PD-AAU-902

UNITED STATES INTERNATIONAL DEVELOPMENT COOPERATION AGENCY
AGENCY FOR INTERNATIONAL DEVELOPMENT
Washington, D.C. 20523

CARIBBEAN REGIONAL

PROJECT PAPER

INFRASTRUCTURE EXPANSION AND MAINTENANCE SYSTEMS
(Amendment # 1)

AID/LAC/P-328 &cr
284

Loan Number:538-K-030
Project Number:538-0138 &
538-0138.01

AGENCY FOR INTERNATIONAL DEVELOPMENT

PROJECT DATA SHEET

1. TRANSACTION CODE: C (A = Add, C = Change, D = Delete) — Amendment Number: 1

DOCUMENT CODE: 3

2. COUNTRY/ENTITY: Regional Development Office/Caribbean

3. PROJECT NUMBER: 538-0138

4. BUREAU/OFFICE: LAC 05

5. PROJECT TITLE (maximum 40 characters): Infrastructure Expansion & Maintenance Systems

6. PROJECT ASSISTANCE COMPLETION DATE (PACD): MM 09 DD 30 YY 93

7. ESTIMATED DATE OF OBLIGATION (Under 'B.' below, enter 1, 2, 3, or 4)

A. Initial FY 86 — B. Quarter 3 — C. Final FY 90

8. COSTS ($000 OR EQUIVALENT $1 =)

A. FUNDING SOURCE	FIRST FY 86 B. FX	C. L/C	D. Total	LIFE OF PROJECT E. FX	F. L/C	G. Total
AID Appropriated Total						
(Grant)	(1,100)	(100)	(1,200)	(30,000)	(10,000)	(40,000)
(Loan)	(1,800)	(-)	(1,800)	(30,000)	(10,000)	(40,000)
Other U.S. 1.						
Other U.S. 2.						
Host Country	-0-	-0-	-0-	-0-	2,100	2,100
Other Donor(s)	-0-	-0-	-0-	-0-	-0-	-0-
TOTALS	2,900	100	3,000	60,000	22,100	82,100

9. SCHEDULE OF AID FUNDING ($000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH. CODE 1. Grant	C. 2. Loan	D. Authorizations TO DATE 1. Grant	D. 2. Loan	E. AMOUNT APPROVED THIS ACTION 1. Grant	E. 2. Loan	F. LIFE OF PROJECT 1. Grant	F. 2. Loan
(1) ESF	770	852	890	18,000	-0-	1,000	7,900	40,000	40,000
(2)									
(3)									
(4)									
TOTALS				18,000	-0-	1,000	7,900	40,000	40,000

10. SECONDARY TECHNICAL CODES (maximum 6 codes of 3 positions each)

11. SECONDARY PURPOSE CODE

12. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each)

A. Code

B. Amount

13. PROJECT PURPOSE (maximum 480 characters)

To create an infrastructure environment that will stimulate investment and productive activity in the Eastern Caribbean.

14. SCHEDULED EVALUATIONS

Interim MM 09 YY 88 | MM YY | Final MM 03 YY 93

15. SOURCE/ORIGIN OF GOODS AND SERVICES

[X] 000 [ ] 941 [ ] Local [X] Other (Specify) Participating Countries of the Eastern Caribbean

16. AMENDMENTS/NATURE OF CHANGE PROPOSED (This is page 1 of a 58 page PP Amendment.)

The purpose of this amendment is to describe the St. Christopher and Nevis bilateral Southeast Peninsula Area Development Subproject (538-0138.01) which adds $7.9 million in loan funds and $1.0 million grant funds to the IEMS project authorization.

17. APPROVED BY

Signature: James L Holtaway

Title: James S. Holtaway, DIRECTOR

Date Signed: MM 09 DD 16 YY 86

18. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION: MM 10 DD 03 YY 86

AID 1330-4 (8-79)

AUTHORIZATION
AMENDMENT NUMBER ONE

NAME OF COUNTRY: Caribbean Regional

NAME OF PROJECT: Infrastructure Expansion and Maintenance Systems

NUMBER OF PROJECT: 538-0138
538-K-030

1. Pursuant to Section 531 of the Foreign Assistance Act of 1961, as amended, the Infrastructure Expansion and Maintenance Systems Project for the Caribbean Region was authorized on May 6, 1986.

2. That Authorization is hereby amended to add the Southeast Peninsula Area Development Subproject (538-0138.01) as follows:

(a) Paragraph 1 is deleted and the following new paragraph 1 inserted in lieu thereof: "Pursuant to Section 531 of the Foreign Assistance Act of 1961, as amended, I hereby authorize the Infrastructure Expansion and Maintenance Systems Project for the Caribbean Region involving obligations of not to exceed Nineteen Million United States Dollars (US$19,000,000) in grant funds and Seven Million Nine Hundred Thousand United States Dollars (US$7,900,000) in loan funds over a five year period from date of authorization, subject to the availability of funds in accordance with the USAID OYB/allotment process, to help in financing foreign exchange and local currency costs for the Project. Subject to future authorizations, the Project Authorization may be increased by an amount not to exceed Thirteen Million One Hundred Thousand United States Dollars (US$13,100,000) in grant and loan funds. The planned life of project is seven years from the date of initial obligation."

(b) Paragraph 2 shall be amended to read as follows: "The Project ("Project") will provide assistance to expand and maintain the physical infrastructure of the countries of the region and to strengthen the local institutions which are responsible for providing and maintaining the infrastructure, thereby encouraging private sector investment in productive enterprises which create jobs and earn foreign exchange. The Project will include a Small Activities Fund, the Engineering and Technical Services Contract component which will design and monitor infrastructure activities/subprojects, and the following specific subprojects:

i. St. Kitts Southeast Peninsula Area Development subproject which will consist of engineering services, construction services and related commodities and technical assistance to construct the Southeast Peninsula road and to support ancillary services such as environmental and land use management, investment packaging, fiscal recovery, and utility installation."

3. A new paragraph 3 is added as follows: "The Government of St. Chistopher and Nevis for the Southeast Peninsula Area Development subproject shall repay the Loan to A.I.D. in U.S. Dollars within twenty five (25) years from the date of first disbursement of the Loan, including a grace period of not to exceed ten (10) years. The Government of St. Christopher and Nevis shall pay to A.I.D. in U.S. Dollars interest from the date of first disbursement of the Loan at the rate of two percent (2%) per annum during the first five (5) years and three percent (3%) per annum for the next five years, and five percent (5%) per annum thereafter, on the outstanding disbursed balance of the loan and on any due and unpaid interest accrued thereon."

4. Paragraph 3, 4, 5 and 6 shall be amended as 4, 5, 6 and 7 respectively.

5. Paragraph 5 Section (b) is amended by adding a new subsection (b ii) as follows:

(ii) Southeast Peninsula Area Development: Conditions Precedent to Disbursement For Construction Supervision and Construction Services. Prior to the disbursement of loan funds for construction supervision and construction services, or to the issuance by A.I.D. of documentation pursuant to which disbursement will be made, the Cooperating Country will, except as the parties may otherwise agree in writing, furnish to A.I.D. in form and substance satisfactory to A.I.D:

(a) Evidence that legislation to establish a Southeast Peninsula Land Development and Conservation Board, acceptable to A.I.D., has been approved by Cabinet and passed by the National Assembly;

(b) Evidence that funds have been committed to finance the installation of a water supply system for the Southeast Peninsula;

(c) Evidence that the Government of St. Christopher and Nevis has obtained, or is in the process of obtaining, all necessary rights of way to lands where construction activities will take place under the A.I.D.-financed part of the Project;

(d) Evidence that; (i) an employee of the Planning Unit has been assigned for thirty months to work with the Technical Assistance team which will assist the Southeast Peninsula Land Development and Conservation Board, (ii) an employee of the Ministry of Agriculture, Lands, Housing and Development has been appointed Project Manager with respect to all aspects of the Project, (iii) an employee of the Public Works Department has been given signature authority for requests for payment by the construction and supervisory engineering contractors; and, (iv) an employee of the Ministry of Finance has been appointed to liaison with the Public Management and Policy Planning Contractor in completing tasks under the financial program of the Project;

(e) Evidence that the Southeast Peninsula has been designated a Special Development Area and that such fiscal measures as may be necessary have been enacted with regard to that Area sufficient to finance the costs associated with the public sector expenditures incurred in development of the Southeast Peninsula; and,

(f) Evidence that Parks and Reserves Legislation has been approved by Cabinet and passed by the National Assembly.

6. The Authorization cited above remains in force except as hereby amended.

James S. Holtaway
Director

ST. KITTS
SOUTHEAST PENINSULA AREA DEVELOPMENT
PROJECT PAPER SUPPLEMENT
NO. 538-0138.01
to the
INFRASTRUCTURE EXPANSION AND MAINTENANCE SYSTEMS PROJECT
NO. 538-0138

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ANNEXES

LIST OF TABLES AND FIGURES

LIST OF ABBREVIATIONS AND ACRONYMS

Board	The Southeast Peninsula Land Development and Conservation Board.
CIDA	Canadian International Development Agency
EA	Environmental Assessment
Government	The Government of St. Christopher (also known as St. Kitts) and Nevis
KPH	Kilometers Per Hour
LUMP	Land Use Management Plan
PWD	The Public Works Department of the Ministry of Communications and Works.
RDO/C	The USAID Regional Development Office of the Eastern Caribbean

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I. SUMMARY AND RECOMMENDATIONS

A. Recommendations

1. Funding

USAID recommends that $7.9 million in loan funds and $1.0 million in grant funds be authorized for the Southeast Peninsula Area Development Project, to be increased incrementally, with a Project Assistance Completion Date (PACD) of September 30, 1989.

2. Geographic Code

The IEMS Project Authorization Amendment Number One specifies that, except as USAID may otherwise agree in writing, commodities financed by USAID shall have their source and origin in the United States or in St. Christopher-Nevis. Except for ocean shipping, the suppliers of commodities or services shall have the United States or St. Christopher-Nevis as their place of nationality. Ocean shipping financed by USAID under the Project shall be financed only on flag vessels of the United States, except as USAID may otherwise agree in writing.

3. Waivers

Right-hand drive passenger vehicles not of U.S. source/origin will be procured for project use as permitted by a blanket waiver notified in FY 86 State 086441.

B. Summary Project Description

The Eastern Caribbean island nation of St. Christopher (also called St. Kitts) and Nevis, became independent on September 19, 1983. The Government is currently faced with the dilemma of trying to sustain foreign exchange earnings and employment by subsidizing a sugar industry that is placing a severe strain on Government's finances. The strategy to overcome this dilemma is to diversify the economy into non-sugar agriculture, tourism and light manufacturing. Although USAID is assisting in this three way diversification effort, a major impact can be made through our investment in the Southeast Peninsula Area Development Project.

The purpose of the Project is to establish the institutional, financial, and infrastructural framework for the physical development of the Southeast Peninsula. The Project will open 3400 acres of currently inaccessible land for development, including: 550 acres for hotels, apartments, condominiums and other commercial activity; 600 acres for low density development such as vacation homes; 650 acres for limited use; and, 1600 acres for natural uses such as hiking and wildlife reserves. Development of the Peninsula will require a penetration road, utility installation, a land use and environmental management program, a fiscal recovery program, and investment in tourism facilities. USAID will finance the road and technical assistance for US$8.9 million. The remaining of inputs will be financed by Government and other donors. The revenue stream to repay the USAID loan and finance the other public sector costs is expected to begin in year seven of the Project.

C. Summary Project Findings

This Project is ready for implementation and is considered to be socially, financially and economically sound, and technically and administratively feasible.

D. Contributors to Project Design

1. USAID

Project Development Committee

Kimberly Finan, Chief, Project Development Division
James Baird, Chief, Infrastructure Division
Robin Phillips, Program Economist
Darwin Clarke, Evaluation Officer
Cecilia Karch, Social and Institutional Analyst
Robert Fedel, Louis Berger International (IEMS Project)
James Myers, Louis Berger International (IEMS Project)
Joanne Connolly, Project Development Officer
James Talbot, Regional Environmental Management

Project Review Committee

James S. Holtaway, Director, RDO/C
Theodore Carter, Regional Legal Advisor
George Cavanagh, Acting Controller
David Mutchler, Chief, Program Division
Peter Orr, Acting Deputy Director
Roy Grohs, Program Economist

2. Consultants

Ozzie Blaiche, R.R. Nathan
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Ed Towle, Island Resources

3. Government of St. Christopher-Nevis

James Bailey, Superintendent of Public Works, Ministry of Communications, Works, Public Utilities, and Posts
Peter Bloomfield, Electricity Department, Ministry of Communications, Works, Public Utilities, and Posts
Aubry Hart, Director, The Planning Unit
Hugh Heyliger, Minister of Agriculture, Lands, Housing and Development
Suswyn Mills, Permanent Secretary, Ministry of Finance
Eugene Petty, Permanent Secretary, Ministry of Agriculture, Lands, Housing and Development
Athill Rawlings, Water Engineer, Ministry of Communications, Works, Public Utilities, and Posts
Tapley Seaton, Attorney General
Victor Williams, Physical Planning Department, The Planning Unit

II. PROJECT RATIONALE AND DESCRIPTION

A. Rationale

1. Country Strategy

Central to the economic development of St. Kitts-Nevis is the burden caused by shrinking demand and soft prices that continues to confront the sugar industry, the country's main foreign exchange earner and a major employer. The Government is faced with the dilemma of trying to sustain foreign exchange earnings and employment by subsidizing an industry that places increasing strains on the Government's finances. The resulting current account budget deficits have been partially covered by reduced Government capital expenditure, however, Government and private saving have been negative, so capital formation has been largely financed by foreign savings.

The long-run consequences of continuing this policy are worsening Government finances and slower growth as Government infrastructure expenditures shrink and as increased borrowings compete with private capital needs. In order for the Government to make a net positive contribution to long-term economic development, and to maintain the confidence of external donors, it must restore positive public and private savings and take steps necessary to foster growth in non-sugar sectors.

RDO/C and the Government agree that the strategy to overcome this dilemma is to facilitate the transition into a diversified economy by creating employment and foreign exchange earning opportunities in other sectors, especially tourism. Given the size and importance of sugar to the economy, no single sector can bear the full burden of replacing the foreign exchange earning capacity and employment presently provided by sugar production.

RDO/C is currently acting to stimulate all three productive sectors through its ongoing portfolio of projects and its policy dialogue agenda which emphasizes fiscal reform and rational resource management. However the most likely sector in which USAID can have a quick and major impact on employment and on foreign exchange earnings is tourism.

Tourism is among the world's largest and fastest growing industries and by acting now St. Kitts-Nevis can exploit its natural advantages and establish its niche in this fast-growing market. Successful development of tourism will require a sufficient number of rooms to attract block bookings and to justify regular service by major air carriers. Airline estimates place this number in the range of 1200-1400 rooms. St. Kitts-Nevis presently has about 740 hotel and guest rooms. While overall occupancy rates are still low, peak season occupancy was nearly 100 percent in the 1984-85 season.

The most effective way to accomplish this increase in capacity is to provide access to the Southeast Peninsula which has some of the most desirable potential tourist attractions and beaches. Access to these natural resources will be a critical element in expanding the base for tourism and in competing effectively in the Caribbean market. It is the best way to maximize the overall impact on the tourism sector because it will stimulate increased utilization of existing tourist facilities and further development of currently accessible sites while simultaneously providing opportunities for creating new facilities on the Peninsula.

2. The Southeast Peninsula

Most of the Southeast Peninsula is comprised of hilly terrain joined to the main land mass of the island by a narrow neck of land which is approximately one-third mile at its widest section (See Figure 1). At present, the main means of transportation to the Salt Ponds is by boat from Basseterre (4.8 miles) or Nevis (1.8 miles). Due to the collapse, some years ago, of the jetty in Majors Bay as a result of hurricane damage, all boats must be beached to gain entry into the Salt Pond area, and as a result only small craft have access.

Access by overland track is possible by 4-wheel drive vehicle, but rock falls and washouts make the track frequently impassable. There are no roads in the Salt Pond area, and the existing tracks are barely suitable for four-wheel drive vehicles even when cleared of vegetation.

There are two small hotels on the Peninsula, one at Banana Bay, the other at Cockleshell Bay. One operates only during the peak tourist season and the other is closed to business. When operating, they are totally dependent on transport by boat for food, materials and fuel. Rainwater is collected and stored for water supply.

This Project will permit access to approximately 3400 acres on the Southeast Peninsula. Based on the carrying capacity of the land as determined by the IRF Land Use Management Plan, this acreage will support;

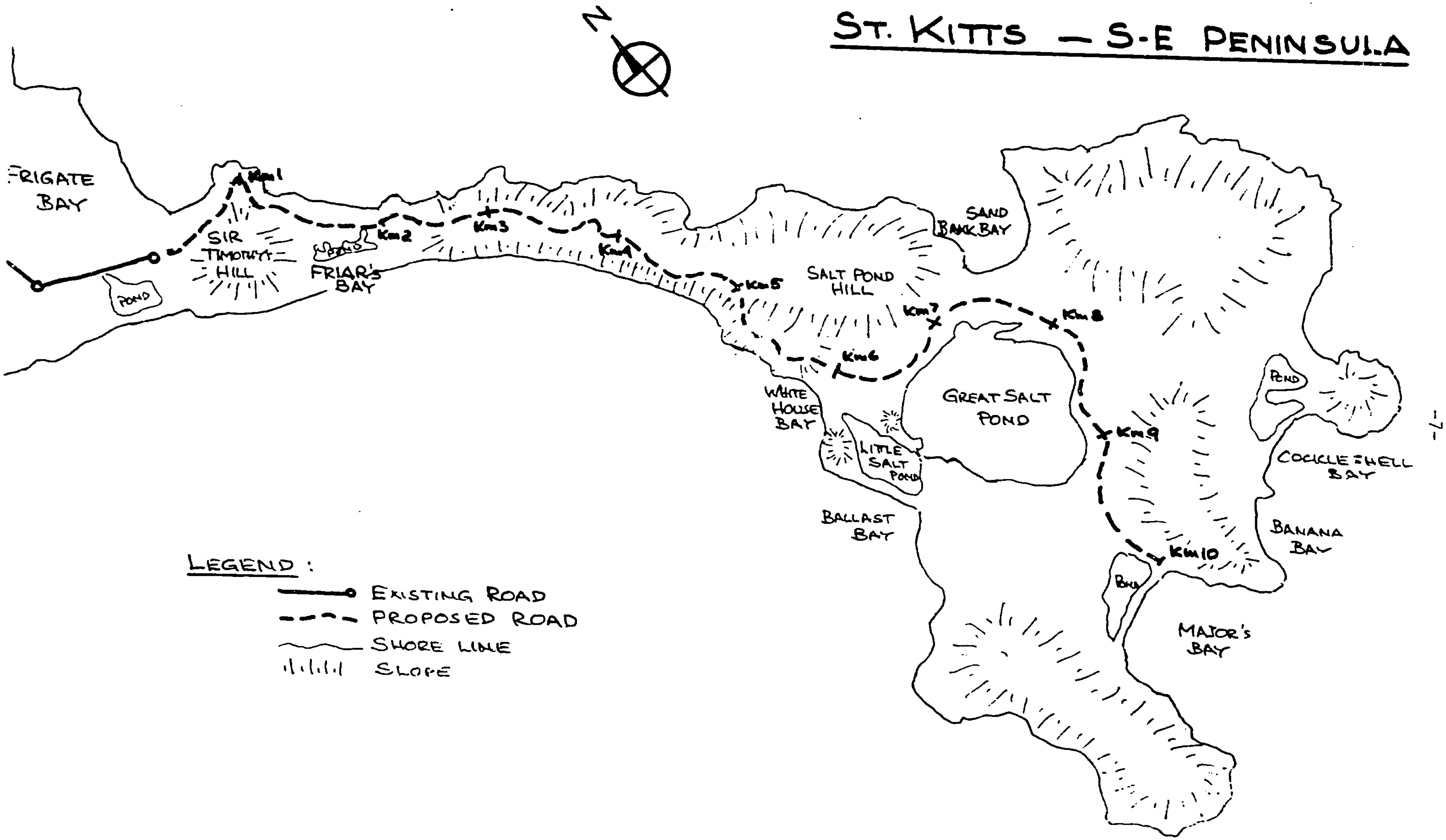
- 550 acres suitable for high density uses including hotels, apartments, condominiums and other commercial activity,
- 600 acres suitable for low density development such as vacation homes,
- 650 acres of environmentally fragile land for limited use with precautions for protecting the natural environment,
- 1600 acres unsuited for development, but suited to natural uses such as hiking trails, parks, scenic overlooks and wildlife reserves.

All land is presently privately owned. The landowners have agreed to work closely with the Government in developing the Peninsula. There is no human habitation except for the two small hotels, and there is no infrastructure. Two very large salt ponds, remnants of a volcanic crater and filled with 15 to 20 feet of organic silt, cover approximately 350 acres. Faults along the old crater have been filled with fine white sand over several thousand years, forming beaches which are the finest in St. Kitts and among the most marketable in the Caribbean.

Limited by the rugged topography and the small developable area (1150 acres), few uses for the land are viable. The USAID-financed Land Use Management Plan recommends areas of various density for commercial developments (hotels, condominiums, and residential), for public use (recreation, parks, camping), and for commercial use (shopping and services).

Upon adoption and implementation of such a plan, the Government can be assured that the Southeast Peninsula will attract visitors and that increased tourism will contribute to further economic development of the nation.

FIGURE 1


ST. KITTS — S-E PENINSULA
N
FRIGATE BAY
SIR TIMOTHY HILL
POND
FRIAR'S BAY
Km 1
Km 2
Km 3
Km 4
Km 5
Km 6
Km 7
Km 8
Km 9
Km 10
SALT POND HILL
SAND BANK BAY
WHITE HOUSE BAY
LITTLE SALT POND
GREAT SALT POND
BALLAST BAY
POND
COCKLESHELL BAY
BANANA BAY
MAJOR'S BAY
LEGEND:
EXISTING ROAD
PROPOSED ROAD
SHORE LINE
SLOPE

3. Private Sector Efforts to Develop the Southeast Peninsula

Over the past years the Government has sought private sector support for the development of the Peninsula. In May 1981 the Government awarded a twenty-five year mandate to Keystone International to act as its exclusive agent to plan and develop the Southeast Peninsula. Neither Keystone nor the Government succeeded, and in October 1983 the Lormad Corporation was appointed exclusive agent. By mid 1984, Lormad had developed a series of preliminary development concepts. Lormad called the planning "sufficient to attract public monies to complete the master plan and to acquire committments from public or international agencies to fund the initial stage of infrastructure." In June 1985 Lormad requested USAID funding for "all past, present and future costs of planning this development."

Notwithstanding the previous development mandates, over the course of the last three years, several major resort developers of differing nationalities have come to the Government of St. Kitts-Nevis with joint venture investment offers. One of the most serious proposals in early 1985 involved the Government installing all primary infrastructure and buying the constructed resort complex from the developers. Clearly, although there is private sector interest in investing on the Peninsula, that interest does not extend to development of the primary infrastructure and would not provide for protection of the environment.

All efforts to package and turn over the development of the Southeast Peninsula to developers have been unsuccessful. Some potential developers have indicated a willingness to provide access roads, sewerage systems, power distribution lines and even desalination plants to service their own hotel developments, however the provision of the primary road, electricity, and water service to the boundary of the area remains the responsibilty of the Government. USAID has examined the previous private mandates executed by the Government. Each was a two-party agreement in which the anticipated results were not achieved, leaving the Government with no alternative other than to approach USAID for assistance in both planning and construction.

4. Predesign Progress

Since August 8, 1985, when the Memorandum of Understanding establishing the design issues for this project was signed between the Government and USAID, the following predesign efforts have been undertaken:

a. The Environmental Assessment The Environmental Assessment, completed in December 1985, presented information required for preparation of the Land Use Management Plan, provided information essential to planning the environmental management component of the Southeast Peninsula Area Development Project, and heightened the awareness of the Government, USAID, and potential investors to the relationship between the environment and the type of development envisioned.

b. The Land Use Management Plan The Land Use Management Plan, completed in June 1986, identifies the institutional framework required for the optimal development of the Southeast Peninsula, as well as the opportunities and constraints to development of the Peninsula. The Plan proposes a balance between conservation, recreation, and urbanization which will avert spoilation, ensure enhancement of amenities, and preserve the economic value of development.

c. Fiscal Recovery Study The "Potential for Recovery of Public Investments and Costs: Southeast Peninsula, St. Kitts" report was completed in May 1986. It concluded that completion of even one major hotel-resort-condomimium complex within four years from beginning the road construction would generate sufficient economic activity on the Peninsula and on the rest of St. Kitts-Nevis so that: (i) by the fourth year, additional annual tax revenues would exceed additional annual public expenditures by $2.6 million per year; (ii) by the sixth year, the cumulative annual revenues would equal the cumulative annual expenditures; and, (iii) from the seventh year forward, Peninsula developments would make a positive fiscal contribution to the public sector. The report also addressed the equity issues associated with improving the value of Peninsula land, which is owned by a few dozen private citizens of St. Kitts-Nevis, and proposed options for taxation of those property owners.

d. Southeast Peninsula Investment Mission

The purpose of this mission was to introduce potential resort property investors to the opportunity afforded by providing access to the Southeast Peninsula, a heretofore undeveloped area. Top government officials met with senior officers of Club Med, Ramada International, Hilton Inns, Resorts International, Divi Corporation, and other similar organizations. The investment mission also served to focus on the investment incentive package the Government would be offering, the type of tourism it is willing to support, and the impact that these decisions would have on the labor force. The mission confirmed for RDO/C the findings in the earlier Beekhuis' report on tourism potential in St. Kitts.

e. Five Year Development Plan. The Interagency Resident Mission, a regional organization which focuses on the macro-economic condition of its member states, provided a six person team of consultants in January 1986 to work with the Government to complete its first five year development plan. The Plan is expected to be approved by Cabinet in September 1986.

5. Relationship to the IEMS Project

The purpose of the Infrastructure Expansion and Maintenance Systems (IEMS) Project, of which the Southeast Peninsula Area Development Project is a subproject, is to create an infrastructure environment that will stimulate investment and productive activity in the Eastern Caribbean. The IEMS project paper, to which this paper is a supplement, establishes criteria for subproject selection.

The central criterion of the IEMS Project is that the physical infrastructure to be financed by the subproject must be essential to the development or expansion of productive activity in agribusiness, manufacturing and tourism, and thereby stimulate investment and raise productivity. The subproject must also contribute to the implementation of the Host Country's development strategy, and the Government must be commited to and participate in the project. The economic justification must indicate an adequate economic rate of return, and linkages to Government policy reform should be encouraged.

The Southeast Peninsula Area Development Project will sponsor the primary infrastructure which is the sine-qua-non for development of any productive enterprise and particularly tourism. The Government has sought assistance to accomplish this task for the past decade through several previous strategies. The Government has agreed to undertake a considerable administrative burden and to legislate far-reaching policy reforms. The economic return in the long run will be of incalculable benefit to the Government in the absence of alternative uses for the Peninsula.

Thus, the objectives of the Southeast Peninsula Area Development project are consonant with the IEMS project purpose, and satisfy the criteria. In the near term, economic activity will be generated during the construction phase of the road and hotels. In the long term, jobs will be created and foreign exchange earned through the influx of tourists and the growth of the consequent service industry.

These short and long-term gains are of critical importance to the Government which requires viable options to depending entirely on sugar production for employment and economic growth. The host country's strong interest in the project is evidenced by their contributions to the year-long predesign work and their willingness to establish legislation and management systems to assure that the project is effectively implemented.

The project is economically viable and will begin to pay for itself by the seventh year, assuring Government adequate resources to maintain the facilities and repay the USAID loan. Finally, planning for the project has already provided USAID with opportunities for dialogue with the Government on policy issues affecting the economy. Project implementation will provide further opportunities to work with the Government to enact changes and discuss additional reforms which may be warranted.

B. Project Objectives

The goal of the Southeast Peninsula Area Development subproject is to diversify the economy, increase foreign exchange earnings and employment, and to promote broadly based economic growth through an expansion of the tourism sector.

The purpose of the subproject is to establish the institutional, financial, and infrastructural framework for the physical development of the Southeast Peninsula.

C. Project Components

Southeast Peninsula Area Development will eventually require a penetration road, utility installation, a land use and environmental management program, a fiscal recovery program, and investment in tourism facilities. As discussed in Section II.A.4, the design of the project examined and planned for each of these elements. The USAID Project consists of the road, the water utility, the land use and environmental management program and the fiscal recovery program. Ancillary infrastructure installation will be coordinated by Government and the investment component will be based on a private sector initiative. A discussion of the project components follows:

1. The Road

USAID will finance construction supervision and construction of a 6.6 mile road from Frigate Bay to Majors Bay at an estimated cost of US$7,900,000. In accordance with U.S. Government procedures, the contracts for construction cannot be signed until all the required loan funds are available. If USAID fiscal year 1987 funds are insufficient to finance the road as far as Majors Bay, the USAID financed portion of the road will end at White House Bay.

The vertical and horizontal alignment of the road is based upon a design speed of 50 KPH. Road structure consists of six inches of crushed stone base course overlaid with two inches of asphaltic concrete. Wearing surface is 18' wide with a 3' crushed stone shoulder on each side. Required right-of-way widths will vary depending on width of embankment and side slopes. The estimated construction period is 18 months.

2. The Utilities

a. Water

Water is the most critical utility requirement. If it is not provided by the time the resorts are constructed, investors will incur technically complex and costly solutions to satisfy their individual requirements. The proposed water system will include storage resevoirs at Sir Timothy's Hill and Sand Bank Bay, a water transmission main installed above ground on a separate alignment, and a booster pumping station. This system is estimated to cost a minimum of US$2,000,000. The Government will be responsible, as a Condition Precedent to signing the construction and supervisory engineering contracts, to have secured funding for this system.

b. Ancillary Utilities

Electricity, telephone, and cable television are of secondary importance and will be installed as the various companies perceive that demand warrants. In the interim, resort facilties have indicated a willingness to use generators for electricity.

Sewage disposal is discussed in detail in the Land Use Management Plan and the Environmental Assessment. Sewage collection and treatment facilities will ultimately be required, probably incorporating a lagoon system with polishing ponds to insure production of an acceptable effluent which could be used for irrigation. Costs for sewerage will be met from private sector sources either through individually installed systems or through contribution to multiuser systems.

3. Land Use and Environmental Management Program

The Government of St. Kitts-Nevis has prepared legislation to institute a Southeast Peninsula Land Development and Conservation Board. The Board, which will consist of five members, will be responsible to the Minister of Agriculture, Lands, Housing and Development. This Board will have broad powers to manage the development of the Peninsula within the guidelines established by an approved Land Use Management Plan. The powers and functions of the Board will be: (a) to evaluate residential, commercial, industrial, agricultural and other developmental schemes; (b) to make recommendations concerning; (i) allotment, reservation, and zoning of land for different purposes, (ii) control of pollution and maintainence of the environmental quality of the Southeast Peninsula, including coastal conservation, (iii) development and implementation of an environmental protection plan, and, (iv) schemes to develop lands in terms of the Land Development (Control) Act; (c) to carry out planning studies relating to the various sectors of the Southeast Peninsula; and, (d) to monitor development schemes and if necessary to make future recommendations.

USAID will finance a contract with a firm which has the capability of; (1) providing support to the Southeast Peninsula Board in carrying out its functions for land use management, (2) implementing the essential mitigation measures identified in the Southeast Peninsula Environmental Assessment and establishing the institutional framework for the subsequent implementation of the secondary recommendations, (3) training in land use management and environmental protection, (4) providing analysis of Government policies regarding investment, and, (5) streamlining systems for approvals of Peninsula related investments.

The contractor will be responsible to the Southeast Peninsula Land Development and Conservation Board. Due to the extensive volume of anticipated work, the technical assistance team will provide assistance in such a manner that the Board reviews and take decisions on proposed actions expeditiously. The technical assistance team will be counterparted by personnel from The Planning Unit which has the majority of approval authorities with respect to the physical infrastructure to be built on the Peninsula. The technical assistance team and the planning unit staff will establish a Southeast Peninsula Board office and serve as the focal point for information related to Peninsula Development. By the time the road is completed and major investment begins, the Board should be recognized as the organization with an unbiased responsibility for managing the competing demands of economic development and environmental protection. The cost of a thirty month technical assistance program is estimated at US$934,000.

4. Fiscal Recovery Program

In order to assure adequate financial planning for cost recovery of public sector expenditures resulting from development of the Southeast Peninsula, and to assure equity of benefits resulting from that development, the Government will embark upon a Fiscal Recovery Program. This program will involve: detailed analysis of the estimated costs of developing the Peninsula including loan repayments and installation and maintenance of public facilities; identification of revenue sources that will be used to cover those costs and an analysis of the adequacy of those sources; and, implementation of a tax administration program which assures collection of the required revenues.

The Government's Ministry of Finance will be assisted in this effort by the USAID-financed Public Management and Policy Planning Project (538-0096). The cost is estimated at $150,000.

5. Investment in Tourism Facilities

It is anticipated that private sector investment in resort facilities at Majors Bay, Sand Bank Bay, Friars Bay, and Ballast Bay will occur immediately after road construction is underway. Investments in secondary sites, private homes, and ancillary service industries will occur in the second phase of planned development.

III. COST ESTIMATE AND FINANCIAL PLAN

A. Financial Plan

Total USAID project costs of $8.9 million, consisting of $7.9 million in loan funds and $1.0 million in grant funds are broken down by component, expense category, year of funding and funding source in Tables 2 through 5. The loan funds will finance the entire road construction and the grant funds will finance the Land Use and Environmental Management Program and Evaluation. An additional $150,000 which is not contained within this budget will be programmed under USAID Project 538-0096, Public Management and Policy Planning, to finance the Fiscal Recovery Program.

In the event that RDO/C's allocation of FY 87 ESF money is not sufficient to finance construction of the road from Frigate Bay to Major's Bay, the USAID financed portion of the road will terminate at White House or Sand Bank Bay. The new termination point would reduce the cost of construction by about $1.0 million. Construction and supervisory engineering contracts will not be signed until (1) all Conditions Precedent have been satisfied and (2) sufficient funding is alloted to cover the entire contract cost.

The Government of St. Kitts and Nevis is responsible within the framework of this project for financing the installation of the water s[illegible]ly system. This will be accomplished through external donor organizations. CIDA is currently programming funds for phase two of a major water program in St. Kitts and is the donor of preference for the Southeast Peninsula water system. If CIDA financing is secured, the Government will then ask the Caribbean Development Bank or the British Development Division to assist with financing for electricity and sewerage. Skantel, the telephone company, and the Cable (the cable television company), will finance installation of these systems when demand warrants.

TABLE 2

SUMMARY OF PROJECT COSTS
BY FISCAL YEAR AND SOURCE OF FUNDING

(In $000)

Source of Funding /Year	Fiscal Year							
	1986		1987		1988		TOTAL	
	Loan	Grant	Loan	Grant	Loan	Grant	Loan	Grant
USAID	1,800	700	6,100	150	-	150	7,900	1,000
Government of St. Kitts-Nevis a/	-	-	-	2,040	-	60	-	2,100
TOTAL	1,800	700	6,100	2,190	-	210	7,900	3,100

a/ Water Systems Estimate of $2.0 million is minimum and includes resources, well development transmission, pipeline, and pumping stations.
Electrical Distribution costs are not included in project budget but are included in the Economic Analysis.

TABLE 1

SUMMARY OF PROJECT COSTS BY EXPENSE CATEGORY AND SOURCE OF FUNDING

(In $000)

Expense Category a/	Life of Project		
	USAID		GOBZN
	Loan	Grant	
1. Technical Assistance			
a. Short-Term	-	180	-
b. Long-Term b/	-	432	-
SUB-TOTAL	-	612	-
2. Training			
a. In-Country	-	10	-
b. U.S.A. - Third Country	-	40	-
SUB-TOTAL	-	50	-
3. Commodities	-	74	-
SUB-TOTAL	-	74	-
4. Other			
a) Supervisory Engineering	800	-	-
b) Construction	7,100	-	-
c) Land Use and Environmental Management	-	198	100
d) Water System c/	-	-	2,000
e) Evaluation and Financial Review	-	66	-
SUB-TOTAL	7,900	264	2,100
TOTAL	7,900	1,000	2,100

a/ Construction contingency (20%) and inflation (6% per year) are included in the construction line item.

b/ $150,000 for the Fiscal Recovery Program is being financed from USAID Project Number 538-0096, Public Management and Policy Planning.

c/ Water system estimate is minimum and includes resevoirs, well development, transmission, pipeline, and pumping stations.

TABLE 4

SUMMARY OF PROJECT COSTS
BY PROJECT COMPONENT AND SOURCE OF FUNDING

(in $000)

Project Component	Life of Project Funding		
	USAID		GOGRN
	Loan	Grant	
1. Road Construction a/			
a. Supervisory Engineering	800	-	-
b. Construction	7,100	-	-
SUB-TOTAL	7,900	-	-
2. Land Use and Environmental Management Program			
a. Technical Assistance	-	612	-
b. Training	-	50	-
c. Commodities	-	74	-
d. Other	-	198	100
SUB-TOTAL	-	934	100
3. Fiscal Recovery Progr. b/	-	b/	-
SUB-TOTAL	-	b/	
4. Water System Installation c/	-	-	2,000
SUB-TOTAL	-	-	2,000
5. Evaluation and Financial Review	-	66	-
SUB-TOTAL	-	66	-
TOTAL	7,900	1,000	2,100

a/ Construction contingency (20%) and inflation (6% per year) are included in the construction line item.

b/ $150,000 for the fiscal recovery program is being financed from USAID Project Number 538-0096, Public Management and Policy Planning.

c/ Water system estimate is minimum and includes resevoirs, well development, transmission, pipeline, and pumping stations.

TABLE 5

SUMMARY OF USAID FUNDING
BY FOREIGN EXCHANGE AND LOCAL COSTS (LC)

(In $000)

Project Component	Life of Project Funding				
	USAID Loan		USAID Grant		TOTAL
	FX	LC	FX	LC	
1. Road Construction[a/]					
a. Supervisory Engineering	800	-	-	-	800
b. Construction	4,600	2,500	-	-	7,100
SUB-TOTAL	5,400	2,500	-	-	7,900
2. Land Use and Environmental Management Program					
a. Technical Assistance	-	-	480	132	612
b. Training	-	-	45	5	50
c. Commodities	-	-	60	14	74
d. Other	-	-	136	62	198
SUB-TOTAL	-	-	721	213	934
3. Fiscal Recovery[b/] Program	-	-	-	-	-
4. Evaluation and Financial Review	-	-	66	-	66
SUB-TOTAL	-	-	66	-	66
TOTAL	5,400	2,500	787	213	8,900

a/ Construction contingency (20%) and inflation (6% per year) are included in the construction line item.

b/ $150,000 for the fiscal recovery program is being financed from USAID Project Number 538-0096, Public Management and Policy Planning.

B. Methods of Implementation and Financing

Activity	Method of Financing	Amount
Construction	Host Country Fixed Unit Price Contract	7,100,000
Supervisory Engineer	Host Country Cost Reimbursable plus Fixed Fee Contract	800,000
T.A. for Land Use Management	USAID Direct Cost Reimbursable plus Fixed Fee Contract with an 8A Firm	934,000
T.A. for Evaluation	USAID Direct Cost Reimbursable plus Fixed Fee Contract	66,000
T.A. for Fiscal Recovery Program	Work order under PMPP Contract	150,000

USAID has had satisfactory experience with the Government of St. Kitts-Nevis ability to receive advances and disburse funds for civil works under the Natural Resources Management Project (538-0108). Under this project, all payments will go directly to the appropriate contract and will not pass through Central Treasury.

C. Loan Terms and Repayment Capability

The USAID loan for the cost of construction supervision and construction services will be made at the following terms: 25 year term, ten year grace period with interest rates at 2% for the first five years, 3% for the next five years, and 5% for the remaining fifteen year amortization period. The fiscal recovery study (Annex G.1) has identified the conditions necessary for repayment capability and Conditions Precedent to disbursement are designed to assure that needed government actions are undertaken.

As a small, newly independent country which has been dependent on a declining monocrop, the Government has had serious fiscal difficulties. Ninety percent of the present EC$ 82 million domestic debt arises from the production of sugar (EC$ 2.7 equals US$ 1.00). EC$ 22 million of this debt is from the March 1985 purchase of the sugar lands and another EC$ 50 million is NACO debt incurred from sugar production. The government's budget is already in deficit and will continue to be so for a number of years. One estimate places the cumulative deficit from 1986 until 1990 at EC$ 90.1 million.

As noted in the Section VI.C. Economic Analysis, even the favorable loan terms for this project sharply increase interest payments on public external debt. For example, assuming that the entire infrastructure package costs US$ 11.4 million, the first quinquennium's annual payments will be US$ 0.22 million, thereby increasing projected interest payments on external debt for 1987 by about 30 percent over the currently projected US$ 0.7 million. Although St. Kitts' debt service ratio is still very low, one must recognize the large size of this project relative to the St. Kitts-Nevis economy.

In order to cope with its serious fiscal situation while assuring its ability to service the loan, the Government of St. Kitts-Nevis will have to undertake revenue enhancement and expenditure reduction measures. This is especially important in the early years of the project, when cash flow from the road will be negative. RDO/C will therefore encourage the Government to pursue fiscal reforms identified in the studies recently made in conjuction with this project. The Government has already initiated two preliminary steps towards more rational planning of its fiscal resources: preparation of a Five Year Development Plan and a financial assessment report by R. R. Nathan. Steps necessary to improve the Government fiscal climate will be addressed in the Southeast Peninsula Area Development Project Agreement as conditions precedent to execution of the construction supervision and construction services contracts.

The Fiscal Recovery Team calculated that the revenues generated from road-induced economic activity will be sufficient to service the loan for the cost of the road. Cumulative road related Government revenue and expenditures from the R.R. Nathan study are as follows (in US$):

TABLE 6

PROJECTED ROAD REVENUE AND EXPENDITURES

(US$)

Year	Cumulative Revenue	Cumulative Expenditure	Balance
1	700,000	3,616,000	- 2,916,000
2	1,000,000	7,231,000	- 6,231,000
3	2,500,000	10,847,000	- 8,347,000
4	4,000,000	14,462,000	-10,462,000
5	12,200,000	18,078,000	- 5,878,000
6	20,000,000	22,001,000	- 2,001,000
7	29,600,000	25,925,000	3,675,000
8	45,700,000	29,848,000	15,852,000
9	61,200,000	33,772,000	27,428,000
10	78,200,000	37,695,000	40,505,000

IV. IMPLEMENTATION PLAN

A. Implementation Schedule

Project activities are programmed to take place over a period of approximately three years from the date of signing the Project Agreement. The first six months of implementation will be used by the Government of St. Kitts and Nevis to satisfy the Conditions Precedent to Disbursement for the Construction Supervision and Construction Services Contracts. During this period RDO/C and the Government will be finalizing the Invitation For Bids for construction, securing and evaluating bids, and procuring services of a Land Use and Environmental Management Contractor.

Subsequent to this start-up phase, the road construction will take place over a twenty month period, the Land Use and Environmental Management Program will take place over a thirty month period, and the Fiscal Recovery Program will continue for an additional six to eight months. Evaluations will be conducted at two points in the project, the first at eighteen months to assure adequate progress is being made and the second just prior to the PACD to measure the impact of the project on investment and on the environment.

The Road, Fiscal Recovery, and Land Use and Environmental Management Components will each be managed by separate Ministries of the Government of St. Kitts and Nevis but their activities will be coordinated by the Director of Planning, Ministry of Agriculture, Lands, Housing and Development: The Superintendent of Public Works will be assigned responsibility for managing the construction portion of the project and as such will administratively approve vouchers of both construction related contractors; The Ministry of Finance will be responsible for managing the Fiscal Recovery Program; And, the Planning Unit will assign a member of their professional staff to work, on a full time basis, with the technical assistance team that reports to the Southeast Peninsula Land Development and Conservation Board.

Within RDO/C, the Infrastructure Office will have primary responsibility for Project Management and as such will coordinate project activities. However they will be dependent on the Program Economist Office for assistance in managing the Fiscal Recovery Component and Project Development Division for assistance in monitoring the Land Use and Environmental Management Program.

TABLE 7

PROJECT IMPLEMENTATION SCHEDULE

September 1986	Project Agreement Signed. Review prequalification data for construction contractors and expressions of interest for construction supervision services.
October 1986	Re-establish centerline of proposed route. Issue RFTP to short-listed A/E firms and notify firms prequalified for construction. Prepare Request For Proposals for Technical Assistance Contract.
November 1986	RFP to 3 or 4 8A contractors for Land use T.A. Finalize IFB for construction contract. Government satisfies Conditions Precedent to First Disbursement. PMPP completes scope of work for long-term T.A.
December 1986	Technical assistance proposals evaluated. Request bids for construction. Proposals for construction supervision services received and evaluated.
January 1987	PMPP Long-term TA begins work on Fiscal Recovery Program. Supervisory Engineering contract negotiated. Technical Assistance contract negotiated. Bids for construction received.
February 1987	Government satisfies CPs to disbursement for construction. Evaluate bids and award construction contract to lowest responsive bidder. Technical assistance contract signed and contractor mobilized.
March 1987	Supervisory engineer on site.
April 1987	Construction starts.
December 1987	PMPP contract completed.
March 1988	Interim evaluation conducted.
October 1988	Construction completed
August 1989	Final evaluation completed. Technical Assistance Contract completed.
September 1989	PACD of subproject.

B. Procurement Plan

1. Construction Assistance

The road construction and engineering contracts will be host country contracts utilizing AID Handbook 11 procedures. The Ministry of Agriculture, Housing, Lands and Development has had experience procuring and managing contracts under AID Host Country Contracting rules. Their experience has been gained over the past two years with : a $800,000 techncial assistance contract under the Natural Resources Management Project 538-0108; $1,000,000 of construction contracts under the Basic Human Needs Trust Fund Project 538-0103; and a $150,000 technical assistance contract for the Environmental Assessment and Land Use Management Plan.

Advertisements have been published in the Commerce Business Daily for submission of prequalification documentation by both construction supervision and construction services contractors. The prequalification documentation will be evaluated by the Public Works Department of the Government of St. Kitts and Nevis with the technical assistance of the USAID engineering consultant. Invitations For Bid will be sent to prequalified firms in December. Bids will be received and evaluated by the Public Works Department, however, negotiations and final contract signature will not occur until all Conditions Precedent have been satisfied and until full funding for the contract has been allotted.

2. Technical Assistance

Technical assistance services for the Land Use and Environmental Management Program will be sought under a direct USAID contract from a Section 8A firm which has experience, preferably in the Caribbean, in coordinating and staffing the management and training effort required to develop land use expertise in St. Kitts. The contract will be for approximately 30 months covering the period from satisfaction of the conditions precedent through the PACD. The contract will provide approximately 30 months of long-term technical assistance and 15 months of short-term assistance as well as a small amount of training, commodities and local support staff.

Technical assistance for the Fiscal Recovery Program will be provided under RDO/C's PMPP contract with R.R. Nathan. The twelve months of long-term assistance will be accessed through a work order which is the mechanism used to request tasks under that contract.

3. Commodities

The Land Use Management Contractor will procure all commodities required to implement the contract using USAID procurement regulations.

C. Opportunities for Gray Amendment Implementation

Technical assistance for coordinating and staffing the land use and environmental management program will be procured from a qualified 8A firm. A request for names of firms and for SBA approval to negotiate with three or more of those firms was sent to AID/W in FY 86 Bridgetown 06718.

V. MONITORING PLAN

A. USAID Responsibilities

USAID staff will undertake the following actions during Project implementation:

- review and approve Government submissions for satisfaction of conditions precedent;
- review and approve all contractual agreements with construction, engineering and technical assistance firms;
- approve and process payment vouchers; and
- assure progress is consistent with project design.

B. Core Contractor Responsibilities

The core contractor, through its permanent Barbados-based staff, will work closely with the RDO/C staff and shall implement, manage and monitor the proposed project, providing engineering and technical services as required. The Core Contractor will undertake the following actions during Project implementation:

- Review the 1981 Roughton Southeast Peninsula road design and cost estimates, making such changes as necessary to permit construction by US construction contractors according to US standards for environmental and engineering design;
- Provide technical assistance to the Government in the preliminary planning for a water supply system to serve the proposed development area;
- Initiate a ground survey to restablish the centerline of the road;
- Prepare contract documents for the provision of supervisory engineering services and construction services;
- Assist the Government and USAID in soliciting and evaluating proposals and bids for engineering and construction services;
- Act on behalf of USAID in the implementation of project activities by providing regular monitoring of construction progress and cooperating with the Government in assuring that the project is proceeding according to plan;
- Assist the Public Works Department in the processing of necessary paperwork required to fund project construction activities;
- Monitor the progress of the technical advisors to the Southeast Peninsula Land Development and Conservation Board; and,
- Monitor the progress of the Fiscal Recovery Component.

C. Supervisory Engineering Contractor Responsibilities

Under a cost reimburseable contract with the Government, a US engineering firm will act on behalf of and in cooperation with Government in assuring the construction contractors compliance with the terms, conditions and technical specifications set forth in the construction contract.

D. Construction Contractor Responsibilities

Under a fixed unit price host country contract, a US construction contractor will provide all equipment, manpower and materials necessary to build the proposed road in accordance with the IFB documents.

E. Land Use and Environmental Management Contractor Responsibilities

The contractor will provide the services of resident long-term and short-term staff to assist the Southeast Peninsula Land Development and Conservation Board in carrying out the recommendations of the Environmental Assessment and the Land Use Management Plan. See the contractor's draft scope of work in Annex K.1.

F. Fiscal Recovery Contractor Responsibilities

Under the existing PMPP contract, USAID will provide services of a long-term (one year) advisor who will work directly with the Ministry of Finance. The contractor will work with Inland Revenue staff and initiate and mobilize such short-term expertise as required to improve the Government's revenue administration.

G. Government of St. Kitts and Nevis Responsibilities

The Ministry of Agriculture, Lands, Housing and Development (MALHD) will be responsible for overall project coordination and will therefore designate a project coordinator through which all AID/Government project documentation shall flow.

1. The Planning Unit within the Ministry will have responsibility for liaisoning with the technical assistance team which is supporting the Southeast Peninsula Land Development and Conservation Board.

2. The Public Works Department (PWD) shall be responsible for administering the construction activities under the proposed project. A contract between the PWD and the supervisory engineering contractor will assist the PWD in monitoring and supervising construction in accordance with the bid documents.

3. The Ministry of Finance shall be responsible for coordinating the activities of the fiscal recovery contractor.

VI. SUMMARY ANALYSES

A. Technical Analysis

1. Method of Construction

Early in the project design stage, consideration was given to contruction using Public Works Department force account labor. Although force account would have provided the Government with on-the-job training in construction, several factors precluded its use: lack of trained equipment operators, lack of manpower in the semi-skilled and foreman levels in the Government civil service; scarcity of equipment and experience in the private sector; the extensive lead time required to procure equipment; and the time required to carry out on-the-job training method of construction. Thus, USAID has initiated competitive procedures to procure the construction services of a U.S. contractor, including construction firms in Puerto Rico and the U.S. Virgin Islands. It is likely that the successful firm will mobilize local contruction labor and subcontractors, thereby providing expanded experience to the private sector in St. Kitts and Nevis.

2. Road Design

A "Southeast Peninsula Road Engineering Design Report" of March 1981 by Roughton and Partners, included design of a 10 Km all weather road from Frigate Bay to Majors Bay where a Roll On/Roll Off truck jetty and ferry connection with Nevis was proposed. The report was reviewed and the cost estimate updated by David Lashley and Partners. These reports, plans and estimates were reviewed and updated to U.S. standards and practice, and now form the technical basis for the proposed project road. Prior to construction the alignment will be reviewed and if possible altered to reduce maximum gradients to a more acceptable level.

The vertical and horizontal alignment of the road is based upon a design speed of 50 KPH. Road pavement structure consists of six inches of crushed stone base course and a two inch asphaltic concrete surface. Wearing surface is 18' wide with a 3' crushed stone shoulder on each side, except where reduced in cut sections. Required right-of-way widths will vary depending on width of embankment and side slopes. The Government will secure the necessary rights of way before construction begins. Drainage structures will consist of 36 inch reinforced concrete or corrugated metal pipe culverts and Armco type pipe at selected catchment areas.

Most of the alignment follows steep terrain and requires major side hill cuts. Where required, gabion walls will be constructed to environmentally protect the slope while providing support for the fill sections. Side slopes will be armored with surplus rock materials where feasible. The estimated construction period is 18 months. Provision is included to construct vista turn outs from the road and pavement widening on steep grades.

3. Utility Design

In recognizing the necessity for utilities to serve the anticipated development on the southeast peninsula, USAID investigated the feasibility of placing utility ducts in the road during construction. Underground placement concurrent with road construction would maximize aesthetics and ensure required service to hotel facilities. However, cost estimates indicated that nearly $5.0 million would be added to the project cost, exclusive of the electrical and telephone cables which would be installed when development occurs.

USAID believes that water is most essential, yet costly, since a preliminary study reveals that, in addition to pipe that could be placed in the road ($2.3 million), additional production wells, two reservoirs and a pumping station will be required. The Government has already had serious discussions with CIDA on financing additional domestic water supplies on St. Kitts. USAID therefore, believes that even partial funding of an overall CIDA water resource and supply project would, besides placing a strain on available USAID funds, create costly confusion between U.S. and Canadian contractors.

Since diesel generators could temporarily provide electricity to hotels and telephone service could similarly be met when demand warrants, the assurance of water either through Government commitment or through its CIDA donor will satisfy USAID's concern regarding utility installations. As noted earlier, a firm commitment of funds for the water supply system will be required as a Condition Precedent to disbursement.

Sewerage. Sewage disposal is discussed in detail in the LUMP and the EAR. Even with moderately dense hotel development, sewage collection and treatment facilities will be required, probably incorporating a lagoon system with polishing ponds to insure production of an acceptable effluent which could be used for irrigation. Ponds would be carefully sited to miminize both odor and visual effects. These are concerns which will be dealt with by the Southeast Peninsula Land Development and Conservation Board when hotel development begins. Costs would presumably be met by the private investors. Where soil permeability permits, low density residential developments could utilize septic tanks with drain fields or soakways.

4. Environmental Design

An Environmental Assessment was carried out for the proposed project by Island Resources Foundation. The analysis, with specific regard to road construction, concerned impacts on the terrain. Recommended mitigations include: provision of emergency turn-outs and overlooks; erosion control; control of spillage of surplus material over the slopes; and minimizing scarring of slopes by excessive cut sections.

To prevent adverse impacts during road construction it is proposed that an environmental engineer review the proposed road design with PWD representatives. A field review will identify remedies to problems likely to be faced during construction. These remedies can be incorporated into the final design documents and monitored for compliance during construction.

5. Summary

The Project will provide an all-weather road from the Frigate Bay roundabout, 10.4 km (6.6 miles) to Majors Bay. The eighteen foot asphaltic concrete surface will be placed on six inches of crushed stone. Two 3 foot crushed rock shoulders will be provided except on the cut side.

The Government or other external donors will be responsible for funding all utility installations. Environmental considerations will be established prior to the start of construction and monitored regularly by the Project's supervisory engineering staff.

The construction contractor will be paid on a unit price basis for work described in the bidding documents. Overall technical monitoring and review will be carried out by the core contractor. A breakdown of construction costs is found in Annex K.2. Construction is estimated to require eighteen months.

B. Financial Analysis

USAID requires that the Southeast Peninsula Development Project be financially self-sustaining. The AID-financed study by R.R. Nathan "Potential for Recovery of Public Investments and Costs: Southeast Peninsula, St. Kitts," concludes that the Government would need a capital outlay of US$12 million to develop the Peninsula, which would cover the costs of road construction, utilities and procurement of lands. The consultant found that completion of only "...one major hotel-resort-condominium complex within four years of the beginning of road construction would generate sufficient economic activity on the Peninsula...so that...by the sixth year the cumulative annual revenues would nearly equal the cumulative annual expenditures." (A summary of the projected revenue stream can be found in Section III.B.)

The Island Resources Foundation "Land Use Management Plan" examined fiscal recovery of the costs of the road and water system within the context of the land use management options which they were recommending. Using conservative assumptions they concluded that "total tax revenues exceed total road and water expenditures by the ninth year."

There is clearly uncertainty surrounding timing of the investments needed to generate revenue from Peninsula development. There is also a need for Government to outlay funds for public facilities, road maintenance, and interest expense prior to year six (or nine). The combination of these two problems resulted in a decision by the Government of St. Kitts-Nevis to institute a two phased tax program specifically for the Peninsula. The first phase will be an amendment to current tax law which will provide for varying tax rates for special development areas, of which the Southeast Peninsula would be designated as the first. The tax on property and land transfer will be increased, and the definition of transfer will include sales, mortgages and leases. The first phase will be legislated prior to construction and will capture revenue from early land speculation. The second phase, which is not yet clearly defined, will be implemented after the road has been built.

Fiscal recovery within the time projected will also depend on the success of hotel development and tax collection. To assure adequate revenues, the Government has requested that the PMPP Project provide long-term technical assistance to the Inland Revenue Department to improve the tax administration system. To increase the probability of attracting hotel investment, the Government is legislating the Southeast Peninsula Land Development and Conservation Board and USAID is providing technical assistance to the Board to, among other things, analyze the impact of Government policies on investment decisions.

C. Economic Analysis

The project since its inception has been controversial, with avid supporters and fervent detractors. One thread of discussion on the pros and cons of the project has surrounded the question of whether there is a reasonable degree of certainty that, once the road and other infrastructure components are in place, private investors will construct tourism facilities. Another thread of discussion has been whether, realistically speaking, there are any alternatives to Southeast Peninsula development if the Kittitian economy is to achieve growth, despite the probabilities involved in the first question.

Given these questions, RDO/C contracted with a number of consultants to determine if the project was viable. Two of these studies are the "Land Use Management Plan" by Island Resources Foundation (Annex F.3) and the "Potential for Recovery of Public Investments and Costs" by Robert R Nathan (Annex G.1). The R.R. Nathan study includes a Supplement (Annex G.2) which provides estimates of the financial and economic viability of the project.

1. Land Use Management Plan Projections

The Island Resources study, in a section discussing returns to private sector hotel investors, indicates that development of the Peninsula by private investors will provide between 1.5 percent and 4 percent in annual returns depending on hotel size, after all other costs (capital and recurrent) are accounted for, and abstracting from inflation. That presentation of returns is not the normal one with which most of us are familiar. In that study, the authors indicate that these are the returns after all costs of borrowing funds are considered. Thus, using the more familiar definition of "returns," an investor can expect between 11 and 15 percent return on his money (see Table 8b). The mission's informal contacts with those knowledgeable about the hotel sector in the Caribbean indicate that profit margins at the top end of this range are not unacceptable to hoteliers. The study goes on to say that in light of this assessment, the development of the Peninsula will have to be very carefully managed or potential investors will be uneasy about--and therefore unlikely to put funds into--investments.

In order to test the sensitivity of the rate of return to the assumption that private hoteliers are likely to come into St. Kitts, we varied assumptions about the opportunity cost of the funds used by the hoteliers and varied the occupancy rates. The results are sensitive to those assumptions (see Tables 8a, 8b, and 8c). If a 60-percent occupancy occurs, then the rate of financial return is about 12 percent for a 250-room hotel. On the other hand, if 40 percent is the more likely long-term occupancy rate, then the returns drops to about 7.5 percent. An 80-percent occupancy rate would bring the rate of return up to 16.5 percent. Therefore, judging from these data, derived from the Island Resources Foundation study, a hotel of this size is only barely acceptable as a risk.

Given the opportunity cost of funds, the Mission anticipates that an investor who expects less than a 60-percent occupancy rate will be very unlikely to invest. On the other hand, large establishments will be better able to market their space and to therefore count on a better occupancy rate. There have been strong expressions of interest in the Southeast Peninsula from hotel investors, most of whom said they were only waiting for the road and other infrastructure to be in place. The experience with the Jack Tar (formerly the Royal St. Kitts) resort facility at Frigate Bay indicates that very high occupancy rates can be achieved on a year round basis.

2. Fiscal Recovery Projections

The R.R. Nathan study, according to the terms of reference, was to assess the capacity of the existing revenue structure to capture sufficient revenues to cover the long-term costs to the Government of providing the infrastructure to attract investors. If that revenue structure was insufficient to cover costs, the study was to suggest additional revenue measures to ensure that the public sector costs of the Peninsula infrastucture were covered. In addition, the R.R. Nathan study was to include various cost-benefit scenarios which the Mission could use to evaluate the financial and economic viability of the proposed project.

The study assumes that there will be investment, offers three scenarios of possible lags in hotel investment, and concludes that there is, in one of the scenarios (the most optimistic), reason to believe that the existing revenue structure will be able to cover infrastructure costs. The study also asserts, on the basis of its conclusions, that there is no need for the Government to contemplate additional revenue measures except as an equity consideration.

In fact, USAID believes that there is need to worry about the public sector's ability to generate sufficient revenues to cover costs, and therefore the Government should seriously consider additional revenue measures to ensure that the costs of Peninsula development borne by the Government are fully covered. That conclusion derives from the now-perilous state of Government finances and the fact that Government current-year outlays associated with the infrastructure elements of the project will not be covered by revenues resulting from Peninsula development until at least the fifth year. (See Section III.B for Table of Revenue and Expenditure Projections).

3. Conclusions

From the analyses carried out in the Mission and by USAID-financed consultants, the following conclusions are drawn:

(a) If the road and supporting infrastructure are completed and if the regulatory structure to zone and protect the Peninsula are put in place and adhered to, then there is at least an even chance that hotel investors will have 250 hotel rooms in place on the Peninsula by the fifth year after road construction is complete, and that another 250 rooms will be in place by the eighth year;

(b) If this scenario occurs and if 60% room occupancy rates are anticipated by hoteliers, then the Government will, beginning in the fifth year after road construction, be able to cover same-year recurrent costs (including amortization of construction debt) from the revenues generated from economic activity on the Peninsula. (It is estimated that the Government will be able to cover same-year costs only after the first year of full occupancy of the hotel.) However, in any scenario, returns will be insufficient until that first full year and, in light of the Government's already serious financial problems, the Government should give serious consideration to putting in place additional revenue measures from the start to ensure adequate Peninsula development-generated revenues to cover these early-year cash flow problems. (Such measures are also highly desirable from an equity standpoint.);

(c) The financial rate of return associated with public sector infrastructure costs is estimated at approximately 17 percent, exclusive of additional revenue measures, assuming that the scenario discussed in point (a) (see Table 9). Thus, although in the first few years after construction begins revenues will be less than annual payments, these "losses" will be more than compensated for in subsequent years, if hotel construction proceeds as in the scenario noted in point (a) above. This apparently high rate of return for a public infrastructure project must be balanced by considering the riskiness of the project. (Indeed, if hotel construction and therefore tax revenues are delayed by even three years, the rate of return drops to about 4 percent.);

(d) It should be recognized that although the Government is obtaining a very favorable loan from AID, the 2 percent rate of interest during the first five years of the grace period and the 3 percent during the second five years sharply increases interest payments on public external debt. For example, assuming that the entire loan funded infrastructure package is US$ 11.4 million, the first quinquennium's annual payments will be US$ 0.23 million, increasing projected interest payments on Government external debt for 1987 by about 30 percent over the currently projected US$ 0.7 million; and,

(e) One measure of the economic rate of return to development of the Southeast Peninsula is calculated elsewhere in this paper as being about 40 percent (see Table 10). This estimate is based on a benefit stream consisting of annual increments to the economy's disposable income and a cost stream consisting of costs of constructing, maintaining, and operating all facilities (recreational and infrastructure) on the Peninsula over the period. Again, this rate of return is dependent upon a rapid entry of hoteliers with large hotels, and drops off if hotels are not built until later.

In sum, perhaps the most important consideration is that if economic growth is to occur in St. Kitts and a transition from sugar is to begin, there are probably no alternatives to the development of the Southeast Peninsula. Because of the lack of alternatives and because of the potential financial gains to the country, USAID supports the Government in seeking to develop the Southeast Peninsula and concurs that it is a worthwhile risk. The project design attempts to minimize that risk by: requiring the Government to institute new revenue measures; providing for improvements in the tax administration system; and, providing for assistance in land use and environmental management.

TABLE 8

SENSITIVITY TEST TO PRIVATE INVESTMENT MODEL

(ALL VALUES IN THOUSAND EC DOLLARS)

IF OCCUPANCY RATE IS 40%

PRIVATE INVESTMENT MODEL (IRF)	IRR (%)	YEARS 0	1	2	ANNUAL RETURNS 3-20
50 ROOMS	9.4	-4215.0	251.3	251.3	502.7
125 ROOMS	8.5	-10694.0	586.3	586.3	1172.7
250 ROOMS	7.5	-21900.0	1089.0	1089.0	2178.0
400 ROOMS	6.8	-34877.0	1608.3	1608.3	3216.7

IF OCCUPANCY RATE IS 60%

PRIVATE INVESTMENT MODEL (IRF)	IRR (%)	YEARS 0	1	2	ANNUAL RETURNS 3-20
50 ROOMS	14.8	-4215.0	377.0	377.0	754.0
125 ROOMS	13.5	-10694.0	879.5	879.5	1759.0
250 ROOMS	12.2	-21900.0	1633.5	1633.5	3267.0
400 ROOMS	11.2	-34877.0	2412.5	2412.5	4825.0

IF OCCUPANCY RATE IS 80%

PRIVATE INVESTMENT MODEL (IRF)	IRR (%)	YEARS 0	1	2	ANNUAL RETURNS 3-20
50 ROOMS	19.6	-4215.0	502.7	502.7	1005.3
125 ROOMS	18.1	-10694.0	1172.7	1172.7	2345.3
250 ROOMS	16.5	-21900.0	2178.0	2178.0	4356.0
400 ROOMS	15.2	-34877.0	3216.7	3216.7	6433.3

NOTES: All data based on the Island Resources Foundation study's "Private Investment Model," which is table A-25 in that report (see Annex F.3). USAID has altered the assumptions by assuming that full returns would not accrue to the hotelier until year 3, although there would be 50 percent returns for the first two years.

TABLE 9

FINANCIAL ANALYSIS OF PUBLIC COSTS IN PENINSULA DEVELOPMENT

(ALL VALUES IN THOUSAND EC DOLLARS)

OPTIMISTIC IRR IS 16.8%
MID-RANGE IRR IS 3.5%

	0	1	2	3	4	5	6	7	8	9
LOAN PAYMENTS (ON US$11.4 MILLION LOAN)		616	616	616	616	616	923	923	923	923
RECURRENT COSTS		3000	3000	3000	3000	3000	3000	3000	3000	3000
TOTAL COSTS		3616	3616	3616	3616	3616	3923	3923	3923	3923
CUMULATIVE COSTS		3616	7231	10847	14462	18078	22001	25925	29848	33772
FISCAL REVENUES (OPT)		700	300	1500	1500	8200	7800	9600	16100	15500
CUMULATIVE		700	1000	2500	4000	12200	20000	29600	45700	61200
FISCAL REVENUES (MID)		700	200				1400	6300	5200	6600
CUMULATIVE		700	400	900	900	900	2300	8600	13800	20400
FISCAL REVENUES (PES)		700	200				100	100		
CUMULATIVE		ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
NET RETURNS (OPT)	-30780	-2300	-2700	-1500	-1500	5200	4800	6600	13100	12500
NET RETURNS (MID)	-30780	-2300	-2800	-3000	-3000	-3000	-1600	3300	2200	3600

	10	11	12	13	14	15	16	17	18	19	20
LOAN PAYMENTS	923	2965	2965	2965	2965	2965	2965	2965	2965	2965	2965
RECURRENT COSTS	3000	3500	3500	3500	3500	3500	3500	3500	4000	4000	4000
TOTAL COSTS	3923	6465	6465	6465	6465	6465	6465	6465	6965	6965	6965
CUMULATIVE COSTS	37695	44160	50626	57091	63557	70022	76487	82953	89918	96884	103849
FISCAL REVENUES (OPTIMISTIC)	17000	18600	20100	26800	26500	27600	29900	31900	38600	38400	39500
CUMULATIVE	78200	96800	116900	143700	170200	197800	227700	259600	298200	336600	376100
FISCAL REVENUES (MID-RANGE)	7400	8300	8600	9200	9500	10200	10700	10700	10700	11400	12100
CUMULATIVE	27800	36100	44700	53900	63400	73600	84300	95000	105700	117100	129200
NET RETURNS (OPTIMISTIC)		1200	6100	5200	7200	7400	7700	8000	8500	9500	10200
CUMULATIVE	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
NET RETURNS (OPTIMISTIC)	14000	15100	16600	23300	23000	24100	26400	28400	34600	34400	35500
NET RETURNS (MID-RANGE)	4400	4800	5100	5700	6000	6700	7200	7200	6700	7400	8100

NOTES:

1. Public costs are the sum of USAID's project costs (US$7.9 million) and USAID's estimate of costs of other utilities (US$ 3.5 million, (see Appendix Table 1 of the Supplement to the PMPP fiscal recovery study, in Annex G.2.) The (perhaps somewhat generous) assumption is made that costs outside USAID's project costs would be covered by loans equally concessional to USAID's loan terms.

2. Fiscal revenues are derived from the same Supplement (and its Appendix Tables 2, 3, and 4), but the assumption that hotel construction in a given year would result in full public revenue benefits by the following year is altered to assume that such benefits would not occur until two years after construction is done.

TABLE 10

ECONOMIC ANALYSIS OF PENINSUAL DEVELOPMENT

(ALL VALUES IN THOUSAND EC DOLLARS)

	TOTALS	1	2	3	4	5	6	7	8	9	10
TOTAL COSTS	2221[illegible]3	36480	3000	5529	24900	16479	15150	37050	26100	28207.5	29207.5
INFRASTRUCTURE	33480	33480									
TOURISM FACILITIES	53073			2529	21900	2529		21900		2107.5	2107.5
INFRA OPERATING	30000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000
FACILITIES OPERATING	105550					10950	12150	12150	23100	23100	24100
(NON-PUB COSTS)	158623	0	0	2529	21900	13479	12150	34050	23100	25207.5	26207.5
TOTAL BENEFITS (DISP INCOME)	433658	4800	2300	11700	11658	47400	41700	54900	87800	81600	89800
NET BENEFITS		-31680	-700	6171	-13242	25221	39750	50750	55500	61592.5	69392.5

ECONOMIC RATE OF RETURN IS 39.7%
IF OCCUPANCY RATE IS 60%

NOTES:

1. This analysis is based on the "optimistic model" in the R.R. Nathan study, and therefore on the data in Appendix Table 2 in the Supplement to that study. The relevant "benefits" line item in that table is "disposable income," the explanation for which is in that Supplement. Again, as in Table 9, the benefits have been delayed for one year beyond what the Supplement estimates. In addition, the public costs item includes USAID's grant of US$ 1 million for technical assistance connected with the project, so the public costs differ from the preceding table herein.

D. Institutional and Administrative Analyses

1. The Dimensions of the Task

The opening of the Southeast Peninsula for development activities will result in a formidable set of new or expanded planning, management, and regulatory responsibilities for the Government of St. Kitts and Nevis. Prior to commencement of construction projects, Government will establish both a legal and administrative framework within which an orderly but also creative process of economic growth and social change can take place without causing environmental damage. If the Government either underestimates the dimensions of this task or fails to provide sufficient support for implementing land management policies or environmental protection programs, then the integrated development strategy proposed for the Peninsula will not be achieved.

The Government of St. Kitts and Nevis therefore confronts the difficult task of rapidly developing new or expanded planning, management, marketing, and monitoring skills and services. Even a preliminary listing of these new or expanded functions will include:

- tourism facilities permitting procedures
- establishment of standards and guidelines (buildings, sewage, roads, marinas, coastal water quality, erosion control)
- design and implementation of an EIA process
- compliance monitoring
- environmental monitoring
- protected and public areas management
- land acquisition and easements
- tax, licencing and user fee policies
- coordination of all of the above

2. Solutions to the Problem

USAID and the Government of St. Christopher and Nevis recognize that planning, managing and monitoring the Southeast Peninsula road construction and development of tourism facilities and amenities constitutes a formidable set of new responsiblities and tasks for the Government.

Both administrative leadership on the part of the Government and a good working relationship between the public and private sector are critical. The respective roles of the public and private sector in the development of a venture of this sort are not always clear. Landownership at the Southeast Peninsula is almost entirely in private hands, while the means to secure funds for basic infrastructure to open the area lies with the government. This ambiguous situation has been complicated by lack of formal communication networks between the Government and the Peninsula landowners, and by the lack of sufficient administrative staff and procedures on land use.

Completion of the predesign process described in Section II.A.4 has culminated in a procedural and organizational framework which views the Government as responsible for:

- building the road
- managing and monitoring the Peninsula's environment to ensure sustainable use for generations to come
- promoting the Peninsula's development potential
- financing the necessary infrastructure
- legislating the necessary tax reform and fiscal incentives
- legislating the necessary statute establishing a forum for public/private sector land use and development options with back-up technical expertise
- mobilizing public support for the national goals associated with the Peninsula's development
- hiring the necessary personnel to oversee the managing, monitoring and planning functions
- liasoning on both a formal and informal basis with the Peninsula landowners.

The framework for carrying out these administrative responsibilities is discussed in the following section.

3. Institutional Framework for SEP Development Planning

a. The Planning Unit

The Planning Unit of the Ministry of Agriculture, Lands, Housing and Development is presently undergoing a revision in its functions and powers which will give the agency more control over the physical planning process enabling the officers to ensure that objective requirements are met. Legislation has been drafted and passed by the National Assembly to this end.

The following are the primary functions and powers of the Planning Unit:

- The planning and preparation of residential, commercial, industrial, agricultural, institutional and other development schemes.

- The evaluation of any development scheme submitted to Government for planning approval.
- The drawing up of schemes to develop land and to grant any person permission to develop land with the concurrence of the Minister in terms of the Land Development (control) Ordinance No. 15 of 1966.
- To undertake or supervise development plans or capital investment plans undertaken by or on behalf of the Government.
- To carry out planning studies related to the various sectors of the economy on behalf of the Government.
- To prepare or assist in the preparation of physical development plans, economic development plans, and environmental.
- To monitor on-going development projects approved by Government.

Additionally, with the opening of the Southeast Peninsula for development the Planning Unit will have primary responsibility for 1) liaison with the donor agencies involved in the project; with the Attorney General's office for legislative reform; with developers, with the SEP Development Board, and with other Government departments; 2) establishment of development standards and procedures for implementation of the SEP Land Use and Development Plan; 3) implementation of environmental protection regulations and development standards for the Peninsula; 4) serve as the Secretariat for the Development Board.

The Planning Unit will initially receive all development proposals for the Peninsula, will ascertain the completeness of each application and will circulate the same to the Development Board and other government agencies. The Planning Unit will recommend approval or disapproval all development proposals and forward its decisions to the Board for submission to the Minister.

The Minister of Agriculture, Lands, Housing and Development nas ultimate responsibility for the Planning Unit and its operations. Chief technical responsibility for the operation of the Planning Unit lies with the Director of Planning. The Planning Unit itself is divided into three divisions: Physical Planning, Economics, and Statistics. Each of these divisions is run by a senior technician with technical staff support.

It is recognized, given the wide range of powers and responsibilities devolving on the Planning Unit that it is presently understaffed. The significant increase in planning responsibilities which will occur with the opening of the Southeast Peninsula for development necessitated increasing the technical capabilities and personnel of the Planning Unit. The establishment of a technical assistance unit to work with the Planning Unit in support of the Southeast Peninsula is designed to meet these needs.

b. Southeast Peninsula Land Development and Conservation Board

In order to provide an organisational framework for consideration of land use options and for reaching consensus on a formal Land Use Management Plan, it was recommended that a Southeast Peninsula Land Development and Conservation Board be created by enactment of appropriate enabling legislation (see draft legislation in Annex I). The Board is being established, with operating rules and regulations, to accomplish the following functional objectives:

To provide a forum for public/private sector discussion on land use and development options for the Southeast Peninsula;

To make recommendations to Government regarding adoption of an official Land Use Management Plan for the Southeast Peninsula based on the guidelines suggested in this report, and in the antecedent Environmental Assessment Report;

To review development applications for the Peninsula, and to make recommendations to government on project proposals submitted.

The initial task of the Board will be to prepare and submit recommendations to Government on a development strategy for the Peninsula, using as a benchmark for its deliberations the guidelines suggested in the Land Use Management Plan prepared by Island Resources Foundation. The objective is to reach agreement by the public and private sectors on specific details to be incorporated into an official Southeast Peninsula Land Use and Development Plan. That Plan will consist of both land use maps and policy guidelines which should control overall development for the Peninsula.

Following the adoption of an official Land Use and Development Plan, the Board will function as the authority responsible to the Minister of Development for implementation of the objectives set forth in the Plan. The Board will review all development applications for the Peninsula; these must meet the criteria for land use defined in the official Southeast Peninsula Land Use and Development Plan. Each project proposal must satisfy the established criteria before the application is forwarded to the Minister, who provides final approval.

The Board is being created by an act of Parliament. Legislation will be followed by promulgation of appropriate rules and regulations. The Board will be composed of five personsappointed by the Minister and will consist of Government representatives and non-government persons selected for their professional skills and/or independent perspective and record of community leadership. It is envisaged that Government representatives will be from ministries or departments most directly involved with Peninsula development, e.g., Ministry of Labour and Tourism, Attorney General's Office, Planning Office, Ministry of Finance, or Ministry of Communications and Works.

To guard against disproportionate influence being exerted by any individual or group of individuals serving on the Board, the term of office will be limited to three years.

c. Technical Assistance Unit

The Southeast Peninsula Land Development and Conservation Board will examine development issues from the broader policy level while the Planning Unit will view issues from the technical perspective required for enforcement of legislation. The Board and the Planning Unit will be linked during the first 30 months by a Technical Assistance Unit which will provide the expertise and manpower required to get the land use, environmental and administrative aspects of the project off the ground. A scope of work and budget for this component of the project are included in Annex K.1. The general tasks of the team will be as follows;

i. To provide support to the Board in carrying out their responsibilities,

ii. To prepare a work plan and assure timely implementation of recommended actions in the Southeast Peninsula Environmental Assessment,

iii. To conduct in-country training and arrange a tour of model planned communities for key decisions makers.

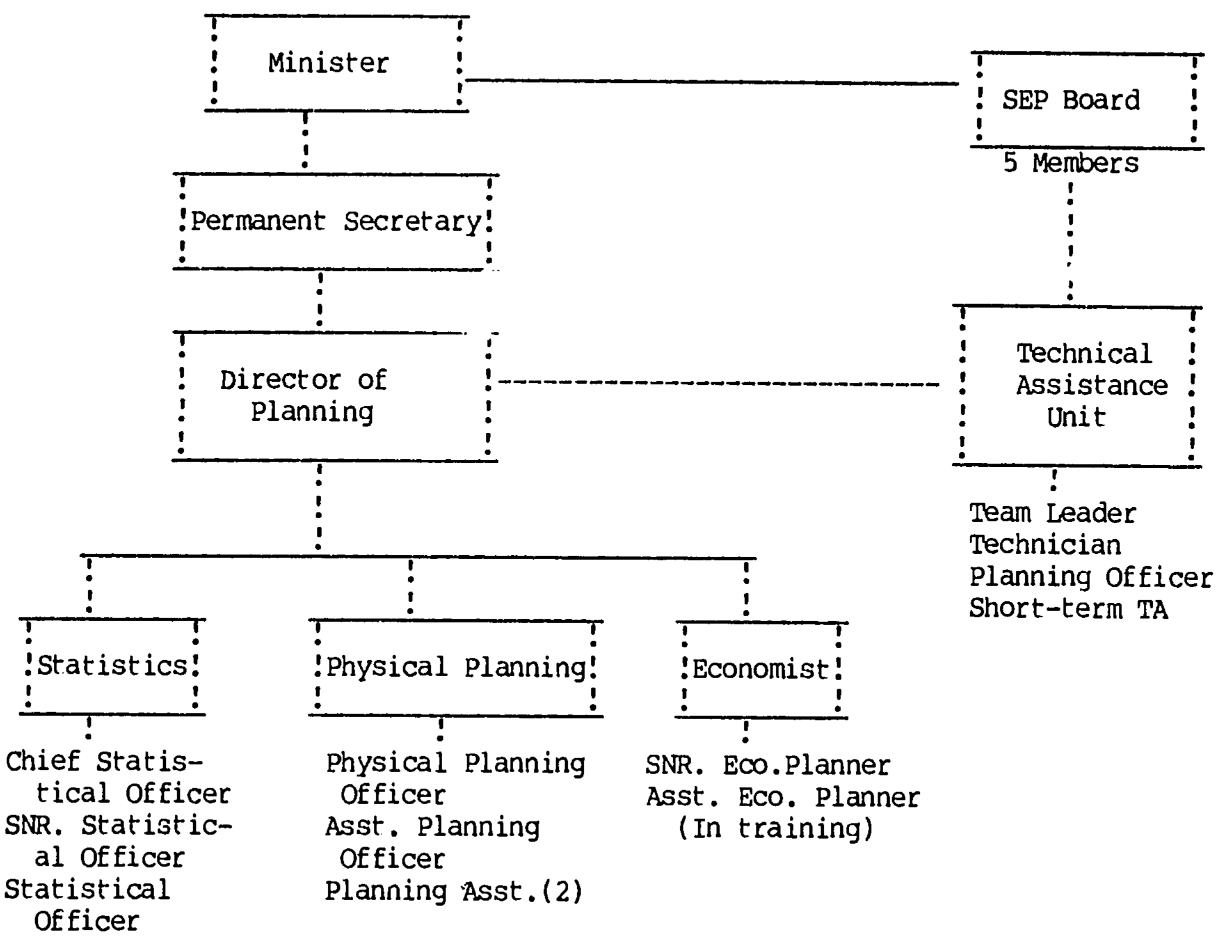
iv. to provide analysis to determine the impacts of Government policies on investment potential for the Peninsula,

v. to develop systems to expedite the approval process for investment applications.

TABLE 11

MINISTRY OF AGRICULTURE, HOUSING, LANDS AND DEVELOPMENT

DEVELOPMENT DIVISION



4. Public Works Department.

The Public Works Department is a division of the Ministry of Communications and Works and is responsible for the construction and maintenance of all public roads, buildings, ports, the airport, and government vehicles in the island of St. Kitts. The Public Works Department is headed by a British Development Division-financed consultant who has supervised the department for the last seven years. The pattern of internal organization of the Department is as follows:

TABLE 12

ST. KITTS PUBLIC WORKS DEPARTMENT

Superintendent

Assistant Superintendent

Asst. Engineer (Civil Works
Inspector of Works (Roads)
Foremen
Foremen

Assistant Engineer (Bldgs. Port)
Inspector of Works (Vacant)
(18-20 non-established mechanics, laborers)
Foreman
Foreman
Foreman

Repair Shop Manager
Vehicle Foreman
Heavy Plant Foreman

The Department which has major responsibility for all Public Works and Government Repair is a well-run organization with good staff and management. In addition to the above responsibilities, the PWD houses Government Stores and does the purchasing of all parts and machinery for government industries. From conversation with the Superintendent and other employees, the stores are well-stocked and parts are not a problem. Most parts, which are ordered from abroad arrive within seven days. Procurement procedures appear to be simple.

The Superintendent of the PWD runs a very efficient operation. Although there is a vacancy at the Inspector level, the PWD does not seem to have management weaknesses at the established workers level.

Both the Superintendent and the Assistant Superintendent are carrying out their responsibilities with considerable autonomy. The location of Government stores within this Division facilitates PWD's ability to perform tasks expeditiously.

The Superintendent is a qualified Engineer while the Assistant Superintendent has 30 years experience with PWD. Both Assistant Engineers are qualified. The Inspector of Roads has no professional qualifications but has taken several overseas courses on road construction and maintenance. Non-established workers including masons, carpenters and mechanics have various grades of training; many are graduates of the Technical College.

With a laboring staff of approximately 150 full-time workers, the PWD seems to be adequately staffed for an island the size of St. Kitts. Absenteeism is not a major problem except during the Christmas/Carnival season. Workers with PWD do not, as a rule work on estates, and thus are available full-time throughout the year.

The Superintendent of the PWD has established a well-run organization and personally directs much of its efforts. The Superintendent has a good knowledge of all equipment and heavy plant and its working condition and efficiency. Additionally, a well-stocked store insures the maintenance of machinery and vehicles for the duration of the Project.

The Superintendent is assisted by a capable and efficient staff including an Assistant Superintendent. There will be a foreman attached to the project and the necessary assistants. Depending on weather conditions, this aspect of the Project should be completed in eighteen months.

E. Social Soundness Analysis

1. Socio-Cultural Context

St. Kitts and Nevis, which achieved independent statehood on September 19, 1983, is by Eastern Caribbean standards a small country with a total population of 44,404 (35,104 on St. Kitts) and a gross domestic product (GDP) of approximately US$43 million. The total labor force is approximately 17,000 persons. A small but growing light manufacturing sector, approximately 30 firms, employs 3,000 persons generating approximately eight percent of GDP. Sugar production occurs entirely on St. Kitts and occupies 12,000 acres out of 19,000 acres regarded as agricultural land.

Given the decline in world sugar prices, the Government's efforts to increase export earnings, tax revenues, and employment opportunities through expansion of the tourism sector is quite understandable and defensible. The tourist industry has been gaining in economic significance for the last five years. Arrivals have been increasing yearly, particularly since 1983. Over 40,000 people visited St. Kitts and Nevis in 1985, up from 35,000 in 1983. This performance is among the best in the Caribbean and reflects the strong market interest in "new" destinations.

However, although tourist arrivals have been increasing, St. Kitts and Nevis is hamstrung by transportation and accommodation constraints which limit the growth potential of the industry. At present only two international airlines serve St. Kitts on a weekly basis; there is no daily service. In order for increased service to occur, the St. Kitts and Nevis hotel sector has to expand significantly. Given the ecology of the two islands, with their mountainous interiors, attention has naturally turned to the unoccupied Southeast Peninsula area, five times the size of the largest area currently under development at Frigate Bay. For development of the Southeast Peninsula to commence, however, the need for a full-length penetration road has been acknowledged as essential. This project is the culmination of a number of studies and various engineering design proposals for such an access road. It is also the culmination of and distillation of thorough research and discussion on the likely implications of constructing such a road and what necessary inputs for balanced economic development should entail.

2. Socio-Cultural Feasibility

It was recognized by all parties that this project could not be viewed or designed as simply a road construction project. An undertaking of this sort which opens up hither to undeveloped areas to intensive capital investment carries with it many environmental, political, social, legal and fiscal issues. Hence, this project is holistically designed to provide the Government and the people of St. Kitts and Nevis with the necessary institutional and legal framework to cope with the physical development process of the Peninsula.

Thus, road construction is but one component, albeit the most pivotal, in the entire project. This means, therefore, that the project is complex and potentially fraught with many problems. Successful completion of both road construction and the implementation of the institutional framework for managing Southeast Peninsula development will require serious commitment on the part of Government and individuals; it will require an intense influx of skills and talents, some of which will be provided locally, but much of which will be technical assistance provided by outside consultants.

In designing this project one had to be cognizant of the serious personpower constraints affecting its implementation and ultimate success. The institutional framework was designed with Kittitian professionals in a manner that all felt would best address the serious administrative needs without unduly burdening Government and individuals and without creating a bureaucracy unworkable because of fiscal and personpower constraints.

However, it is necessary to caution that although the institutional framework design is both needed and appropriate, ongoing successful implementation will require political will on the part of this, and future Governments. There are equity issues, political issues and hard decisions which will have to be resolved in the area of land use management and physical development of the Peninsula. A deteriorating fiscal situation also impacts on Government's ability to provide the necessary resources to affect environmental controls and to fund and staff new positions.

3. Participant and Beneficiary Populations

The design process of this project has been a thoroughly collaborative one involving Southeast Peninsula landowners, prospective investors, regional enviromental consultants, regional economists and most importantly the political leaders and chief technicians of the Government of St. Kitts and Nevis. In fact, the Environmental Assessment Team funded by USAID included three Kittitians appointed by the Government: a hotelier/landowner, the Director of Planning and the Chief of the Water Department. Additionally Government appointed a local resources committee to overview the Land Use Management Plan proposed by Island Resources Foundation and to make recommendations to Government.

4. Equity Issues

The entire design thrust of this project, as a development project, rather than simply a road construction project, is to ensure as far as possible, that the opening up of the Southeast Peninsula for development is done in such a manner as to ensure long-term benefits for the majority of the population of St. Kitts and Nevis, including the environmental protection of this patrimony. Hence, project design has entailed a number of analyses resulting in a series of recommendations, many of which have been incorporated as conditions precedent in the proposed road project. Importantly, Government has agreed to a tax reform package which includes amendment to the present law to provide for varying tax rates for special development areas of which the Southeast Peninsula would be designated the first. Taxes on land transfers and property are to be increased and are to be assessed on a revised market value. This first phase of taxation will be legislated before construction of the road and will capture revenue from early land speculation.

5. Social Impact and Spread Effects

Robert Nathan Associates, Island Resources Foundation and Neidcorp have all analyzed the growth potential of the Southeast Peninsula. These organizations have examined the following: the prospects for recovery of public investment in the road and other infrastructure; the potential for significant tax revenue; the tourist development potential; the prospects for overall Peninsula Development; the hazards facing the environment; and the effect of the development on the labor force.

While all these analyses postulate that construction of the road and the opening of the Southeast Peninsula to development will result in considerable private investment, the generation of revenue, increase in job opportunities and moderately optimistic multiplier effects, it is difficult to forecast or measure this potential in a reliably quantifiable manner. What can be postulated is that significant tourist investment on the Southeast Peninsula, provided an equitable tax and revenue system is put into place, would measurably assist the poor fiscal situation of St. Kitts and Nevis, provide revenues which could benefit social welfare in many areas and have widespread positive social impact.

Secondly, components of the project are designed to ensure that investment on the Southeast Peninsula benefits as wide a base of the local populace, Government, and indigenous private sector as possible. Institutional development is designed not only to provide for objective criteria and balanced land use, but also for providing Kittitians with the necessary skills to oversee this balanced development. At the end of the project the foundations for: environmental protection and monitoring, land use management, improved tax administration and better physical planning will be in place and can be built on. Discussion of these components and areas of concern are further discussed in Annex J.

F. Environmental Analysis

In conformance with USAID Reg. 16, Environmental Procedures (22 CFR Post 216), a series of studies were prepared in conjunction with the proposed penetration road under the assumption that the project was an "area development action," not just a road construction project, requiring long-term planning to avoid environmental deterioration of the basic amenities of the Southeast Peninsula.

An Initial Environmental Examination (IEE) was prepared by the Regional Environmental Management Specialist (REMS) in June 1985 which recommended (1) that an Environmental Assessment (EA) be undertaken in order to define and package the data base of information on which development decisions could be made and to prepare an Environmental Protection Strategy for the Southeast Peninsula; and (2) that a Land Use Management Plan (LUMP) follow the EA, which would serve as a basis for deciding upon future environmentally sound development options.

The EA, conducted in October 1985 (Annex F.2) concluded that during road construction unreasonable degradation of the terrestrial and marine environments would not occur if precautions were taken primarily to control erosion and reduce sediment inputs (e.g. from spoil areas) to the adjacent marine environment. In the long term and following road construction, imports by people and development resulting from improved areas were also identified as potentially serious threats to the Peninsula environment.

Therefore, factors such as strengthening the institutional and legal basis to manage the environment of the Southeast Peninsula and St. Kitts in general, were recommended in a more comprehensive resource protection plan described in Chapter 5 of the EA. The Government reviewed the EA and endorsed it in early 1986. Two key assumptions linked to the eventual execution of such a resource protection plan are (1) that the Government's capacity to manage its environmental resources be improved through major structural adjustments in an institutional and legal sense; and (2) that some manageable growth scenario for the Southeast Peninsula be promoted in a socially and environmentally-accepted context.

The Land Use Management Plan (Annex F.3), prepared during March - April 1986, elaborates a comprehensive set of new and expanded planning, management, and regulatory responsibilities for the Government which will be implemented during road construction and operational upon completion of the road. The Government is prepared to establish both a legal and administrative framework for environmentally sound economic growth on the Peninsula. USAID is prepared to make available those necessary financial resources to support the implementation of appropriate environmental protection measures and a coherent land management and development policy, including technical assistance, commodities and training.

Major program elements of the environmental protection plan will be executed by the Government with the assistance of a contractor. It is anticipated that the major duties of this contractor would include: (1) institution-building with respect to the proposed Southeast Peninsula Land Development and Conservation Board; environmental education (Appendix D of EA); technical assistance in the environmental sciences and on policy matters pertaining to Southeast Peninsula development; identification of trainees and training mechanisms for designated Government staff in environmental management; and legislative reform, or its facilitation by the Attorney General of St. Kitts and Nevis.

1. <u>Remedial Environmental Protection Measures During Road Construction</u>

Appendix M and Section 4.1 and 5.1.1 of the LUMP describe, in general terms, the measures necessary to protect the coastal environment from road construction impacts. In sum, these include:

(a) prevention of or mimimizing the effects of erosion
(b) entrapment of sediments (i.e. eroded materials)
(c) coordination of erosion and sediment control and management of water run-off from selected sites along the proposed road alignment.

The appropriate time to identify potentially critical sites with respect to the above required measures would be prior to finalization of the engineering plan and design. An engineer from Louis Berger International and representatives of the Public Works Department will review the IFB documents including profile drawings, to ensure that, where possible, adequate measures to address environmental concerns have been included. Quality control/quality assurance of implementation of such remedial measures will be the responsibility of the A&E Construction Supervision Contractor, who will be selected prior to construction commencement.

2. Legal and Instutional Elements of the Land Use Management Strategy

The Government will approach the problem of arriving at a mutually acceptable development strategy for the Southeast Peninsula through adoption of a Land Use Management Plan and some appropriate development option such as the "manageable growth scenario" elaborated in the LUMP. Chapter 5 and Appendices B and C of the LUMP analyze the existing institutional framework within which the Peninsula development activities may be planned and executed. The basic components of the action agenda to implement desired institutional and legislative changes are described in Table 5.1 of the LUMP, but are summarized herein as follows:

- Establishment of the Southeast Peninsula Land Development and Conservation Board;
- Official adoption of the Land Use and Development Plan;
- Training of Planning Office staff in environmental management principles and of the Education Office in environmental education;
- Preparation of Southeast Peninsula development guidelines (especially the Developers Handbook), EIA procedures, and a Recreation/Amenities Plan;
- Establishment of a parks and public recreation management framework for designated Peninsula lands.

Each of these talks will serve as benchmarks of progress, or discrete outputs of the project. The completion of each of these tasks will be facilitated or directly accomplished by the Ministry of Agriculture, Lands, Housing and Development, including any necessary legislative reform mentioned in Table 5.1 or other pretinent sections of the LUMP.

The institutionalization of the environmental management process must evolve within a West Indian time frame, that is gradually over the Life-of-Project. Hence, there is a need to be flexible by not attempting to establish a rigid institutional structure for the Board and other agencies, which will be eventually mobilized to address the field and policy management needs of the Peninsula.

In terms of a timeframe in which this action agenda for expansion and upgrading of selected Government sectors, for legislative reform, and for implementation of a regulatory framework associated with development of the SEP, it is anticipated that all basic elements will be in place by the end of the road construction phase. For this reason, the environmental management/technical assistance contract will be for a period of 30 months.

VII. Conditions Precedent Covenants

The following conditions and covenants will be included in the Loan/Grant Project Agreement:

A. Conditions Precedent

1. First Disbursement. Prior to the first disbursement of the Assistance, or to the issuance by A.I.D. of documentation pursuant to which disbursement will be made, the Cooperating Country will, except as the Parties may otherwise agree in writing, furnish to A.I.D. in form and substance satisfactory to A.I.D.:

(a) An opinion of counsel acceptable to A.I.D. that this Agreement has been duly authorized and/or ratified by, and executed on behalf of, the Cooperating Country, and that it constitutes a valid and legally binding obligation of the Cooperating Country in accordance with all of its terms; and,

(b) A statement of the name of the person holding or acting in the office of the Cooperating Country specified in Section 9.2, and of any additional representatives, together with a specimen signature of each person specified in such statement.

2. Construction Supervision and Construction Services. Prior to any disbursement of loan funds for construction supervision and construction services, or to the issuance by A.I.D. of documentation pursuant to which disbursement will be made, the Cooperating Country will, except as the parties may otherwise agree in writing, furnish to A.I.D. in form and substance satisfactory to A.I.D.:

(a) Evidence that legislation to establish a Southeast Peninsula Land Development and Conservation Board, acceptable to A.I.D., has been approved by Cabinet and passed by the National Assembly;

(b) Evidence that funds have been committed to finance the installation of a water supply system for the Southeast Peninsula;

(c) Evidence that the Government of St. Christopher and Nevis has obtained, or is in the process of obtaining, all necessary rights of way to lands where construction activities will take place under the A.I.D.-financed part of the Project;

(d) Evidence that; (i) an employee of the Planning Unit has been assigned for thirty months to work with the Technical Assistance team which will assist the Southeast Peninsula Land Development and Conservation Board, (ii) an employee of the Ministry of Agriculture, Lands, Housing and Development has been appointed Project Manager with respect to all aspects of the Project, (iii) an employee of the Public Works Department has been given signature authority for requests for payment by the construction and supervisory engineering contractors; and, (iv) an employee of the Ministry of Finance has been appointed to liaison with the Public Management and Policy Planning Contractor in completing tasks under the financial program of the Project;

(e) Evidence that the Southeast Peninsula has been designated a Special Development Area and that such fiscal measures as may be necessary have been enacted with regard to that Area sufficient to finance the costs associated with the public sector expenditures incurred in development of the Southeast Peninsula; and,

(f) Evidence that Parks and Reserves Legislation has been approved by Cabinet and passed by the National Assembly.

B. Special Covenants

1. Project Evaluation. The Parties agree to establish an evaluation program as part of the Project. Except as the Parties otherwise agree in writing, the program will include during the implementation of the Project and at one or more points thereafter:

(a) Evaluation of progress toward attainment of the objectives of the Project;

(b) Identification and evaluation of problem areas or constraints which may inhibit such attainment;

(c) Assessment of how such information may be used to help overcome such problems;

(d) Evaluation, to the degree feasible, of the overall development impact of the Project.

2. Staffing and Meetings of the Southeast Peninsula Land Development and Conservation Board. The Government of St. Christopher and Nevis agrees to appoint representatives to the

Southeast Peninsula Land Development and Conservation Board, to assure that the Board meets on a regular basis to address Peninsula development issues and to implement a Southeast Peninsula Land Use and Environmental Management Plan.

3. Maintenance Costs. The Government of St. Christopher and Nevis agrees to provide on a continuing basis adequate funds for the maintenance of the road to be constructed under the Project.

4. Land Use Management Plan. The Government of St. Christopher and Nevis agrees to prepare a national land use management plan.

5. Provision of Utilities. The Government of St. Christopher and Nevis agrees to provide, or cause to be provided, installation of the utilities required to meet projected demand on the Southeast Peninsula.

VIII. Evaluation Plan

The progress of this sub-project will be closely monitored on an ongoing basis by the USAID Project Committee and the IEMS contractor within the umbrella project monitoring framework. RDO/C will hold monthly reviews with the IEMS core contractor to assess all aspects of performance.

Additionally, there will be two formal evaluations of this sub-project. The first evaluation will be conducted not later than eighteen months after the signature of the Project Agreement. The final evaluation will be carried out not less than three months before the PACD of the subproject which is September 1989.

The first evaluation will focus principally on contruction status, institution building and policy elements of this sub-project. Specifically, it will assess the progress being made with the establishment of a functional Southeast Peninsula Land Development and Conservation Board. The evaluation will examine how the Board is carrying out the following responsibilities:

A. evaluation of residential, commercial, industrial, agricultural and other developmental schemes;

B. Recommendation in respect to; 1. allotment, reservation and zoning of land for different purposes; 2. control of pollution and maintenance of the environmental quality of the Southeast Peninsula, including coastal conservation; 3. development and implementation of an environmental protection plan; and, 4. preparation of schemes to develop lands;

C. Conduct of planning studies; and,

D. monitoring of private sector development schemes.

The evaluation will assess implementation of the Board's workplan and review the status of Government's actions regarding:

- the environmental education program;
- a "Developer's Handbook";
- Environmental Impact Assessment procedures;
- Plans for: Erosion Control and Sediment Reduction,
  Wildlife/Endangered Species
  Management,
  Beaches and Dunes Management,

A National Conservation Strategy,
Land Acquisition (recreation, parks, utilities, etc.)
Marine Resources Management,
Recreational Development and Management,
Parks and Protected Areas,
Reforestation,
Tourism Amenities/Utilities; and,

- Assistance in drafting promulgation of laws for parks and reserves enforcement.

The evaluation will also review implementation of legislative and policy measures required to facilitate enterprise development. This evaluation will therefore assess the operations, systems and procedures of the Board, its staffing patterns and its potential for being an effective organization for managing the competing demands of economic development and environmental protection. This mid-term assessment is expected to recommend whatever modifications are necessary to assure the establishment of the institutional, financial and infrastructure framework for the physical and economic development of the Peninsula.

The final evaluation to be completed prior to the PACD, will be an impact evaluation and will review lessons learned. It will seek to determine the extent to which this subproject has contributed to the development of the tourism sector as a means of broadening the economic base of the country. In this connection, this evaluation will ascertain the degree to which private sector investment can be attributed to project activities. It will also examine the impact of construction activities on the environment. Finally, it will assess how successfully the Board's functions (above) have been institutionalized.

The level of effort required for the initial evaluation will be a minimum of 1.5 person months <ins>each</ins> for a Transportation Economist, an Institutional Development Specialist and an Engineer/Environmental Specialist.

ACTION AID-7 INFO AMB DCM P/E CERON 10

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LZJVZCZCWN0389
RR RUEHWN
DE RUEHC #2420 3510006
ZNR UUUUU ZZH
R 170006Z DEC 85
FM SECSTATE WASHDC
TO AMEMBASSY BRIDGETOWN 2186
BT
UNCLAS STATE 382420

LOC: 001 241
17 DEC 85 0008
CN: 01780
CHRG: AID
DIST: AID

AIDAC

E.O. 12356: N/A
TAGS: N/A
SUBJECT: ST. KITTS ROAD - NEVIS PORT

REF: ZALLMAN - ORR TELCON 11/21/85

1. DECISION ON APPROVAL AUTHORITY FOR SUBJECT ACTIVITY OF INFRASTRUCTURE CLUSTER PROJECT WAS DEFERRED AT ACTION PLAN AND INFRASTRUCTURE PID REVIEWS UNTIL AFTER ACCEPTANCE OF STRATEGY STATEMENT FOR ST. KITTS-NEVIS. STRATEGY WAS ACCEPTED AT NOV. 8 REVIEW, AND IT WAS AGREED THAT SUBJECT ACTIVITY WOULD BE PRINCIPAL USG BILATERAL ASSISTANCE TO ST. KITTS-NEVIS.

2. PER REFCON, AID/W UNDERSTANDS THAT MISSION NOW INTENDS TO SPLIT ROAD AND PORT ACTIVITIES INTO SEPARATE LOP FUNDING APPROVAL DOCUMENTS. AID/W AGREES THAT MISSION HAS PROVIDED ENOUGH INFORMATION ON ST. KITTS ROAD TO ENABLE PROCEEDING TO PP SUPPLEMENT WHICH MAY BE APPROVED BY THE RDO/C DIRECTOR.

3. TO DATE, HOWEVER WE HAVE NOT RECEIVED DESCRIPTION OF NEVIS PORT ACTIVITY. PLEASE INCLUDE DESCRIPTION OF PLANNED PORT PRJECT IN NEXT ACTION PLAN. IF EARLIER AID/W CONCURRENCE IS NEEDED, PLEASE CABLE ACTION PLAN LEVEL DESCRIPTION. WHITEHEAD
BT
#2420

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ACTION AID · · · · · · · · · ·

LOC: 006 537
05 AUG 86 2306
CN: 02517
CHRG: AID
DIST: AID

VZCZCWN0470
OO RUEHWN
DE RUEHC #3689 2162257
ZNR UUUUU ZZH
O 042256Z AUG 86
FM SECSTATE WASHDC
TO AMEMBASSY BRIDGETOWN IMMEDIATE 4971
BT
UNCLAS STATE 243689

AIDAC

E.O. 12356: N/A
TAGS:
SUBJECT: LOAN TERMS FOR ST. KITTS-NEVIS SE PENINSULA ROAD PROJECT

REF: (A) BRIDGETOWN 04579; (B) ZALLMAN-GROHS TELCON 7/14

1. APPRECIATE THOUGHTFUL CABLE REQUESTING MOST CONCESSIONAL TERMS FOR SUBJECT PROJECT.

2. ST. KITTS-NEVIS NOW QUALIFIES FOR 25 YEAR TERMS WITH 10 YEAR GRACE PERIOD. INTEREST IS 2 PERCENT DURING FIRST FIVE YEARS; 3 PERCENT DURING SECOND FIVE YEARS; AND 5 PERCENT DURING THE FIFTEEN YEAR AMORTIZATION PERIOD.

3. PER REF (B) UNDERSTAND ST. KITTS-NEVIS DEBT SERVICE IS ABOUT 20 PERCENT OF TAX AND NON-TAX REVENUES AT PRESENT. DIFFERENCE BETWEEN TERMS STATED PARA 2 AND MOST CONCESSIONAL TERMS WOULD NOT INCREASE DEBT SERVICE IN FIRST FIVE YEARS, AND WOULD ONLY INCREASE DEBT SERVICE BY ABOUT DOLS 60,000/YEAR OR ABOUT 0.2 PERCENT IF LOAN WERE FULLY DISBURSED IN ONE YEAR.

4. SINCE DEBT SERVICE IS RELATIVELY LOW AND ADDITIONAL

BURDEN WOULD BE MINIMAL, REGRET TO ADVISE THAT REQUEST IS NOT APPROVED. SHULTZ
BT
#3689

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5C(1) - PROJECT CHECKLIST

Listed below are statutory criteria applicable to projects. This section is divided into two parts. Part A. includes criteria applicable to all projects. Part B. applies to projects funded from specific sources only: B.1. applies to all projects funded with Development Assistance loans, and B.3. applies to projects funded from ESF.

CROSS REFERENCES: IS COUNTRY CHECKLIST UP-TO-DATE?
HAS STANDARD ITEM CHECKLIST BEEN REVIEWED FOR THIS PROJECT?

A. GENERAL CRITERIA FOR PROJECT

1. FY 1986 Continuing Resolution Sec. 524; FAA Sec. 634A

   Describe how authorizing and appropriations committees of Senate and House have been or will be notified concerning the project;

   Subproject is part of IEMS Project (538-0138) Congressional Notification which was sent forward and expired on March 8, 1986.

2. FAA Sec. 611(a)(1). Prior to obligation in excess of $500,000, will there be (a) engineering, financial or other plans necessary to carry out the assistance and

   Yes, this has been done.

   (b) a reasonably firm estimate of the cost to the U.S. of the assistance?

   Yes

3. FAA Sec. 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 purpose of the assistance?

   This subproject requires one piece of new legislation and an amendment to current legislation. We have received a draft of the new legislation. No funds will be committed until both actions have been enacted by the National Assembly. The terminal date on this action is 180 days.

4.	FAA Sec. 611(b); FY 1986 Continuing Resolution Sec 501 If for water or water-related land resource construction, has project met the principles, standards, and procedures established pursuant to the Water Resources Planning Act (42 U.S.C. 1962, et seq.)? (See AID Handbook 3 for new guidelines.)	Not applicable.
5.	FAA Sec. 611(e). If project is capital assistance (e.g., construction), and all U.S. assistance for it will exceed $1 million, has Mission Director certified and Regional Assistant Administrator taken into consideration the country's capability effectively to maintain and utilize the project?	Yes, the Mission Director has certified that St. Christopher and Nevis has the capacity to use and maintain the project.
6.	FAA Sec. 209. Is project susceptible to execution as part of regional or multilateral project? If so, why is project not so executed? Information and conclusion whether assistance will encourage regional development programs.	No.
7.	FAA Sec. 601(a). Information and conclusions whether project will encourage efforts of the country to: (a) increase the flow of international trade; (b) foster private initiative and competition; and (c) encourage development and use of cooperatives, and credit	The subproject provides the infrastructure base for foreign and local investment in private sector enterprises.

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	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.	
8.	<u>FAA Sec. 601(b).</u> Information and conclusions on how project will encourage U.S. private trade and investment abroad and encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise).	The subproject will utilize U.S. firms as construction supervisors, contractors, and land use management contractors.
9.	<u>FAA Sec. 612(b), 636(h); FY 1986 Continuing Resolution Sec 507.</u> 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 U.S. are utilized in lieu of dollars.	Not applicable.
10.	<u>FAA Sec. 612(d).</u> Does the U.S. own excess foreign currency of the country and, if so, what arrangements have been made for its release?	No.
11.	<u>FAA Sec. 601(e).</u> Will the project utilize competitive selection procedures for the awarding of contracts, except where applicable procurement rules allow otherwise?	Contracts for subproject activities will be let according to the Federal Aquisition Regulations as amended to reflect AID special circumstances.

12. FAA 1986 Continuing Resolution Sec. 522. If assistance is for the production of any commodity for export, is the commodity likely to be in surplus on world markets at the time the resulting productive capacity becomes operative, and is such assistance likely to cause substantial injury to U.S. producers of the same, similar or competing commodity?	Not applicable.
13. FAA 118(c) and (d). Does the project comply with the environmental procedures set forth in AID Regulation 16. Does the project or program take into consideration the problem of the destruction of tropical forests?	Subproject design included a full environmental assessment and project implementation will include an AID financed environmental management program. Not applicable.
14. FAA 121(d). If a Sahel project, has a determination been made that the host government has an adequate system for accounting for and controlling receipt and expenditure of project funds (dollars or local currency generated therefrom)?	Not applicable.
15. FY 1986 Continuing Resolution Sec. 536. Is disbursement of the assistance conditioned solely on the basis of the policies of any multilateral institution?	No.
16. ISDCA of 1985 Sec. 310. For development assistance projects, how much of the funds will be available only for activities of economically and socially disadvantaged enterprises,	Not applicable. This Project is ESF funded.

historically black colleges and universities, and private and voluntary organizations which are controlled by individuals who are black Americans, Hispanic Americans, or Native Americans, or who are economically or socially disadvantaged (including women)?

B. FUNDING CRITERIA FOR PROJECT

1. Development Assistance Project Criteria

a. FAA Sec. 102(a), 111, 113, 281(a). Extent to which activity will (a) effectively involve the poor in development, by extending access to economy at local level, increasing labor-intensive production and the use of appropriate technology, spreading investment out from cities to small towns and rural areas, and insuring wide participation of the poor in the benefits of development on a sustained basis, using the appropriate U.S. institutions; (b) help develop cooperatives, especially by technical assistance, to assist rural and urban poor to help themselves toward better life, and otherwise encourage democratic private and local governmental institutions;

Not applicable.

(c) support the self-help efforts of developing countries; (d) promote the participation of women in the national economies of developing countries and the improvement of women's status, (e) utilize and encourage regional cooperation by developing countries?

b.	<u>FAA Sec. 103, 103A, 104, 105, 106</u>. Does the project fit the criteria for the type of funds (functional account) being used?	Not applicable.
c.	<u>FAA Sec. 107</u>. Is emphasis on use of appropriate technology (relatively smaller, cost-saving, labor-using technologies that are generally most appropriate for the small farms, small businesses, and small incomes of the poor)?	Not applicable.
d.	<u>FAA Sec. 110(a)</u>. Will the recipient country provide at last 25% of the costs of the program, project, or activity with respect to which the assistance is to be furnished (or is the latter cost-sharing requirement being waived for a "relatively least developed country)?	Not applicable.

e.	FAA Sec 122(b). Does the activity give reasonable promise of contributing to the development of economic resources, or to the increase of productive capacities and self-sustaining economic growth?	Not applicable.
f.	FAA Sec. 128(b). If the activity attempts to increase the institutional capabilities of private organizations or the government of the country, or if it attempts to stimulate scientific and technological research, has it been designed and will it be monitored to ensure that the ultimate beneficiaries are the poor majority?	Not applicable.
g.	FAA Sec. 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 civil education and training in skills required for effective participation in governmental processes essential to self-government.	Not applicable.

2. <u>Development Assistance Project Criteria (Loans Only)</u>

a. <u>FAA Sec. 122(b)</u>. Information and conclusion on capacity of the country to repay the loan, at a reasonable rate of interest.	Not applicable.
b. <u>FAA Sec. 620(d)</u>. If assistance is for any productive enterprise which will compete with U.S. enterprises, is there an agreement by the recipient country to prevent export to the U.S. of more than 20% of the enterprise's annual production during the life of the loan?	Not applicable.

3. <u>Economic Support Fund Project Criteria</u>

a. <u>FAA Sec. 531(a)</u>. Will this assistance promote economic and political stability? To the maximum extent feasible, is this assistance consistent with the policy directions, purposes, and programs of Part I of the FAA?	Economic and political stability will be enhanced by diversifying the economy and making it less vulnerable to downward trends in sugar prices thereby safeguard employment opportunities and foreign exchange earnings.
b. <u>FAA Sec. 531(c)</u>. Will assistance under this chapter be used for military, or paramilitary activities?	No.

c.	<u>ISDCA of 1985 Sec. 207.</u> Will ESF funds be used to finance the construction of, or the operation or maintenance of, or the supplying of fuel for, a nuclear facility? If so, has the President certified that such country is a party to the Treaty on the Non-Proliferation of Nuclear Weapons or the Treaty for the Phohibition of Nuclear Weapons in Latin America (the "Treaty of Tlatelolco"), cooperates fully with the IAEA, and pursues nonproliferation policies consistent with those of the United States?	None.
d.	<u>FAA Sec. 609.</u> If commodities are to be granted so that sale proceeds will accrue to the recipient country, have Special Account (counterpart) arrangements been made?	Not applicable.

MISSION DIRECTOR'S GRAY AMENDMENT CERTIFICATION

"I, James S. Holtaway, as Director of the Regional Development Office/Caribbean, hereby certify that the procurement plan was developed with full consideration of maximally involving Gray Amendment organizations in the provision of required goods and services and that the Southeast Peninsula Area Development Project is appropriate for minority or Gray Amendment organization contracting."

James S. Holtaway
Director

September 16, 1986
Date

CERTIFICATION PURSUANT TO SECTION 611(e) OF THE FOREIGN ASSISTANCE ACT OF 1961, AS AMENDED

I, James S. Holtaway, as Director of the Regional Development Office/Caribbean, having taken into consideration, among other things, the maintenance and utilization of projects in the Caribbean Region previously financed or assisted by the United States, do hereby certify that in my judgement the Government of St. Christopher and Nevis has both the financial capacity and the human resources capability to effectively utilize and maintain goods and services procured under the proposed capital assistance loan and grant project entitled Southeast Peninsula Area Development Project.

This judgement is based upon the implementation record of externally financed projects, including USAID-financed projects, in St. Christopher and Nevis and the quality of planning which has gone into this new project.

James S. Holtaway

James S. Holtaway
Director

September 16, 1986

Date

PRIME MINISTER

ST. KITTS AND NEVIS

GOVERNMENT HEADQUARTERS,
P. O. BOX 186,
ST. KITTS, W. I.

Ref. No ...PM/S1/1......

11th September, 1986.

Mr. James S. Holtaway,
Director,
USAID,
P.O. Box 302,
Bridgetown,
Barbados, W.I.

Dear Mr. Holtaway,

The purpose of this letter is to request that the United States Government assist the Government of St. Christopher and Nevis to diversify its economic base by opening the Southeast Peninsula for tourism development. This expansion will offer an opportunity for employment creation and foreign exchange earnings which will partially relieve this country of its dependence on sugar production.

During the past twelve months the Government of St. Christopher and Nevis has been working with USAID to design the Southeast Peninsula Area Development Project and to examine the long range environmental, fiscal, and institutional impacts of opening 20% of this country's land area to development. The project as designed will include: a penetration road; water, power and telephone utilities; a financial program; and, a development council supported by a land use unit. We are requesting that USAID provide financial assistance for the road and technical assistance to the financial program and the land use management unit. The estimated cost of this assistance will be US$8,900,000.00.

The penetration road will be an all-weather road from Frigate Bay to White House Bay. The road structure will consist of six inches of crushed stone base course and a double bituminous surface treatment. The wearing surface will be eighteen feet wide with shoulders wide enough to accommodate the installation of utilities. Installation of waterpipe, conduits and manholes for the utilities will be financed by our Government whereas the more costly upgrades in supply will be financed by other donors or the utility services themselves. The actual utility connections will occur when user demand is imminent.

/The Government

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PRIME MINISTER

ST. KITTS AND NEVIS

GOVERNMENT HEADQUARTERS,
P. O. BOX 186,
ST. KITTS, W. I.

Ref. No ....PM/S1/1.....

Mr. James S. Holtaway, - 2 - 11th September, 1986.
USAID,
Barbados.

The Government of St. Christopher and Nevis assures the United States Government of its full cooperation in carrying out the Southeast Peninsula Area Development Project.

The Government of St. Christopher and Nevis further confirms its decisions in respect of the establishment of the Southeast Peninsula Development Authority, and the financial program as communicated to you in my letter of 19th August, 1986. The manpower, financial, and other inputs required of us will be provided in an expeditious manner.

We look forward to a continued, combined effort by both governments to yield a productive and beneficial program for the people of St. Christopher and Nevis.

Yours sincerely,

Kennedy A. Simmonds
Prime Minister.

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Life of Project:
From FY 1986 to FY 1989
Total U.S. Funding: US$ 8.9m
Date Prepared: 09/05/86

Sub-Project Title & Number: Southeast Peninsula Area Development Project No. 538-0138.01

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Program or Sector Goal: To diversify the economy, increase foreign exchange earnings and employment, and to promote broadly based economic growth through an expansion into the tourism sector.	Measures of Goal Achievement 1. Initiation of resort facility construction. 2. Decrease in unemployment or shift of workers from sugar industry.	1. Monitoring of issuance of building permits and changes in land ownership. 2. Statistical records of the planning unit.	Assumptions for achieving goal targets: Continued availability of personal disposable income for international travel by North Americans and Europeans.
Project Purpose: To establish the institutional, financial and infrastructure framework for the physical and economic development of the Southeast Peninsula of St. Kitts.	Conditions that will indicate purpose has been achieved: End of project status. 1. Road constructed, utility installation underway. 2. SDA taxation established, taxes assessments issued, collections received. 3. Southeast Peninsula Board meeting, LUMP accepted, decisions being made, zones established, investment applications being processed. 4. Environmental Management Program underway.	1. Completion of construction 2. Enactment and enforcement of fiscal and taxation laws. 3. Enactment of Board legislation, minutes of meetings, regulations gazetted. 4. Regulations established, publicity distributed.	Assumptions for achieving purpose: 1. GOSKN adherance to recommendations set forth in the Environmental Assessment, LUMP report, and the Fiscal Recovery Report 2. Funding committed by other donor sources and utility companies for utility installation.
Outputs 1. Construction of road 2. Establishment of an environmental management program. 3. Functional Land Development and Conservation Board. 4. Special Development Area taxation which is billed and collected. 5. Initiation of utility installation and hotel/resort construction.	Magnitude of Outputs 1. 4 miles. 2. An environmental education program; a "Developer's Handbook"; Environmental Impact Assessment; Erosion control and sedimemt reduction plan; Wildlife/Endangered species Mngmt. plan; Beaches and dunes management plan; National conservation strategy; Marine Resources Management plan; Parks and Protected Areas plan; and, Reforestation plan. 3. Rules and Regulations of Board promulgated, LUMP accepted, 24 meetings recorded. 4. 30 bills issued & collected for two consecutive years. 5. Water system installed, electricity and phone system installation underway, one new resort complex completed.	Through regular visits and/or periodic reports of LUMP unit.	Assumptions for achieving outputs: 1. Enactment and enforcement of Land Use Legislation. 2. Active investment by pivate sector developers 3. Construction of the road and utilities along the SEP.

Inputs:	Implementation Target (Type and Quantity) AID	GOSKN	TOTAL
Technical Assistance	612,000	-	612,000
Training	50,000	-	50,000
Commodities	74,000	-	74,000
Other			
Construction	7,900,000	-	7,900,000
Land Use Program	198,000	100,000	298,000
Water Supply System	-	2,000,000	2,000,000
Evaluation	66,000	-	66,000
Total	8,900,000	2,100,000	11,000,000

USAID disbursement records, Ministry of Communications and Works Maintenance Records, planning units staff assignments.

Assumptions for Providing Inputs:
Road and Utilities need maintenance prior to PACD.

ACTION AID-7 INFO AMB DCM P/E CHRON 10

VZCZCWN0507 LOC: 010 368
RR RUEHWN 26 MAR 86 0242
DE RUEHC #2623 0850241 CN: 03308
ZNR UUUUU ZZH CHRG: AID
R 260239Z MAR 86 DIST: AID
FM SECSTATE WASHDC
TO RUEHWN/AMEMBASSY BRIDGETOWN 3422
INFO RUEHPU/AMEMBASSY PORT AU PRINCE 1939
BT
UNCLAS STATE 092623

AIDAC BRIDGETOWN FOR PORR, PORT AU PRINCE FOR JTALBOT

E.O. 12356: N/A
TAGS: N/A
SUBJECT: ST. KITTS ENVIRONMENTAL ASSESSMENT

1. ST. KITTS SOUTHEAST PENINSULA ACCESSROAD ENVIRONMENTAL ASSESSMENT (3-) HAS BEEN REVIEWED BY LAC S ONVIRONCNTAL OFFICER. THIS EA IS EXCEPTIONALLY WELL DONE AND ISNEREBY APPROVED SUBJECT O INCORPORRTILOSOF ITS RECOMMENDATIONS INTO THE LAND USE MANAGEMENT PLAN AND FINAL AID PROJECT. WHITEHEAD
BT
#2623

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AGENCY FOR INTERNATIONAL DEVELOPMENT
WASHINGTON, D C 20523

LAC/DR-IEE-85-38

ENVIRONMENTAL THRESHOLD DECISION

Project Location	:	St. Kitts
Project Title and Number	:	Southeast Peninsula Access Road 538-0138
Funding	:	
Life of Project	:	
IEE Prepared by	:	James J. Talbot REMS/CAR
Recommended Threshold Decision	:	Positive Determination
Bureau Threshold Decision	:	Concur with Recommendation
Comments	:	None
Copy to	:	James S. Holtaway, Director RDO/C
Copy to	:	Mike Demetre, RDO/C
Copy to	:	James J. Talbot, USAID/Haiti
Copy to	:	Wendy Stickel, LAC/DR/CAR
Copy to	:	IEE File

James S. Hester Date MAY 29 1985

James S. Hester
Chief Environmental Officer
Bureau for Latin America
and the Caribbean

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INITIAL ENVIRONMENTAL EXAMINATION

Project Location: St. Kitts

Project Title: Southeast Peninsula Access Road (538-0138)

Funding:

IEE Prepared By:

James J. Talbot
Regional Environmental Management Specialist/Caribbean

Date: May 13, 1985

Recommended Threshold Decision: Positive Determination

Concurrence:

James S. Holtaway
Director
USAID, Regional Development Office/Caribbean

Date: May 17, 1985

Chief Environmental Officer, LAC Decision:

Recommendation Approved : ______________________ Date: ________

Recommendation Disapproved: ______________________ Date: ________

B

INITIAL ENVIRONMENTAL EXAMINATION (IEE)

ST. KITTS SOUTHEAST PENINSULA ACCESS ROAD

PROJECT (AID 538-0138)

Prepared By: James J. Talbot
Regional Environmental Management Specialist/Caribbean
May 13, 1985

Prepared For: Regional Development Office/Caribbean
U.S. Agency for International Development

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LAND USE MANAGEMENT PLAN

FOR THE SOUTHEAST PENINSULA
ST. KITTS, WEST INDIES

(July 1986)

Prepared For
The Government of St. Kitts and Nevis

Prepared By
The Island Resources Foundation
St. Thomas, U.S. Virgin Islands

Edward L. Towle, Ph.D.
Team Leader

With Funding Support From
U.S. Agency for International Development
Regional Development Office/Caribbean
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A.6.2 Private Investment Models

The Private Investment Models are an attempt to illustrate the kinds of return which might be expected by an "average" investor in a new resort in the Southeast Peninsula. This model is a tool for understanding some of the constraints facing private investors and developers. Although built from a variety of local and regional factors, the model illustrates the low rates of return usually reported for resort developments throughout the Eastern Caribbean, such as the 1985 Horvath and Horvath/American Express report on tourist resorts in Latin America and the Caribbean. In spite of the model's relatively small size, the development of this model received more attention than any other aspect of the economic analysis.

The reason for this attention is that the model is pessimistic about the opportunities for profitable investments in resort properties in the Southeast Peninsula. The four scenarios presented here (Table A-25), representing four different size hotels, show average internal rates of return over twenty years of 1.5% to 4.4%. The inverse relation between hotel size and rate of return is primarily explained by the model's constant room rate and the arguable assumptions that amenities in larger resorts are more expensive, while variable costs remain relatively constant. Although these cost assumptions could be varied, the assumptions employed are consistent with current regional experience, and the basic construction cost ($EC 190/square foot) is already extremely low.

These low returns do not mean a carefully planned and managed resort cannot realise a substantial profit in St. Kitts; it does mean, however, that private investors must be able to assure that their investment plan is superior to other, more "average" hotel developments in the region. Forms of mixed hotel/condominium ownership would appear to be especially attractive options, since large portions of the resort development costs are borne by individual private investors (who, if U.S. taxpayers, often gain tax advantages).

From the private investor's perspective, the critical factor in achieving a profitable hotel is the ability to charge room rates considerably above the average for tourist hotels in the Eastern Caribbean. Maintaining a high occupancy rate (over 80%) and designing unique management models (labour intensive with low capital and energy costs, such as Ocean Terrace Inn in St. Kitts or Young Island Resort in St. Vincent) are also promising development alternatives. The cautionary note provided by the Private Investment Model is that the total environment of the Southeast Peninsula must be attractive to relatively wealthy tourists. However, in order to insure maintenance of a sustained level of environmental quality, the private sector will have to rely on Government services and assistance because potential returns do not provide confidence that private support can obtain environmental amenities on the Southeast Peninsula for a prolonged period of time.

The Private Investment Model assumes an average land cost for prime resort property of $50,000 per acre, which is in line with recent land sales on the Southeast Peninsula. One implication of the model is that this level, which would represent a massive windfall to most of the Peninsula's current landowners, may be above the level which a prudent developer would pay, given the other potential problems he would face. In addition, developers would encounter problems getting commercial credit to bankroll a resort development in St. Kitts, given the area's unproven tourist potential.

For public policy makers, the lesson of the Private Investment Model is that investors in the Southeast Peninsula will need to be carefully cultivated and encouraged. Government should exercise some discretion to reward developers who can demonstrate positive prior experience in the Caribbean and who can guarantee design features, recreational amenities and operational efficiencies sufficient to assure that the overall quality of the tourism facilities in the Southeast Peninsula are not degraded. Government should not require or expect that investors will be able to provide substantial additional concessions because large profit margins do not exist.

On the other hand, it is critically important for Government to maintain a high level of basic public services in the Southeast Peninsula, in order to sustain an attractive environment for both the high income tourists who are necessary for the success of the major resorts in the area and for local recreational users who presently have very limited, lower quality options. Several other sections of this report outline the public services required of Government if it is to fulfill its proper role as a "partner" in Southeast Peninsula development strategies. Failure to provide these services from the outset will place the entire venture at risk and ultimately involve costly remedial action. It is a sobering truth that Government's amenity support on the supply side is just as crucial for a successful development scenario as the number and affluence of tourists on the demand side.

(revised)

Tables A-25. PRIVATE INVESTMENT MODEL.

Analysis of costs and returns for hotels from 50 to 400 rooms.
(Dollar amounts in EC$1,000's.)

Assumptions:

Case:	Rooms	Sq ft.	Cost /ft	Amenity Fctr	Land Costs Acres	Land Costs $EC(M)	Finance Costs	Operating Costs (% of Total Sales) Payroll	Food	Other	Occupancy Rates % Room	$/Room		Tourist Hotel Spending/Day Total=	Room+	Food+	Misc.
I	50	300	190	1.10	8.0	135.0	9.5%	23%	20%	42%	60%	1.7	EC$	270	172	84	14
II	125	300	190	1.15	20.0	125.0	9.5%	23%	20%	43%	60%	1.7		270	172	84	14
III	250	300	190	1.20	40.0	120.0	9.5%	23%	20%	44%	60%	1.7		270	172	84	14
IV	400	300	190	1.25	64.0	100.0	9.5%	23%	20%	45%	60%	1.7		270	172	84	14

Cash Flow Factors:

	Total Costs:	Yearly Amortization	Annual Amounts: Total Sales	Operating Costs Payrll	Food	Other	Gross Income	PreTax Profit
I	4215	478	5026	1156	1005	2111	754	276
II	10694	1213	12565	2890	2513	5403	1759	546
III	21900	2483	25130	5780	5026	11057	3267	784
IV	34877	3955	40208	9248	8042	18094	4825	870

Model Cash Flow

YEAR	Zero	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
I	-4215	-729	150	150	276	276	276	276	276	276	276	276	276	276	276	276	276	276	276	276	4543
II	-10694	-1967	988	988	546	546	546	546	546	546	546	546	546	546	546	546	546	546	546	546	10893
III	-21900	-4243	2244	2244	784	784	784	784	784	784	784	784	784	784	784	784	784	784	784	784	21334
IV	-34877	-7172	3543	3543	870	870	870	870	870	870	870	870	870	870	870	870	870	870	870	870	31109

INTERNAL RATE OF RETURN:

I	4.4%
II	3.9%
III	2.7%
IV	1.5%

These conservative assumptions reflect returns of approximately 4%, after inflation, based on the expectation that: (1) land values will double in 20 years; and (2) the value of the resort is one-half its original construction cost (in real terms) after 20 years.

Note: Columns 2-7 represent construction and land acquisition costs for various sized hotels. For example, costs for a 50-room facility averaging 300 square feet/room are estimated at EC$190/sq. ft. for construction plus a muitiplier factor of 1.10 for common areas and infrastructure plus 8 acres of land at EC$135,000/acre.

ANNEX G.1
(On file in RDO/C)

ROBERT R. NATHAN
ASSOCIATES INC

Potential for Recovery of Public Investments and Costs: Southeast Peninsula, St. Kitts

Prepared for
The Government of St. Kitts–Nevis

May 28, 1986

by
Robert R. Nathan Associates, Inc.
Economic and Management Consultants
Washington, D.C.

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July 24, 1986

Roy Grohs, Economist
Regional Development Office/Caribbean
Agency for International Development
Nicholas House
Bridgetown, Barbados WI

Dear Roy:

Enclosed is a brief statement embodying the additional data and information you requested to supplement our main report. The paper covers mainly the definitions and methods that were used and presents summary tables for the various scenarios and for the benefit-cost comparisons. The appendices cover the essential details. The procedures generally are as in our main report.

There are a number of points that should be noted as you use these data:

(1) Scenario I follows the pattern of development postulated in our main report but extends it to 20 years. Scenarios II and III assume progressively later starts and a slower rate of development. Rather than invent additional scenarios, IV and V were borrowed from Ed Towle's LUMP. But, in order to maintain comparability I used our methods to calculate the benefits and costs. The five scenarios cover a wide range of possibilities.

(2) Matching GDP with project investments and costs in the calculation of the internal rate of return is not entirely consistent with the common usage of that measure. But if one thinks of the general public as the decision entity and considers only economic benefits the concept makes some sense as an internal rate of economic return. Since part of the GDP is taxable we decided that disposable income (GDP net of taxes) might be a more appropriate measure of economic benefit but it still leaves

ROBERT R. NATHAN
ASSOCIATES INC

a little unease about comparing government cost to public benefits. I have less of a conceptual problem comparing government costs to government tax revenues.

(3) All of the benefits except from road construction are derived through induced private investment and entrepreneurship which does not enter the calculations of IRR or of the other measures we provided. This generates some very favorable cost-benefit calculations. But then one can argue that this should be expected for without the road there would be no significant economic activity on the peninsula.

You will note that we used three different measures for comparing project costs and benefits: (1) the internal rate of return (IRR) which you requested; (2) the net present value (NPV) of the investment which is the sum of the present value of each of the specified annual benefits less the sum of the present value of all annual public costs; and, (3) the benefits per unit of cost (B/C) which is the sum of the present value of each of the specified benefits divided by the sum of the present value of annual public costs.

By any of these measures the ranking of the scenarios for any of the combinations of benefits and costs remains unchanged and all except the pessimistic one (III) are acceptable. Ed Towles' low Manageable Growth scenario (V) is barely acceptable by these measures.

I hope this provides you with the necessary information that you need. We do have the data on the computer so that if you need to change anything or wish to add another scenario it could be done quickly.

We are now in the process of working on the supplementary budget and hope to be able to get it to you early next week.

ROBERT R. NATHAN
ASSOCIATES INC

Please call me if you have any questions (202-393-2700). My best regards to you and Kim. It was a pleasure working with both of you on this project and I hope we will have an opportunity to work together again in the future.

Sincerely,

Oswald P. Blaich
Principal Associate

OPB/pdb

Enclosures

St. Kitts Southeast Peninsula Road: Returns to Public Investment

July 1986

Supplement to:
Potential for Recovery of
Public Investments and Costs:
Southeast Peninsula, St. Kitts

Prepared Under the Public Management
and Policy Planning Project
for the USAID Regional Development Office
for the Caribbean and the
Government of St. Kitts-Nevis
Under Contract to
Robert R. Nathan Associates, Inc.

RRNA - PMPP
July 1986

ST. KITTS SOUTHEAST PENINSULA ROAD RETURNS TO PUBLIC INVESTMENT

This report is a supplement to the recently completed draft report on the Potential for Recovery of Public Investments and costs: Southeast Peninsula, St. Kitts.[1] It provides estimates of public benefits that can be attributed directly and indirectly to the public costs for the proposed St. Kitts southeast peninsula road and associated infrastructure. Because of extreme uncertainty, five development scenarios are postulated. These reflect different degrees of optimism or pessimism with respect to prospective private development of the area for tourism and associated facilities. For each of the five scenarios, two levels of public costs are assumed. These differ largely with respect to costs that can be deferred to private sector developers.[2]

Development Scenarios

The five private sector tourism development scenarios cover a period of 20 years each. They differ primarily with respect to the type of tourism facilities, the time at which

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1. Prepared for the Government of St. Kitts-Nevis by Robert R. Nathan Associates, Inc. under the Public Management and Policy Planning Project, funded by the USAID Mission in Barbados.
2. Detailed data and assumptions used are presented in the Appendices to this supplement.

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development begins, and the rate at which development takes place after that. In this context the main distinguishing features of each of the five scenarios are:

I. Moderately Optimistic: The main features are four major hotel-condo-resort (HCR) complexes completed in Years 4, 7, 12, and 17. (The first 10 years are identical to the development assumption in the main RRNA-PMPP draft report.

II. Moderately Pessimistic: This is characterized by one HCR complex completed in Year 7, with modest other developments following.

III. Pessimistic: Is characterized by only one HCR complex completed in Year 12, with modest other development following.

IV. Early Development: This is the highly optimistic scenario defined by Island Resources Foundation. It includes two HCRs completed in Years 3 and 5 and about nine other small hotels with incremental additions.[1]

V. Manageable Growth: This is as defined by Island Resources Foundation and includes only small hotels with the first 15-room unit not being completed until Year 6.[1]

An HCR is defined as a hotel-resort-complex complete with recreation and limited shopping facilities. It is assumed to have a minimum of 250 rooms so as to be eligible for the pending exemptions from taxes on imported foods, beverages and hotel supplies. All scenarios make some allowances for incremental expansion of these complexes, some small hotels, a number of independent condominiums, and private homes (Table 1).

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1. Island Resources Foundation, Land Use Management Plan for the Southeast Penninsula, St. Kitts, West Indies, Draft report May 1986.

Table 1. Summary of Tourism Development Scenarios

Scenario characteristics		In 10 years	In 20 years
I. Moderately optimistic			
Large hotels[a]	No. of rooms	500	1,000
Small hotels	No. of rooms	100	325
Condos	No. of units	90	190
Homes	No. of units	40	90
II. Moderately pessimistic			
Large hotels[a]	No. of rooms	250	250
Small hotels	No. of rooms	25	125
Condos	No. of units	25	50
Homes	No. of units	25	70
III. Pessimistic			
Large hotels[a]	No. of rooms	0	250
Small hotels	No. of rooms	0	50
Condos	No. of units	0	45
Homes	No. of units	0	40
IV. Early development (IRF)			
Large hotels[a]	No. of rooms	525	525
Small hotels	No. of rooms	380	1,130
Condos	No. of units	145	345
Homes	No. of units	45	130
V. Manageable growth (IRF)			
Large hotels[a]	No. of rooms	0	0
Small hotels	No. of rooms	120	1,135
Condos	No. of rooms	0	137
Homes	No. of rooms	0	21

a. Large hotels are defined as 250 rooms or more.
Source: See Appendix Tables 2 through 6 for details.

Public Investments and Costs

The benefit-cost measures are calculated for each scenario using two levels of cost (Table 2). The full-cost case, as in the main report, assumes a total public investment of $32.4 million dollars for road construction, civil works for utilities, and land-related costs for the right-of-way, wildlife reserves, and public-use easements.[1] The minimum-cost case assumes that total public investment will be limited to $20.5 million in the first year for road construction and $7.0 million for the civil works associated with the utilities. The remaining costs are assumed to be deferred to private developers or provided through grants from land owners or from other sources. In either case, the government is assumed to be committed to incurring costs for operations and maintenance. The full-cost cost case also assumes an annual expenditure of $2.5 million for marketing promotion, and a financial reserve.

Three types of benefits are estimated to accrue to public investments and costs. These are:

- Gross Domestic Product (GDP) as estimated by the model defined in Appendix A
- Disposable Income (DI) which is GDP less taxes attributable to first round wages and subsequent multiplier effects (Appendix B)
- Tax Revenues (TR) as defined in the main report

It should be noted that all benefits accruing to public investment and costs derive either from public expenditures

1. See main report.

Table 2. Summary of Investment and Recurring Costs: All Scenarios

	Present value[a]	Selected project years						
		1	2	6	7	10	15	20
	--------Millions of dollars--------							
Full-cost								
Investment	30.0	24.8	2.7	3.9	.6	--	--	--
Recurring	29.1	2.6	2.7	2.9	3.0	3.1	4.7	3.6
Total	59.1	27.4	5.4	6.8	3.6	3.1	4.7	3.6
Minimum-Cost								
Investment	20.5	20.5	--	--	--	--	--	--
Recurring	5.7	.1	.2	.4	.5	.6	.2	1.1
Total	26.2	20.6	.2	.4	.5	.6	2.2	1.1

a. Discounted at 10 percent over 20 years. Details provided in Appendix Table 1.

for the construction of the road and specified infrastructure, or indirectly from private investment in tourism facilities, condos and private homes and from the economic activity generated by it. It is argued that without the road there would be no private investment and hence no public benefits of any kind, which has been the case for the last 100 years or more.

The aggregate economic benefits to the people of St. Kitts (as opposed to the government) are embodied in the measures of GDP and DI. The GDP measure assumes that taxes paid by the GDP recipients, who in the first round of spending are mainly skilled and unskilled workers, will generate public services of equivalent value. However, DI is generally considered more directly reflective of benefits by wage and other income recipients.

The primary benefit to the government of St. Kitts-Nevis, as a separate entity, is the tax revenue that is associated with its expenditures for the road and other infrastructure.

The estimated benefits for either the public or the government as defined above are projected for each of the five scenarios for 20 years (Table 3).

Cost-Benefit Measures

The various scenarios are compared by three standard measures commonly used to relate costs to benefits. These are:

Table 3. Summary of Economic and Fiscal Benefits Accruing From Various Scenarios

	Present value[a]	Value in Year 10	Value in Year 20
	------------	Millions of dollars	------------
Economic benefits			
Gross domestic product			
I. Moderately optimistic	780	109.2	235.8
II. Moderately pessimistic	236	43.2	70.5
III. Pessimistic	107	0.0	60.2
IV. Early development	1,143	167.1	329.2
V. Manageable growth	260	15.6	203.8
Disposable income			
I. Moderately optimistic	708	98.6	212.5
II. Moderately pessimistic	215	39.1	63.6
III. Pessimistic	98	0.0	54.1
IV. Early development	1,037	150.9	297.3
V. Manageable growth	236	14.1	184.4
Fiscal benefits (tax revenues)			
I. Moderately optimistic	131	18.6	40.5
II. Moderately pessimistic	40	7.4	12.1
III. Pessimistic	18	0.0	10.2
IV. Early development	193	28.5	55.7
V. Manageable growth	44	2.7	34.8

a. Discounted at 10 percent over 20 years.

- Internal Rate of Return (IRR)
- Net Present Value (NPV)
- Benefits per dollar of cost (B/C)

Each measure is estimated independently for GDP, DI, and TR for each scenario and for each cost assumption (Table 4).

Table 4. Summary Cost-Benefit Measures -- Public

	Full cost			Minimum cost		
	IRR (percent)	NPV[a] ($ million)	B/C[a] (percent)	IRR (percent)	NPV ($ million)	B/C (percent)
<u>Gross domestic product</u>						
I. Moderately optimistic	80.8	721.1	13.2	108.6	754.0	29.8
II. Moderately pessimistic	32.8	177.3	4.0	45.3	210.2	9.0
III. Pessimistic	16.8	48.4	1.8	25.2	81.3	4.1
IV. Early development	122.5	1,084.1	19.3	165.9	1,117.0	43.6
V. Manageable growth	27.1	201.0	4.4	36.2	233.9	9.9
<u>Disposable income</u>						
I. Moderately optimistic	76.8	649.1	12.0	103.5	682.0	27.0
II. Moderately pessimistic	31.1	156.0	3.6	43.4	188.9	8.2
III. Pessimistic	15.8	38.9	1.7	24.2	71.8	3.7
IV. Early development	116.7	978.6	17.6	158.6	1,011.5	39.6
V. Manageable growth	25.8	177.4	4.0	34.8	210.3	9.0
<u>Tax revenues</u>						
I. Moderately optimistic	23.2	72.4	2.2	35.1	105.3	5.0
II. Moderately pessimistic	4.2	(19.1)	.7	15.1	13.8	1.5
III. Pessimistic	(4.7)	(41.1)	.3	6.5	(8.2)	.7
IV. Early development	33.3	133.7	3.3	48.1	166.6	7.4
V. Manageable growth	7.0	(14.7)	.8	14.8	18.2	1.7

a. All benefits (B) and costs (C) are discounted at 10 percent for 20 years. Parentheses indicate negative values.

APPENDIX A. MODEL FOR ESTIMATING GDP AND ASSOCIATED MEASURES

A simple, idealized model of a small nation's open economy is used to estimate the impact of tourism increases on the economy and the fiscal situation. The total value added to the nation's economy, its gross domestic product (GDP), is divided into two parts: one which is totally dependent on the nation's endogenous activity and one which is totally exogenous to the nation's economy.

This model is expressed by the following relationships:

(1) Yt = Yex + Yend

(2) Yend = f(Yt)

where Yt = total domestic product (GDP)

Yex = exogenously determined product

Yend = endogenously determined product

The primary interest in this study is to examine the impact of construction and tourism changes, exogenously determined, on the gross domestic product.

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1. This type of model was employed in Charles L. Levin, The Theory and Method of Income and Product Accounts for Metropolitan Areas, (Ames, Iowa State College, 2958).

Transformed into functions that indicate the relationships of change the above equations become:

(3) $\Delta Yt = \Delta Yex + \Delta Yend$

(4) $\Delta Yend = f(\Delta Yt)$

The economy cannot be subdivided readily into variables that are either totally endogenous or totally exogenous, but they can be approximated. Thus, foreign investment, exports, and government expenditures are taken to approximate variables that are exogenously determined; consumption, on the other hand, is assumed to be totally endogenous.

Substituting changes in consumption, ΔC for $\Delta Yend$ in (3) and (4) yields:

(5) $\Delta Yt = \Delta Yex + \Delta C$, and

(6) $\Delta C = f(\Delta Yt)$

At this point the economy's marginal propensity to consume MPC_L, locally produced goods, can be substituted for f in (6), yielding:

(7) $\Delta C = MPC_L(\Delta Yt)$

Equations (5) and (7) are employed below to estimate the multiplier. Substituting for ΔC in (5) the following are obtained:

(8) $\Delta Yt = \Delta Yex + MPC_L(\Delta Yt)$

(9) $\Delta Yt - MPC_L(\Delta Yt) = \Delta Yex$

A-3.

multiplier [illegible] too high — did [illegible] assume to allow for imported labour.

(10) $\Delta Yt(1-MPC_L) = \Delta Yex$

(11) $\Delta Yt = \frac{1}{1 - MPC_L} (\Delta Yex)$

The expression $\frac{1}{1 - MPC_L}$ is the GDP multiplier usually designated as K so that:

(12) $\Delta Yt = k\ \Delta Yex$

The marginal propensity to consume locally-produced goods (MPC_L) is therefore all that is required to estimate the multiplier in (12). In St. Kitts-Nevis, it was observed that 50 percent of total consumption was from imports. This indicates that the average propensity to consume local goods was approximately 0.5 and if relations can be assumed to be linear over the range of projected values, the marginal propensity to consume locally-produced goods would also be to 0.5.

Thus, the value of $k = \frac{1}{1-0.5}$ or 2 as was assumed in all computations.

Thus, for the economy as a whole, the total increase in GDP that would result from a change in exogenous expenditure is twice the amount of the change in exogenous expenditure. In the case of tourist expenditures, for example, it is important to recognize, however, that the exogenous expenditure is only that part of total expenditure that goes directly into the nation's economy. For example, the portion of tourist expenditures that goes to pay the hotel tax and to pay for imported items will not produce a multiplier effect on the economy only that part which pays for local factors of production will be subject to the multiplier.

APPENDIX B. FORMULAS AND ASSUMPTIONS FOR ESTIMATING BENEFITS

A. <u>Calculations of Benefits</u>

(1) Construction Expenditures ($ millions)

(a) Road Construction: (Constant for all scenarios)

GDP = Wages x 1.96

Taxes = Wages x .25

(b) Hotel Construction: (Specific to scenarios)

GDP = Rooms Under Construction x .038,710

Taxes = Rooms Under Construction x .004,940

(c) Condo Construction: (Specific to scenarios)

GDP = Units Under Construction x .099,960

Taxes = Units Under Construction x .012,750

(d) Homes Construction: (Specific to scenarios)

GDP = Units Under Construction x .166,600

Taxes = Units Under Construction x .021,250

(2) Hotel Guest Expenditures ($ millions): (Specific to scenarios)

GDP = No. of rooms x Occupancy Rate x .222,750

Taxes = No. of rooms x Occupancy Rate x .039,425

B-2.

(3) Condo Guests Expenditures ($ millions): (Specific to scenarios)

GDP = No. of Units x .216,800

Taxes = No. of Units x .032,520

(4) Disposable Income ($ millions): (Specific to scenarios)

DI All Sources = GDP All Sources - .12 (GDP All Construction) - .10 (GDP Hotel Guest Spending + GDP Condo Guest Spending).

B. General Assumptions

(1) Construction

(a)	Hotel construction	HCR 2 years; other 1 year
	Skilled workers	1.2 per room/year
	Unskilled workers	1.0 per room/year
(b)	Condo construction	1 year
	Skilled workers	3.0 per unit/year
	Unskilled workers	3.0 per unit/year
(c)	Home construction	1 year
	Skilled workers	5.0 per unit/year
	Unskilled workers	5.0 per unit/year
(d)	Wages for construction	
	Skilled	$11,000 per year
	Unskilled	6,000 per year
(e)	Construction multipliers	
	GDP	1.96 (wages)
	Tax revenues	.25 (wages)

(2) Hotel guest spending

Beds per room	1.6
Beds occupancy rate	Specific to year and scenario
Visitor-days (max./bed)	365
Spending per visotor	$337.50
Spending subject to hotel tax	50 percent
Multipliers	
GDP	1.3 (guest spending)
Tax revenue	.20 (guest spending)

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(3) Condo guest spending

Beds per unit	4.0
Bed occupancy	45 percent
Visitor-days/max./bed	365
Spending per visitor	$275.00
Spending subject to hotel tax	0
Multipliers	
GDP	1.20 (guest spending)
Tax revenue	.18 (guest spending)

APPENDIX TABLE 1. SEP DEVELOPMENT, PUBLIC COST ALTERNATIVES: FULL AND MINIMUM COST

(MILLIONS OF DOLLARS)

COST	YEAR 1	2	3	4	5	6	7	8	9	10
INVESTMENT										
ROAD CONSTRUCTION										
MAIN	13.5	1.2	-	-	-	-	-	-	-	-
BRANCH	-	-	-	-	-	2.8	-	-	-	-
UTILITIES CONSTRUCTION										
MAIN	7.0	1.0	-	-	-	-	-	-	-	-
BRANCH	-	-	-	-	-	1.2	-	-	-	-
LAND PURCHASE										
RIGHT OF WAY	1.3	-	-	-	-	-	-	-	-	-
PUBLIC USE	1.0	-	-	-	-	-	-	-	-	-
MUNICIPAL FACILITY	-	-	-	-	-	-	0.6	-	-	-
TOTAL COST OF INVESTMENT										
FULL COST	24.8	2.2	0.0	0.0	0.0	3.9	0.6	0.0	0.0	0.0
MINIMUM COST 1/	20.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RECURRING COSTS										
OPERATION AND MAINTENANCE	0.1	0.2	0.3	0.3	0.4	0.4	0.5	0.5	0.6	0.6
PROMOTION AND RESERVE	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
TOTAL RECURRING COSTS										
FULL COST	2.6	2.7	2.8	2.8	2.9	2.9	3.0	3.0	3.1	3.1
MINIMUM COST 3/	0.1	0.2	0.3	0.3	0.4	0.4	0.5	0.5	0.6	0.6
TOTAL ALL COSTS										
FULL COST	27.4	4.9	2.8	2.8	2.9	6.8	3.6	3.0	3.1	3.1
MINIMUM COST	20.6	0.2	0.3	0.3	0.4	0.4	0.5	0.5	0.6	0.6

COST	11	12	13	14	15	16	17	18	19	20
INVESTMENT										
ROAD CONSTRUCTION										
MAIN	-	-	-	-	-	-	-	-	-	-
BRANCH	-	-	-	-	-	-	-	-	-	-
UTILITIES CONSTRUCTION										
MAIN	-	-	-	-	-	-	-	-	-	-
BRANCH	-	-	-	-	-	-	-	-	-	-
LAND PURCHASE										
RIGHT OF WAY	-	-	-	-	-	-	-	-	-	-
PUBLIC USE	-	-	-	-	-	-	-	-	-	-
MUNICIPAL FACILITY	-	-	-	-	-	-	-	-	-	-
TOTAL COST OF INVESTMENT										
FULL COST	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MINIMUM COST 1/	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RECURRING COSTS										
OPERATION AND MAINTENANCE	2.0 2/	0.7	0.8	0.8	2.2 2/	0.9	1.0	1.0	2.4 2/	1.1
PROMOTION AND RESERVE	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
TOTAL RECURRING COSTS										
FULL COST	4.5	3.2	3.3	3.3	4.7	3.4	3.5	3.5	4.9	3.6
MINIMUM COST 3/	2.0	0.7	0.8	0.8	2.2	0.9	1.0	1.0	2.4	1.1
TOTAL ALL COSTS										
FULL COST	4.5	3.2	3.3	3.3	4.7	3.4	3.5	3.5	4.9	3.6
MINIMUM COST	2.0	0.7	0.8	0.8	2.2	0.9	1.0	1.0	2.4	1.1

1/ INCLUDES ONLY FIRST YEAR MAIN ROAD AND MAIN UTILITY CONSTRUCTION COSTS OF $13.5 AND $7.0 MILLION RESPECTIVELY.
2/ INCLUDES PERIODIC EXTRAORDINARY MAINTENANCE.
3/ INCLUDES ONLY OPERATIONS AND MAINTENANCE.

APPENDIX TABLE 2. SEP DEVELOPMENT ALTERNATIVE I: MODERATELY OPTIMISTIC - FULL AND MINIMUM COST

	YEAR																			
ASSUMPTIONS, BENEFITS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
DEVELOPMENT ASSUMPTIONS:	(NUMBER OF SPECIFIED UNITS)																			
HOTEL ROOMS	0	0	10	200*	300	300	550*	550	575	600	600	850*	875	900	975	1000	1250*	1275	1300	1325
CONDO UNITS	0	0	0	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190
HOME UNITS	0	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
HOTEL OCCUPANCY RATE	0.20	0.20	0.20	0.50	0.52	0.55	0.58	0.60	0.62	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65
DEVELOPMENT BENEFITS:	(MILLIONS OF DOLLARS)																			
GROSS DOMESTIC PRODUCT FROM:																				
CONSTRUCTION WAGES	5.1	2.4	10.5	13.5	2.6	12.1	12.1	1.8	2.8	2.8	11.7	11.5	1.8	2.8	3.0	11.5	11.5	1.8	3.8	2.8
HOTEL SPENDING	0.0	0.0	1.3	31.2	34.7	36.8	71.1	73.5	79.4	86.5	86.9	123.1	126.7	130.3	141.2	144.8	181.0	184.6	188.2	191.8
CONDO SPENDING	0.0	0.0	0.0	6.5	8.7	10.8	13.0	15.2	17.3	19.5	21.7	23.8	26.0	28.2	30.4	32.5	34.7	36.9	39.0	41.2
ALL SOURCES	5.1	2.4	11.8	51.2	46.0	59.7	96.2	90.5	99.5	109.2	120.3	158.4	154.5	161.3	174.6	188.8	227.2	223.3	230.2	235.8
DISPOSABLE INCOME (ALL SOURCES) _1/	4.8	2.3	11.7	47.4	41.7	54.9	87.8	81.6	85.8	98.6	109.4	143.7	139.2	145.5	157.4	171.1	205.6	201.2	207.5	212.5
TAX REVENUE FROM:																				
CONSTRUCTION ACTIVITIES	0.7	0.3	1.3	1.7	0.3	1.5	1.5	0.2	0.3	0.3	1.4	1.4	0.2	0.3	0.3	1.4	1.4	0.2	0.3	0.3
HOTEL ACTIVITY	0.0	0.0	0.2	5.5	6.2	6.5	12.6	13.0	14.1	15.4	15.4	21.8	22.4	23.1	25.0	25.6	32.0	32.7	33.3	34.0
CONDO ACTIVITY	0.0	0.0	0.0	1.0	1.3	1.6	2.0	2.3	2.6	2.9	3.3	3.6	3.9	4.2	4.6	4.9	5.2	5.5	5.9	6.2
ALL SOURCES	0.7	0.3	1.5	8.2	7.8	9.6	16.1	15.5	17.0	18.6	20.1	26.8	26.5	27.6	29.9	31.9	38.6	38.4	39.5	40.5
NET BENEFITS ASSUMING:																				
FULL COST																				
GROSS DOMESTIC PRODUCT	-27.3	-1.0	9.0	48.4	43.1	52.9	92.6	87.5	96.4	106.1	115.8	155.2	151.2	158.0	169.9	185.4	223.7	219.8	225.3	237.2
DISPOSABLE INCOME	-22.6	-1.1	8.5	44.6	38.8	48.1	84.2	78.6	88.7	95.5	104.9	140.5	135.9	142.2	152.7	167.7	202.1	197.7	202.6	208.9
TAX REVENUE	-26.7	-5.1	-1.3	5.4	4.9	2.8	12.5	12.5	13.9	15.5	15.6	23.6	23.2	24.3	25.2	28.5	35.1	34.9	34.6	36.9
MINIMUM COST																				
GROSS DOMESTIC PRODUCT	-15.5	2.2	11.5	50.9	45.6	59.3	95.7	90.0	98.9	108.6	118.3	157.7	153.7	160.5	172.4	187.9	226.2	222.3	227.8	229.7
DISPOSABLE INCOME	-15.8	2.1	11.4	47.1	41.3	54.5	87.3	81.1	89.2	98.0	107.4	143.0	138.4	144.7	155.2	170.2	204.6	200.2	205.1	211.6
TAX REVENUE	-14.9	0.1	1.2	7.9	7.4	9.2	15.6	15.0	16.4	18.0	18.1	26.1	25.7	26.8	27.3	31.0	37.6	37.4	37.1	39.4

* INDICATES THE FIRST YEAR OF OPERATION FOR A NEW HOTEL-CONDO RESORT (HCR) DEVELOPMENT.
_1/ DEFINED AS GDP LESS TAXES ON THAT PORTION OF WAGES AND INCOME SUBJECT TO MULTIPLIER.

APPENDIX TABLE 2. (CONTINUED) INTERNAL RATE OF RETURN ANALYSIS

INTERNAL RATE OF RETURN AT:

	20 YEARS (%)	10 YEARS (%)
FULL COST		
GROSS DOMESTIC PRODUCT	80.8	79.2
DISPOSABLE INCOME	76.8	75.0
TAX REVENUE	23.2	11.7
MINIMUM COST		
GROSS DOMESTIC PRODUCT	108.6	107.9
DISPOSABLE INCOME	103.5	102.8
TAX REVENUE	35.1	28.6

APPENDIX TABLE 2. (CONTINUED) NET PRESENT VALUE ANALYSIS

DISCOUNTED AT 8%	PRESENT VALUE 20 YEARS	PRESENT VALUE 10 YEARS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PROJECT YEAR			DISCOUNTED VALUES																			
DISCOUNT FACTOR	-	-	1.000	0.926	0.857	0.794	0.735	0.681	0.630	0.583	0.540	0.500	0.463	0.429	0.397	0.368	0.340	0.315	0.292	0.270	0.250	0.232
FULL COST BASIS			(MILLIONS OF DOLLARS)																			
INVESTMENT	30.4	30.4	24.8	2.5	0.0	0.0	0.0	2.7	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RECURRING COSTS	31.3	20.7	2.6	2.5	2.4	2.2	2.1	2.0	1.9	1.7	1.7	1.6	2.1	1.4	1.3	1.2	1.6	1.1	1.0	0.9	[illegible]	0.8
GDP	556.5	354.1	5.1	2.2	10.1	40.7	33.8	40.7	60.6	52.8	53.7	54.6	55.7	60.0	61.1	59.4	56.4	59.5	[illegible]	[illegible]	[illegible]	[illegible]
DISPOSABLE INCOME	467.2	321.7	4.8	2.1	10.0	37.6	30.6	37.4	55.3	47.6	48.5	49.3	50.3	61.6	55.3	53.5	53.5	53.9	[illegible]	[illegible]	[illegible]	[illegible]
TAX REVENUE	161.3	58.6	0.7	0.3	1.3	6.5	5.7	6.5	10.1	9.0	9.2	9.3	9.3	11.5	10.5	10.2	10.2	16.0	11.3	10.4	9.9	9.6
MINIMUM COST BASIS																						
INVESTMENT	20.5	20.5	20.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RECURRING COSTS	6.9	2.6	0.1	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.1	0.3	0.3	0.7	0.3	0.1	0.3	[illegible]	0.3
GDP	556.5	354.3	5.1	2.2	10.1	40.7	33.8	40.7	60.6	52.8	53.7	54.6	55.7	60.0	61.3	59.4	55.4	59.5	[illegible]	[illegible]	[illegible]	[illegible]
DISPOSABLE INCOME	467.2	321.7	4.8	2.1	10.0	37.6	30.6	37.4	55.3	47.6	48.5	45.3	50.3	61.6	55.3	53.5	53.5	53.9	[illegible]	[illegible]	[illegible]	[illegible]
TAX REVENUE	161.3	58.6	0.7	0.3	1.3	6.5	5.7	6.5	10.1	9.0	9.2	9.3	9.3	11.5	10.5	10.2	10.2	16.6	11.3	16.4	9.9	9.6

DISCOUNTED AT 10%	PRESENT VALUE 20 YEARS	PRESENT VALUE 10 YEARS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PROJECT YEAR			DISCOUNTED VALUES																			
DISCOUNT FACTOR	-	-	1.000	0.909	0.826	0.751	0.683	0.621	0.564	0.513	0.467	0.424	0.386	0.350	0.319	0.290	0.263	0.239	0.218	0.198	0.180	0.164
FULL COST			(MILLIONS OF DOLLARS)																			
INVESTMENT	30.0	30.0	24.8	2.5	0.0	0.0	0.0	2.4	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RECURRING COSTS	29.1	19.2	2.6	2.5	2.3	2.1	2.0	1.8	1.7	1.5	1.4	1.3	1.7	1.1	1.1	1.0	1.2	0.8	0.8	0.7	0.9	0.6
GDP	380.2	317.5	5.1	2.2	9.7	38.5	31.4	37.1	54.3	46.4	46.5	46.3	46.4	55.4	49.3	46.8	47.5	45.1	[illegible]	[illegible]	[illegible]	[illegible]
DISPOSABLE INCOME	308.2	289.9	4.8	2.1	9.7	35.6	28.5	34.1	49.5	41.9	41.9	41.8	42.2	50.3	44.4	42.2	41.6	40.9	[illegible]	[illegible]	[illegible]	[illegible]
TAX REVENUE	131.5	57.6	0.7	0.3	1.2	6.2	5.3	6.0	9.1	8.0	7.9	7.9	7.8	9.4	8.5	8.0	7.9	7.0	[illegible]	[illegible]	[illegible]	[illegible]
MINIMUM COST																						
INVESTMENT	20.5	20.5	20.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RECURRING COSTS	5.7	2.4	0.1	0.2	0.2	0.2	0.3	0.2	0.1	0.3	0.3	0.3	0.8	0.7	0.1	0.2	0.0	0.2	[illegible]	[illegible]	[illegible]	[illegible]
GDP	380.2	317.5	5.1	2.2	9.7	38.5	31.4	37.1	54.3	46.4	46.5	46.3	46.4	55.4	49.3	46.8	45.9	45.1	[illegible]	[illegible]	[illegible]	[illegible]
DISPOSABLE INCOME	308.2	289.4	4.8	2.1	9.7	35.6	28.5	34.1	49.5	41.9	41.5	41.8	42.2	50.3	44.4	42.2	41.6	40.9	[illegible]	[illegible]	[illegible]	[illegible]
TAX REVENUE	131.5	57.6	0.7	0.3	1.2	6.2	5.3	6.0	9.1	8.0	7.9	7.9	7.8	9.4	8.5	8.0	7.9	7.0	[illegible]	[illegible]	[illegible]	[illegible]

APPENDIX TABLE 2. (CONTINUED) COST - BENEFIT COMPARISON

	20 YEARS	10 YEARS
NET TAX REVENUE _1/ ($ MILLIONS)		
FULL COST - 8%	97.6	7.5
MINIMUM COST - 8%	133.9	35.5
FULL COST - 10%	72.4	3.4
MINIMUM COST - 10%	105.3	29.7
GDP PER DOLLAR COST _2/		
FULL COST - 8%	15.0	6.9
MINIMUM COST - 8%	34.9	15.3
FULL COST - 10%	13.2	6.5
MINIMUM COST - 10%	29.8	13.9
DISPOSABLE INCOME PER DOLLAR COST _3/		
FULL COST - 8%	13.6	6.3
MINIMUM COST - 8%	31.6	14.0
FULL COST - 10%	12.0	5.9
MINIMUM COST - 10%	27.0	12.7

_1/ PRESENT VALUE OF TAX REVENUE LESS PRESENT VALUE OF DESIGNATED COSTS.
_2/ PRESENT VALUE OF GROSS DOMESTIC PRODUCT DIVIDED BY PRESENT VALUE OF DESIGNATED COSTS.
_3/ PRESENT VALUE OF DISPOSABLE INCOME DIVIDED BY PRESENT VALUE OF DESIGNATED COSTS.

APPENDIX TABLE 1. SEP DEVELOPMENT ALTERNATIVE II: MODERATELY PESSIMISTIC - FULL AND MINIMUM COST

ASSUMPTIONS, BENEFITS	YEAR 1	2	3	4	5	6	7	8	9	10
DEVELOPMENT ASSUMPTIONS:	(NUMBER OF SPECIFIED UNITS)									
HOTEL ROOMS	0	0	0	0	0	0	250*	250	250	275
CONDO UNITS	0	0	0	0	0	0	0	0	20	25
HOME UNITS	0	0	0	0	0	5	10	15	20	25
HOTEL OCCUPANCY RATE	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.57	0.55	0.58
DEVELOPMENT BENEFITS:	(MILLIONS OF DOLLARS)									
GROSS DOMESTIC PRODUCT FROM:										
CONSTRUCTION WAGES	5.1	1.2	0.0	0.0	0.0	11.1	11.1	0.0	3.0	2.3
HOTEL SPENDING	0.0	0.0	0.0	0.0	0.0	0.0	27.0	29.0	36.0	35.5
CONDO SPENDING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	5.4
ALL SOURCES	5.1	1.2	0.0	0.0	0.0	11.1	38.9	29.0	38.7	43.2
DISPOSABLE INCOME (ALL SOURCES) _1/	4.0	1.1	0.0	0.0	0.0	11.1	30.1	26.9	35.2	39.1
TAX REVENUE FROM:										
CONSTRUCTION ACTIVITIES	0.7	0.7	0.0	0.0	0.0	1.4	1.4	0.1	0.5	0.3
HOTEL ACTIVITY	0.0	0.0	0.0	0.0	0.0	0.0	4.9	5.1	5.4	6.3
CONDO ACTIVITY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.8
ALL SOURCES	0.7	0.7	0.0	0.0	0.0	1.4	6.3	5.2	6.6	7.4
NET BENEFITS ASSUMING:										
FULL COST										
GROSS DOMESTIC PRODUCT	-22.1	-4.2	-2.0	-2.0	-2.5	4.3	35.3	26.0	35.0	40.1
DISPOSABLE INCOME	-22.6	-4.3	-2.0	-2.0	-2.5	4.3	32.5	23.9	32.1	36.0
TAX REVENUE	-26.2	-5.2	-2.0	-2.0	-2.9	-5.4	2.7	2.2	3.5	4.2
MINIMUM COST										
GROSS DOMESTIC PRODUCT	-15.5	1.0	-0.1	-0.3	-0.4	10.7	38.4	29.3	38.1	42.0
DISPOSABLE INCOME	-15.8	0.9	-0.1	-0.3	-0.4	10.7	35.6	26.4	34.0	38.9
TAX REVENUE	-19.5	-0.0	-0.1	-0.3	-0.4	1.0	5.0	4.7	6.6	6.8

ASSUMPTIONS, BENEFITS	YEAR 11	12	13	14	15	16	17	18	19	20
DEVELOPMENT ASSUMPTIONS:										
HOTEL ROOMS	300	300	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CONDO UNITS	30	35	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
HOME UNITS	30	35	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
HOTEL OCCUPANCY RATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DEVELOPMENT BENEFITS:										
GROSS DOMESTIC PRODUCT FROM:										
CONSTRUCTION WAGES	1.5	1.3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
HOTEL SPENDING	40.1	41.6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CONDO SPENDING	6.5	7.6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
ALL SOURCES	48.1	50.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DISPOSABLE INCOME (ALL SOURCES) _1/	43.6	47.6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TAX REVENUE FROM:										
CONSTRUCTION ACTIVITIES	0.2	0.2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
HOTEL ACTIVITY	7.1	7.3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CONDO ACTIVITY	1.0	1.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
ALL SOURCES	8.3	8.6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
NET BENEFITS ASSUMING:										
FULL COST										
GROSS DOMESTIC PRODUCT	43.6	47.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DISPOSABLE INCOME	38.9	42.2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TAX REVENUE	3.0	5.6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MINIMUM COST										
GROSS DOMESTIC PRODUCT	46.1	49.6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DISPOSABLE INCOME	41.9	44.2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TAX REVENUE	6.3	7.5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

* INDICATES THE FIRST YEAR OF OPERATION FOR A NEW HOTEL-CONDO RESORT (HCR) DEVELOPMENT.
_1/ DEFINED AS GDP LESS TAXES ON THAT PORTION OF WAGES AND INCOME SUBJECT TO MULTIPLIER.

APPENDIX TABLE 3. (CONTINUED) INTERNAL RATE OF RETURN ANALYSIS

INTERNAL RATE OF RETURN AT:

	20 YEARS	10 YEARS
	(%)	(%)
FULL COST		
GROSS DOMESTIC PRODUCT	32.8	23.4
DISPOSABLE INCOME	31.1	21.4
TAX REVENUE	4.2	-18.6
MINIMUM COST		
GROSS DOMESTIC PRODUCT	45.3	39.1
DISPOSABLE INCOME	43.4	37.0
TAX REVENUE	15.1	2.1

APPENDIX TABLE 3. (CONTINUED) NET PRESENT VALUE ANALYSIS

DISCOUNTED AT 8%	PRESENT VALUE		DISCOUNTED VALUES																			
PROJECT YEAR	20 YEARS	10 YEARS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
DISCOUNT FACTOR	-	-	1.000	0.926	[illegible]	0.794	0.735	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.270	[illegible]	0.232
FULL COST BASIS									(MILLIONS OF DOLLARS)													
INVESTMENT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
RECURRING COSTS	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
GDP	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DISPOSABLE INCOME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TAX REVENUE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MINIMUM COST BASIS																						
INVESTMENT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
RECURRING COSTS	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
GDP	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DISPOSABLE INCOME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TAX REVENUE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

DISCOUNTED AT 10%	PRESENT VALUE		DISCOUNTED VALUES																			
PROJECT YEAR	20 YEARS	10 YEARS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
DISCOUNT FACTOR	-	-	1.000	[illegible]	[illegible]	0.751	0.683	0.621	0.564	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
FULL COST									(MILLIONS OF DOLLARS)													
INVESTMENT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
RECURRING COSTS	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
GDP	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DISPOSABLE INCOME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TAX REVENUE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MINIMUM COST																						
INVESTMENT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
RECURRING COSTS	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
GDP	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DISPOSABLE INCOME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TAX REVENUE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

APPENDIX TABLE 3. (CONTINUED) COST - BENEFIT COMPARISON

NET TAX REVENUE _1/ ($ MILLIONS)	20 YEARS	10 YEARS
FULL COST - 8%	-14.2	-34.9
MINIMUM COST - 8%	22.1	-6.5
FULL COST - 10%	-19.1	-34.5
MINIMUM COST - 10%	13.8	-8.6
GDP PER DOLLAR COST _2/		
FULL COST - 8%	4.6	1.5
MINIMUM COST - 8%	10.7	4.3
FULL COST - 10%	4.0	1.8
MINIMUM COST - 10%	9.0	3.8
DISPOSABLE INCOME PER DOLLAR COST _3/		
FULL COST - 8%	4.2	1.8
MINIMUM COST - 8%	9.7	3.5
FULL COST - 10%	3.6	1.6
MINIMUM COST - 10%	8.2	3.5

_1/ PRESENT VALUE OF TAX REVENUE LESS PRESENT VALUE OF DESIGNATED COSTS.

_2/ PRESENT VALUE OF GROSS DOMESTIC PRODUCT DIVIDED BY PRESENT VALUE OF DESIGNATED COSTS.

_3/ PRESENT VALUE OF DISPOSABLE INCOME DIVIDED BY PRESENT VALUE OF DESIGNATED COSTS.

APPENDIX TABLE 4. SIP DEVELOPMENT ALTERNATIVE III: PESSIMISTIC - FULL AND MINIMUM COST

ASSUMPTIONS, BENEFITS	YEAR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
DEVELOPMENT ASSUMPTIONS:	(NUMBER OF SPECIFIED UNITS)																			
HOTEL ROOMS	0	0	0	0	0	0	0	0	0	0	0	250*	250	275	275	275	275	275	300	325
CONDO UNITS	0	0	0	0	0	0	0	0	0	0	0	0	0	20	[illegible]	[illegible]	35	[illegible]	45	[illegible]
HOME UNITS	0	0	0	0	0	0	0	0	0	0	0	5	10	15	[illegible]	[illegible]	[illegible]	35	[illegible]	[illegible]
HOTEL OCCUPANCY RATE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.52	0.55	0.58	0.60	0.62	0.65	0.65	0.65
DEVELOPMENT BENEFITS:																				
GROSS DOMESTIC PRODUCT FROM:	(MILLIONS OF DOLLARS)																			
CONSTRUCTION WAGES	5.1	1.7	0.0	0.0	0.0	0.0	0.0	0.0	.0	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
HOTEL SPENDING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.0	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CONDO SPENDING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.0	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
ALL SOURCES	5.1	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DISPOSABLE INCOME (ALL SOURCES) _1/	4.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TAX REVENUE FROM:																				
CONSTRUCTION ACTIVITIES	0.7	0.2	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
HOTEL ACTIVITY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CONDO ACTIVITY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
ALL SOURCES	0.7	0.2	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
NET BENEFITS ASSUMING:																				
FULL COST																				
GROSS DOMESTIC PRODUCT	-22.1	-4.2	-2.0	-2.0	-2.5	-4.2	-3.0	-3.0	-3.1	-3.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DISPOSABLE INCOME	-22.0	-4.1	-2.0	-2.0	-2.5	-4.2	-3.0	-3.0	-3.1	-3.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TAX REVENUE	-20.7	-5.2	-2.0	-2.0	-2.5	-4.7	-3.5	-3.0	-3.1	-3.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MINIMUM COST																				
GROSS DOMESTIC PRODUCT	-15.5	1.0	-0.1	-0.1	-0.4	0.2	0.1	-0.5	-0.0	-0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DISPOSABLE INCOME	-15.0	0.5	-0.1	-0.1	-0.4	0.2	0.1	-0.5	-0.0	-0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TAX REVENUE	-14.5	-0.0	-0.1	-0.1	-0.4	-0.3	-0.4	-0.5	-0.0	-0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

* INDICATES THE FIRST YEAR OF OPERATION FOR A NEW HOTEL-CONDO RESORT (HCR) DEVELOPMENT.
_1/ DEFINED AS GDP LESS TAXES ON THAT PORTION OF WAGES AND INCOME SUBJECT TO MULTIPLIER.

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APPENDIX TABLE 4. (CONTINUED) INTERNAL RATE OF RETURN ANALYSIS

INTERNAL RATE OF RETURN AT:

	20 YEARS	10 YEARS
	(%)	(%)
FULL COST		
GROSS DOMESTIC PRODUCT	16.8	-181.7
DISPOSABLE INCOME	15.8	-181.6
TAX REVENUE	-4.7	-164.8
MINIMUM COST		
GROSS DOMESTIC PRODUCT	25.2	-165.4
DISPOSABLE INCOME	24.2	-165.3
TAX REVENUE	6.5	-163.5

APPENDIX TABLE 4. (CONTINUED) NET PRESENT VALUE ANALYSIS

DISCOUNTED AT 8%	PRESENT VALUE		DISCOUNTED VALUES																			
PROJECT YEAR	26 YEARS	10 YEARS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
DISCOUNT FACTOR	-	-	1.000	0.926	0.857	0.794	0.735	0.681	0.630	0.583	0.540	0.500	0.463	0.429	0.397	0.368	0.340	0.315	0.292	0.270	0.250	0.232
										(MILLIONS OF DOLLARS)												
FULL COST BASIS																						
INVESTMENT	36.4	30.4	24.8	2.5	0.0	0.0	0.0	2.7	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RECURRING COSTS	33.1	20.1	2.6	2.5	2.4	2.2	2.1	2.0	1.9	1.7	1.7	1.8	2.1	1.4	1.3	1.2	1.6	1.1	1.0	0.9	1.2	0.8
GDP	130.2	7.0	5.1	1.1	0.0	0.0	0.0	0.4	0.4	0.0	0.0	0.0	4.6	16.1	11.9	15.4	14.6	14.0	13.7	13.4	13.9	14.0
DISPOSABLE INCOME	126.2	4.0	4.0	1.0	0.0	0.0	0.0	0.4	0.4	0.0	0.0	0.0	4.6	14.9	10.7	14.0	13.4	12.7	12.4	12.2	12.6	12.6
TAX REVENUE	21.5	1.1	0.7	0.2	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.6	2.6	2.1	2.6	2.5	2.4	2.3	2.3	2.4	2.4
MINIMUM COST BASIS																						
INVESTMENT	20.5	20.5	20.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RECURRING COSTS	6.5	2.0	0.1	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.9	0.3	0.3	0.3	0.7	0.3	0.3	0.3	0.5	0.3
GDP	130.2	7.0	5.1	1.1	0.0	0.0	0.0	0.4	0.4	0.0	0.0	0.0	4.6	16.1	11.8	15.4	14.0	14.0	13.7	13.4	13.5	14.0
DISPOSABLE INCOME	126.2	4.0	4.0	1.0	0.0	0.0	0.0	0.4	0.4	0.0	0.0	0.0	4.6	14.9	10.7	14.0	13.4	12.7	12.4	12.2	12.6	12.6
TAX REVENUE	23.1	1.1	0.7	0.2	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.6	2.6	2.1	2.6	2.5	2.4	2.3	2.3	2.4	2.4

DISCOUNTED AT 10%	PRESENT VALUE		DISCOUNTED VALUES																			
PROJECT YEAR	26 YEARS	10 YEARS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
DISCOUNT FACTOR	-	-	1.000	0.909	0.826	0.751	0.683	0.621	0.564	0.513	0.467	0.424	0.386	0.350	0.319	0.290	0.263	0.239	0.218	0.198	0.180	0.164
										(MILLIONS OF DOLLARS)												
FULL COST																						
INVESTMENT	36.0	30.0	24.6	2.5	0.0	0.0	0.0	2.4	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RECURRING COSTS	24.1	19.2	2.6	2.5	2.3	2.1	2.0	1.8	1.7	1.5	1.4	1.3	1.7	1.1	1.1	1.0	1.2	0.8	0.8	0.7	0.9	0.6
GDP	102.5	6.5	5.1	1.1	0.0	0.0	0.0	0.4	0.3	0.0	0.0	0.0	3.8	13.1	9.5	12.1	11.4	10.7	10.2	9.9	10.6	9.9
DISPOSABLE INCOME	58.0	4.5	4.4	1.0	0.0	0.0	0.0	0.4	0.3	0.0	0.0	0.0	3.8	12.1	8.6	11.0	10.3	9.6	9.2	8.9	9.1	8.9
TAX REVENUE	16.0	1.1	0.7	0.2	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.5	2.1	1.7	2.1	1.9	1.8	1.7	1.7	1.7	1.7
MINIMUM COST																						
INVESTMENT	20.5	20.5	20.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RECURRING COSTS	5.2	2.4	0.1	0.2	0.2	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.8	0.2	0.3	0.2	0.6	0.2	0.2	0.2	0.4	0.2
GDP	102.5	6.4	5.1	1.1	0.0	0.0	0.0	0.4	0.3	0.0	0.0	0.0	3.8	13.1	9.5	12.1	11.4	10.7	10.2	9.9	10.0	9.9
DISPOSABLE INCOME	58.0	4.5	4.0	1.0	0.0	0.0	0.0	0.4	0.3	0.0	0.0	0.0	3.8	12.1	8.6	11.0	10.3	9.6	9.2	8.9	9.1	8.9
TAX REVENUE	16.0	1.1	0.7	0.2	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.5	2.1	1.7	2.1	1.9	1.8	1.7	1.7	1.7	1.7

APPENDIX TABLE 4. (CONTINUED) COST - BENEFIT COMPARISON

NET TAX REVENUE _1/ ($ MILLIONS)	20 YEARS	10 YEARS
FULL COST - 8%	-40.4	-50.0
MINIMUM COST - 8%	-4.1	-22.0
FULL COST - 10%	-41.1	-48.1
MINIMUM COST - 10%	-8.2	-21.8
GDP PER DOLLAR COST _2/		
FULL COST - 8%	2.2	0.1
MINIMUM COST - 8%	5.1	0.3
FULL COST - 10%	1.8	0.1
MINIMUM COST - 10%	4.1	0.3
DISPOSABLE INCOME PER DOLLAR COST _3/		
FULL COST - 8%	2.0	0.1
MINIMUM COST - 8%	3.4	0.2
FULL COST - 10%	1.7	0.1
MINIMUM COST - 10%	3.7	0.3

_1/ PRESENT VALUE OF TAX REVENUE LESS PRESENT VALUE OF DESIGNATED COSTS.
_2/ PRESENT VALUE OF GROSS DOMESTIC PRODUCT DIVIDED BY PRESENT VALUE OF DESIGNATED COSTS.
_3/ PRESENT VALUE OF DISPOSABLE INCOME DIVIDED BY PRESENT VALUE OF DESIGNATED COSTS.

APPENDIX TABLE 5. SEP DEVELOPMENT ALTERNATIVE IV: EARLY DEVELOPMENT ([illegible]) - FULL AND MINIMUM COST

ASSUMPTIONS, BENEFITS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	YEAR																			
DEVELOPMENT ASSUMPTIONS:	(NUMBER OF SPECIFIED UNITS)																			
HOTEL ROOMS	0	0	250*	450	725*	775	840	840	855	905	930	1055	1155	1155	1205	1305	1370	1380	1408	1455
CONDO UNITS	0	0	0	15	30	60	80	100	125	145	170	190	220	230	255	275	290	335	345	365
HOME UNITS	0	1	1	7	18	23	29	38	42	45	55	62	73	82	94	101	117	122	130	140
HOTEL OCCUPANCY RATE	0.20	0.20	0.20	0.50	0.52	0.55	0.58	0.60	0.62	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65
DEVELOPMENT BENEFITS:	(MILLIONS OF DOLLARS)																			
GROSS DOMESTIC PRODUCT FROM:																				
CONSTRUCTION WAGES	5.1	11.1	17.4	20.4	14.4	6.3	6.1	3.5	3.8	4.7	7.2	10.0	8.7	7.5	7.6	8.9	10.1	8.1	9.7	10.5
HOTEL SPENDING	0.0	0.0	11.1	50.1	84.0	94.9	108.5	112.3	118.1	131.0	134.7	152.8	167.2	167.2	174.5	188.5	195.0	199.8	214.3	239.6
CONDO SPENDING	0.0	0.0	0.0	2.2	6.5	13.0	17.3	21.7	[illegible]	31.4	36.9	41.2	47.7	49.9	55.1	55.6	67.9	77.6	74.0	79.1
ALL SOURCES	5.1	11.1	28.5	72.7	104.9	114.2	131.9	137.5	145.0	167.1	178.8	204.0	223.6	224.6	237.4	[illegible]	272.0	286.5	298.0	329.2
DISPOSABLE INCOME (ALL SOURCES) _1/	4.8	11.0	27.4	67.5	95.9	103.4	119.3	124.1	134.5	156.9	161.6	184.6	202.1	197.9	214.4	232.1	246.5	[illegible]	269.9	287.3
TAX REVENUE FROM:																				
CONSTRUCTION ACTIVITIES	0.7	1.4	2.2	2.5	1.9	0.8	0.8	0.5	0.5	0.6	0.8	1.3	1.1	4.1	1.0	1.1	1.3	1.0	1.2	1.4
HOTEL ACTIVITY	0.0	0.0	2.0	8.9	14.9	16.8	19.2	19.9	20.9	23.2	23.8	27.0	29.6	29.6	30.9	32.4	35.4	35.4	37.9	42.0
CONDO ACTIVITY	0.0	0.0	0.0	0.3	1.0	2.0	2.6	3.3	4.1	4.7	5.5	6.2	7.2	7.5	8.3	8.9	9.4	10.9	11.2	11.9
ALL SOURCES	0.7	1.4	4.2	11.7	17.8	19.6	22.6	23.7	25.5	28.5	30.1	34.5	37.9	37.4	40.2	43.4	46.1	47.3	50.3	55.7
NET BENEFITS ASSUMING:																				
FULL COST																				
GROSS DOMESTIC PRODUCT	-22.1	5.7	25.7	69.5	102.0	107.4	128.3	134.5	145.9	164.0	174.3	200.8	220.1	218.3	237.3	[illegible]	265.1	277.8	293.9	325.0
DISPOSABLE INCOME	-22.6	5.6	24.6	66.7	91.0	98.6	115.7	121.1	131.4	147.8	157.1	181.4	190.8	194.6	205.7	[illegible]	243.0	246.8	265.8	283.7
TAX REVENUE	-26.7	-4.0	1.4	8.5	14.9	17.8	19.0	20.7	22.4	25.4	25.8	31.3	34.8	34.1	35.5	40.0	42.8	43.8	45.4	52.1
MINIMUM COST																				
GROSS DOMESTIC PRODUCT	-15.5	10.9	28.2	72.4	104.5	113.8	131.4	137.0	148.4	166.5	176.8	203.3	222.8	218.8	235.7	250.0	271.8	279.5	296.4	328.1
DISPOSABLE INCOME	-15.8	10.6	27.1	67.2	95.5	103.0	118.8	123.6	133.9	150.3	159.6	183.4	201.3	197.1	212.2	231.2	245.9	252.3	267.5	286.2
TAX REVENUE	-14.4	1.2	3.9	11.4	17.4	19.2	22.1	23.2	24.9	27.9	28.1	33.8	37.1	36.8	38.6	42.5	45.1	46.3	47.9	54.0

* INDICATES THE FIRST YEAR OF OPERATION FOR A NEW HOTEL-CONDO RESORT (HCR) DEVELOPMENT.
_1/ DEFINED AS GDP LESS TAXES ON THAT PORTION OF SALES AND INCOME SUBJECT TO MULTIPLIER.

APPENDIX TABLE 5. (CONTINUED) INTERNAL RATE OF RETURN ANALYSIS

INTERNAL RATE OF RETURN AT:

	20 YEARS	10 YEARS
	(%)	(%)
FULL COST		
GROSS DOMESTIC PRODUCT	122.5	122.1
DISPOSABLE INCOME	116.7	116.3
TAX REVENUE	33.3	26.7
MINIMUM COST		
GROSS DOMESTIC PRODUCT	165.9	165.9
DISPOSABLE INCOME	158.6	158.6
TAX REVENUE	48.1	44.7

APPENDIX TABLE 5. (CONTINUED) NET PRESENT VALUE ANALYSIS

DISCOUNTED AT 8%	PRESENT VALUE		DISCOUNTED VALUES																			
PROJECT YEAR	20 YEARS	10 YEARS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
DISCOUNT FACTOR	-	-	1.000	0.926	0.857	0.794	0.735	0.681	0.630	0.583	0.540	0.500	0.463	0.429	0.397	0.368	0.340	0.315	0.292	0.270	0.250	0.232
FULL COST BASIS										(MILLIONS OF DOLLARS)												
INVESTMENT	[illegible]	[illegible]	28.0	2.5	0.0	0.0	0.0	[illegible]	[illegible]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RECURRING COSTS	[illegible]	[illegible]	2.6	2.5	[illegible]	[illegible]	2.1	2.0	1.9	1.7	1.7	1.6	2.1	1.6	[illegible]	[illegible]	1.6	1.1	1.0	0.9	[illegible]	[illegible]
GDP	1187.0	[illegible]	5.1	10.1	26.6	57.1	77.1	77.0	81.1	80.2	88.5	[illegible]	82.0	87.5	[illegible]	88.9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DISPOSABLE INCOME	1258.0	[illegible]	6.6	10.2	[illegible]	[illegible]	70.5	78.6	75.2	72.6	72.6	75.5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	72.0	60.6	[illegible]	69.9
TAX REVENUE	219.1	[illegible]	[illegible]	1.1	1.2	9.1	11.1	13.3	14.2	13.8	13.8	16.1	13.9	14.0	[illegible]	13.0	[illegible]	13.2	13.5	12.8	[illegible]	[illegible]
MINIMUM COST BASIS																						
INVESTMENT	[illegible]	20.5	[illegible]	[illegible]	[illegible]	0.0	0.0	0.0	0.0	0.0	[illegible]	[illegible]	[illegible]	0.0	[illegible]	[illegible]	[illegible]	[illegible]	0.0	0.0	0.0	0.0
RECURRING COSTS	[illegible]	7.6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.1	0.0	0.1
GDP	1187.0	[illegible]	5.1	10.1	26.6	[illegible]	77.1	77.0	81.1	[illegible]	88.5	[illegible]	77.0	87.5	88.8	[illegible]	[illegible]	[illegible]	75.1	75.1	76.1	[illegible]
DISPOSABLE INCOME	1258.0	[illegible]	6.6	10.2	[illegible]	[illegible]	70.5	78.6	75.2	[illegible]	72.6	[illegible]	74.0	79.2	80.2	72.0	[illegible]	[illegible]	72.0	60.6	63.5	[illegible]
TAX REVENUE	219.1	97.4	0.7	1.1	1.2	9.1	11.1	13.3	14.2	[illegible]	11.8	16.1	13.9	14.0	15.0	13.0	[illegible]	13.3	13.5	12.4	12.6	[illegible]

DISCOUNTED AT 10%	PRESENT VALUE		DISCOUNTED VALUES																			
PROJECT YEAR	20 YEARS	10 YEARS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
DISCOUNT FACTOR	-	-	1.000	0.909	0.826	0.751	0.683	0.621	0.564	0.513	0.467	0.424	0.386	0.350	0.319	0.290	0.263	0.239	0.218	0.198	0.180	0.164
FULL COST										(MILLIONS OF DOLLARS)												
INVESTMENT	30.0	30.0	28.0	2.5	[illegible]	0.0	[illegible]	2.0	[illegible]	0.0	0.0	0.0	0.0	0.0	[illegible]	[illegible]	[illegible]	0.0	[illegible]	0.0	0.0	[illegible]
RECURRING COSTS	29.1	19.2	2.6	[illegible]	[illegible]	2.1	2.0	1.8	1.7	1.5	[illegible]	1.3	[illegible]	1.1	[illegible]	[illegible]	[illegible]	[illegible]	1.0	0.7	0.5	0.6
GDP	1191.2	571.2	5.1	[illegible]	[illegible]	[illegible]	71.6	70.9	76.9	70.9	[illegible]	70.5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	55.5	53.0	50.0
DISPOSABLE INCOME	1017.2	[illegible]	5.0	10.0	[illegible]	[illegible]	65.5	69.2	67.3	63.7	62.8	64.0	47.6	66.6	60.5	57.6	[illegible]	[illegible]	51.7	50.2	48.6	48.0
TAX REVENUE	192.0	87.0	0.7	1.1	1.5	8.0	[illegible]	12.2	12.3	12.2	11.5	12.1	11.0	12.1	12.1	10.8	10.6	[illegible]	10.0	9.6	9.1	9.1
MINIMUM COST																						
INVESTMENT	20.5	20.5	[illegible]	[illegible]	[illegible]	[illegible]	0.0	0.0	[illegible]	0.0	0.0	0.0	0.0	0.0	[illegible]	0.0	[illegible]	0.0	[illegible]	0.0	0.0	0.0
RECURRING COSTS	5.2	2.6	[illegible]	[illegible]	[illegible]	[illegible]	0.1	0.2	[illegible]	0.3	0.1	0.1	0.0	0.2	[illegible]	0.2	[illegible]	0.2	[illegible]	0.2	0.0	0.2
GDP	1191.2	571.2	5.1	10.1	[illegible]	[illegible]	71.6	70.9	76.6	70.9	69.0	70.9	69.0	71.6	71.1	[illegible]	[illegible]	[illegible]	[illegible]	55.5	53.0	50.0
DISPOSABLE INCOME	1017.2	[illegible]	5.0	10.6	[illegible]	[illegible]	65.5	69.2	67.3	63.1	62.8	64.0	47.6	66.6	55.5	57.6	50.6	[illegible]	51.1	50.2	48.0	48.0
TAX REVENUE	192.0	87.0	0.7	1.1	1.5	8.7	12.2	12.2	12.3	12.2	11.9	12.1	11.0	12.1	12.1	10.8	10.6	10.6	10.0	9.6	9.1	9.1

ANNEX C.2
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APPENDIX TABLE 5. (CONTINUED) COST - BENEFIT COMPARISON

NET TAX REVENUE _1/ ($ MILLIONS)	20 YEARS	10 YEARS
FULL COST - 8%	170.4	46.3
MINIMUM COST - 8%	206.7	74.3
FULL COST - 10%	133.7	38.4
MINIMUM COST - 10%	166.6	64.7
GDP PER DOLLAR COST _2/		
FULL COST - 8%	21.8	11.3
MINIMUM COST - 8%	50.6	25.1
FULL COST - 10%	19.3	10.8
MINIMUM COST - 10%	43.6	22.8
DISPOSABLE INCOME PER DOLLAR COST _3/		
FULL COST - 8%	19.8	10.3
MINIMUM COST - 8%	45.9	22.9
FULL COST - 10%	17.6	9.7
MINIMUM COST - 10%	39.6	20.8

_1/ PRESENT VALUE OF TAX REVENUE LESS PRESENT VALUE OF DESIGNATED COSTS.
_2/ PRESENT VALUE OF GROSS DOMESTIC PRODUCT DIVIDED BY PRESENT VALUE OF DESIGNATED COSTS.
_3/ PRESENT VALUE OF DISPOSABLE INCOME DIVIDED BY PRESENT VALUE OF DESIGNATED COSTS.

APPENDIX TABLE 6. SEP DEVELOPMENT ALTERNATIVE V: MANAGEABLE GROWTH (IDF) - FULL AND MINIMUM COST

ASSUMPTIONS, BENEFITS	YEAR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
DEVELOPMENT ASSUMPTIONS:	(NUMBER OF SPECIFIED UNITS)																			
HOTEL ROOMS	0	2	3	4	3	40	54	74	99	120	130	237	344	460	548	655	796	844	1068	1135
CONDO UNITS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	33	55	98	137
HOME UNITS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5	9	15	21
HOTEL OCCUPANCY RATE	0.00	0.20	0.25	0.30	0.35	0.40	0.45	0.50	0.52	0.55	0.58	0.60	0.62	0.65	0.65	0.65	0.65	0.65	0.65	0.65
DEVELOPMENT BENEFITS:	(MILLIONS OF DOLLARS)																			
GROSS DOMESTIC PRODUCT FROM:																				
CONSTRUCTION SALES	5.1	1.3	0.0	0.0	0.1	1.9	1.1	0.8	0.9	0.5	2.0	5.8	6.1	4.5	5.5	8.5	8.0	7.9	13.6	9.8
HOTEL SPENDING	0.0	0.1	0.2	0.3	0.5	3.6	5.4	8.2	11.5	14.7	17.8	31.7	47.5	66.6	79.3	94.8	115.3	122.2	145.9	164.3
CONDO SPENDING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	7.2	11.9	21.2	29.7
ALL SOURCES	5.1	1.4	0.2	0.3	0.6	5.5	6.5	9.0	12.4	15.6	20.4	37.5	53.6	71.1	84.8	106.1	130.5	142.0	180.7	203.8
DISPOSABLE INCOME (ALL SOURCES) _1/	4.8	1.3	0.2	0.3	0.6	5.1	5.9	8.2	11.3	14.1	18.6	34.3	48.9	64.4	76.9	94.3	118.3	128.6	164.0	184.4
TAX REVENUE FROM:																				
CONSTRUCTION ACTIVITIES	0.7	0.2	0.0	0.0	0.0	0.3	0.2	0.1	0.1	0.1	0.3	0.7	0.8	0.6	0.7	1.1	1.1	1.0	1.6	1.2
HOTEL ACTIVITY	0.0	0.0	0.0	0.0	0.1	0.6	1.0	1.5	2.0	2.6	3.1	5.6	8.4	11.8	14.0	16.8	20.4	21.6	25.8	29.1
CONDO ACTIVITY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.1	1.8	3.2	4.5
ALL SOURCES	0.7	0.2	0.0	0.0	0.1	0.9	1.2	1.6	2.1	2.7	3.4	6.3	9.2	12.4	14.7	18.3	22.6	24.4	30.5	34.8
NET BENEFITS ASSUMING:																				
FULL COST																				
GROSS DOMESTIC PRODUCT	-22.3	-4.0	-2.6	-2.5	-2.2	-1.3	2.9	6.0	9.3	12.5	15.9	34.3	50.3	67.4	80.1	102.7	127.0	136.5	175.8	200.2
DISPOSABLE INCOME	-22.6	-4.1	-2.6	-2.5	-2.4	-1.7	2.3	5.2	8.2	11.0	14.1	31.1	45.6	61.1	72.7	92.4	114.8	125.1	159.1	180.3
TAX REVENUE	-26.7	-4.7	-2.8	-2.8	-2.8	-5.4	-2.4	-1.4	-1.0	-0.4	-1.1	3.1	5.9	9.1	10.0	14.4	15.1	20.5	25.7	31.2
MINIMUM COST																				
GROSS DOMESTIC PRODUCT	-15.[illegible]	1.2	-0.1	-0.0	0.2	5.1	6.0	8.5	11.0	15.0	18.4	36.0	52.0	70.3	87.6	105.2	125.5	141.0	170.3	202.7
DISPOSABLE INCOME	-15.8	1.1	-0.1	-0.0	0.2	4.7	5.4	7.7	10.7	13.5	16.6	33.6	48.1	63.8	74.7	95.4	117.3	127.6	161.6	183.3
TAX REVENUE	-14.4	-0.0	-0.1	-0.3	-0.3	0.5	0.7	1.1	1.5	2.1	1.4	5.8	8.4	11.6	12.5	17.4	21.8	23.4	28.7	31.7

* INDICATES THE FIRST YEAR OF OPERATION FOR A NEW HOTEL-CONDO RESORT (HCR) DEVELOPMENT.
_1/ DEFINED AS GDP LESS TAXES ON THAT PORTION OF SALES AND INCOME SUBJECT TO MULTIPLIER.

APPENDIX TABLE 6. (CONTINUED) INTERNAL RATE OF RETURN ANALYSIS

INTERNAL RATE OF RETURN AT:

	20 YEARS (%)	10 YEARS (%)
FULL COST		
GROSS DOMESTIC PRODUCT	27.1	-4.4
DISPOSABLE INCOME	25.8	-4.1
TAX REVENUE	7.0	-167.3
MINIMUM COST		
GROSS DOMESTIC PRODUCT	36.2	17.1
DISPOSABLE INCOME	34.8	15.1
TAX REVENUE	14.8	-15.2

APPENDIX TABLE 6. (CONTINUED) NET PRESENT VALUE ANALYSIS

DISCOUNTED AT 8%	PRESENT VALUE		DISCOUNTED VALUES																			
PROJECT YEAR	20 YEARS	10 YEARS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
DISCOUNT FACTOR	-	-	1.000	0.926	0.857	0.794	0.735	0.681	0.630	0.583	0.540	0.500	0.463	0.429	0.397	0.368	0.340	0.315	0.292	0.270	0.250	0.232
			(MILLIONS OF DOLLARS)																			
FULL COST BASIS																						
INVESTMENT	30.4	30.4	24.8	2.5	0.0	0.0	0.0	2.7	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RECURRING COSTS	33.3	20.7	2.6	2.5	2.4	2.2	2.1	2.0	1.9	1.7	1.7	1.6	2.1	1.4	1.3	1.2	1.6	1.1	1.0	0.9	1.2	0.8
GDP	338.8	34.7	5.1	1.3	0.2	0.2	0.4	3.7	4.1	5.2	6.7	7.8	9.4	16.1	21.3	26.2	28.8	33.4	38.1	38.3	45.2	47.3
DISPOSABLE INCOME	307.8	32.0	4.8	1.2	0.2	0.2	0.4	3.5	3.7	4.8	6.1	7.1	8.6	14.7	19.4	23.7	26.1	30.3	34.5	34.7	41.0	42.8
TAX REVENUE	50.2	5.8	0.7	0.2	0.0	0.0	0.1	0.6	0.8	0.9	1.1	1.4	1.6	2.7	3.7	4.6	5.0	5.8	6.6	6.6	7.7	8.1
MINIMUM COST BASIS																						
INVESTMENT	20.5	20.5	20.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RECURRING COSTS	6.5	2.6	0.1	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.7	0.3	0.3	0.3	0.6	0.3
GDP	338.8	34.7	5.1	1.3	0.2	0.2	0.4	3.7	4.1	5.2	6.7	7.8	9.4	16.1	21.3	26.2	28.8	33.4	38.1	38.3	45.2	47.3
DISPOSABLE INCOME	307.8	32.0	4.8	1.2	0.2	0.2	0.4	3.5	3.7	4.8	6.1	7.1	8.6	14.7	19.4	23.7	26.1	30.3	34.5	34.7	41.0	42.8
TAX REVENUE	50.2	5.8	0.7	0.2	0.0	0.0	0.1	0.6	0.8	0.9	1.1	1.4	1.6	2.7	3.7	4.6	5.0	5.8	6.6	6.6	7.7	8.1

DISCOUNTED AT 10%	PRESENT VALUE		DISCOUNTED VALUES																			
PROJECT YEAR	20 YEARS	10 YEARS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
DISCOUNT FACTOR	-	-	1.000	0.909	0.826	0.751	0.683	0.621	0.564	0.513	0.467	0.424	0.386	0.350	0.319	0.290	0.263	0.239	0.218	0.198	0.180	0.164
			(MILLIONS OF DOLLARS)																			
FULL COST																						
INVESTMENT	30.0	30.0	24.8	2.5	0.0	0.0	0.0	2.4	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RECURRING COSTS	24.1	19.2	2.6	2.5	2.3	2.1	2.0	1.8	1.7	1.5	1.4	1.3	1.7	1.1	1.1	1.0	1.2	0.8	0.8	0.7	0.9	0.6
GDP	260.1	31.3	5.1	1.3	0.2	0.2	0.4	3.4	3.7	4.6	5.8	6.6	7.9	13.1	17.1	20.6	22.3	25.4	28.4	28.1	32.5	33.4
DISPOSABLE INCOME	236.5	28.8	4.8	1.2	0.2	0.2	0.4	3.2	3.3	4.2	5.3	6.0	7.2	12.0	15.6	18.7	20.2	23.0	25.8	25.5	29.5	30.2
TAX REVENUE	44.4	5.2	0.7	0.2	0.0	0.0	0.1	0.6	0.7	0.8	1.0	1.1	1.3	2.2	2.9	3.6	3.9	4.4	4.9	4.8	5.5	5.7
MINIMUM COST																						
INVESTMENT	20.5	20.5	20.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RECURRING COSTS	5.7	2.4	0.1	0.2	0.2	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.8	0.2	0.3	0.2	0.6	0.2	0.2	0.2	0.4	0.2
GDP	260.1	31.3	5.1	1.3	0.2	0.2	0.4	3.4	3.7	4.6	5.8	6.6	7.9	13.1	17.1	20.6	22.3	25.4	28.4	28.1	32.5	33.4
DISPOSABLE INCOME	236.5	28.8	4.8	1.2	0.2	0.2	0.4	3.2	3.3	4.2	5.3	6.0	7.2	12.0	15.6	18.7	20.2	23.0	25.8	25.5	29.5	30.2
TAX REVENUE	44.4	5.2	0.7	0.2	0.0	0.0	0.1	0.6	0.7	0.8	1.0	1.1	1.3	2.2	2.9	3.6	3.9	4.4	4.9	4.8	5.5	5.7

APPENDIX TABLE 6. (CONTINUED) COST - BENEFIT COMPARISON

NET TAX REVENUE _1/ ($ MILLIONS)	20 YEARS	10 YEARS
FULL COST - 8%	-5.5	-45.3
MINIMUM COST - 8%	30.8	-17.3
FULL COST - 10%	-14.7	-44.0
MINIMUM COST - 10%	18.2	-17.7
GDP PER DOLLAR COST _2/		
FULL COST - 8%	5.3	0.7
MINIMUM COST - 8%	12.4	1.5
FULL COST - 10%	4.4	0.6
MINIMUM COST - 10%	9.9	1.4
DISPOSABLE INCOME PER DOLLAR COST _3/		
FULL COST - 8%	4.8	0.6
MINIMUM COST - 8%	11.2	1.4
FULL COST - 10%	4.0	0.6
MINIMUM COST - 10%	9.0	1.3

_1/ PRESENT VALUE OF TAX REVENUE LESS PRESENT VALUE OF DESIGNATED COSTS.
_2/ PRESENT VALUE OF GROSS DOMESTIC PRODUCT DIVIDED BY PRESENT VALUE OF DESIGNATED COSTS.
_3/ PRESENT VALUE OF DISPOSABLE INCOME DIVIDED BY PRESENT VALUE OF DESIGNATED COSTS.

DRAFT

SAINT CHRISTOPHER AND NEVIS

No. of 1986

AN ACT to provide for the development, conservation and management of the South-East Peninsula, to establish a Land Development and Conservation Board with specific powers and functions, and for matters connected thereto.

BE IT ENACTED by the Queen's Most Excellent Majesty, by and with the advice and consent of the National Assembly of Saint Christopher and Nevis and by the authority of the same as follows:-

Short title and commencement.

1. This Act may be cited as the South-East Peninsula Land Development and Conservation Act, 1986 and shall come into operation on such date as the Minister may by Order publish in the Gazette.

Interpretation.

2. In this Act, unless the context otherwise requires -

"Board" means the South-East Peninsula Land Development and Conservation Board established under section 3 of this Act;

"Minister" means the Minister for the time being charged with the subject of Planning and Development;

"South-East Peninsula" means the area as defined in the Schedule to this Act.

Establishment of a South-East Peninsula Land Development and Conservation Board.

3. (1) There shall be established a South-East Peninsula Land Development and Conservation Board.

(2) The Board shall be comprised of five members appointed by the Minister, one of whom shall be appointed Chairman of the Board.

(3) The members of the Board shall be appointed to serve for a period not exceeding three (3) years and shall be eligible for re-appointment.

(4) The Board shall regulate its own proceedings and may establish Committees and co-opt persons to serve on any Committee.

Powers and Functions of the Board.

4. The powers and functions of the Board shall be -

(a) to evaluate residential, commercial, industrial, agricultural and other developmental schemes;

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(b) to allot, reserve and zone land for different purposes;

(c) to control pollution and maintain the evironmental quality of the Sout-East Peninsula, including coastal conservation;

(d) to develop and implement an environmental protection plan;

No.15 of 1966

(e) to draw up schemes to develop lands and make recommendations in respect of the development of land in terms of the Land Development (Control) Act;

(f) to carry out planning studies relating to the various sectors of the South-East Peninsula;

(g) to monitor developmental schemes and if necessary to make further recommendations; and

(h) to do any other matter incidental or consequential to the aforementioned powers and functions or to evaluate any matter required by the Minister.

South-East Peninusla Development Plan.

5. (1) The Board shall prepare a South-East Peninsula Development and Land Use Management Plan to include the following -

(a) the guidelines to be used in determining the suitability of particular developmental activities in the Peninsula;

(b) proposals dealing with the following subjects -

(i) land use;

(ii) transport facilities;

(iii) preservation and management of the scenic and other natural resources;

(iv) recreation and tourism;

(v) waste disposal facilities and power plants;

(vi) living resources;

(vii) human settlements;

(viii) agriculture and industry within the South-East Peninsula;

(ix) coastal conservation;

(x) any other developmental matter submitted by the Minister.

(2) The Board shall submit the Pland and any schemes evaluated by it to the Minister in accordance with the provisions of the Land Development Control Act.

No.15 of 1966.

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(3) The Board may, with the approval of the Minister make the Development and Land Use Management Plan available for public inspection and invite submission of comments or recommendations thereon in writing.

(4) Upon approval of the Plan made by the Minister by Order published in the Gazette, the Plan shall regulate developmental activity in the South-East Peninsula.

Offences.

6. (1) Any person who -

(a) fails to comply with the requirements of the Development plan;

(b) resists or obstructs the Board or any officer in the exercise of any power conferred or as directed by the Board in conformity with any other Act;

(c) fails to comply with the provisions or Regulations made under this Act;

(d) makes any statement, which to his knowledge is false or incorrect, in any return or information furnished by him in compliance with a notice issued by the Board,

shall be guilty of an offence under this Act and shall on conviction after summary trial before a Magistrate, be liable to a fine of not less than one thousand five hundred dollars and not exceeding twenty-five thousand dollars or to imprisonment of either description for a term not exceeding six months or to both such fine and imprisonment.

(2) Every person who is guilty of an offence under this Act, shall in addition to the fines prescribed under this section, be liable to a fine not exceeding one hundred dollars for each day on which the offence is continued after conviction.

Regulations.

7. (1) The Minister may in consultation with the Board, make Regulations to give effect to the principles and provisions of this Act.

(2) Without prejudice to the generality of powers under sub-section (1), the Minister may make Regulations relating to the laying out, maintenance and improvement of roads, the laying out and sub-division of land for building purposes, the erection, construction and alteration of buildings and structures, the class and design of buildings or structures to be erected in any specified part of the South-East Peninsula and for zoning any area or the use to which any land may be put.

Speaker.

Passed the National Assembly this day of ,1986.

Clerk of the National Assembly.

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SOCIAL ANALYSIS

1. Socio-Cultural Context

St. Kitts and Nevis, which achieved independent statehood on September 19, 1983, is by Eastern Caribbean standards a small country with a total population of 44,404 (35,104 on St. Kitts) and a gross domestic product (GDP) of approximately US$43 million. The total labor force is approximately 17,000 persons. A small but growing light manufacturing sector, approximately 30 firms, employs 3,000 persons generating approximately eight percent of GDP. Sugar production occurs entirely on St. Kitts and occupies 12,000 acres out of 19,000 acres regarded as agricultural land. Sugar, therefore, dominates the economy and, with its molasses by-product, accounts for 17.5 percent of GDP and 70 percent of total exports.

Given the secular decline in world sugar prices, the Government's continuing search for increased export earnings, tax revenues, and expanded employment opportunities by enlargement and enhancement of the tourism sector is quite understandable and defensible. A recent Government document sums it up:

> The careful development of Tourism in the State is of vital importance. It is necessary in order to provide a wide variety of services and attractions to the visitor. It is also important in that it provides employment and income to our Nationals while retaining as much as possible of our socio-cultural fabric intact.
>
> (St. Kitts and Nevis Government, Ministry of Tourism, 1982)

The tourist industry has been gaining in economic significance for the last five years. Arrivals have been significantly increasing yearly, particularly since 1983. Over 40,000 people visited St. Kitts and Nevis in 1985, up from 35,000 in 1983. This performance is among the best in the Caribbean and reflects the strong market interest in "new" destinations.

However, although tourist arrivals have been recently increasing, St. Kitts and Nevis is hamstrung by transportation and accomodation constraints which limit the growth potential of the industry. At present only two international airlines serve St. Kitts on a weekly basis; there is no daily service. In order for increased service to occur, the St. Kitts and Nevis hotel sector has to expand significantly. Given the ecology of the two islands, with their mountainous interiors, attention has naturally turned to the relatively unoccupied Southeast Peninsula area, five times the size of the largest tourist investment, the Frigate Bay Development Corporation. For development of the South-East Peninsula to commence, however, the need for a full-length penetration road has generally been acknowledged as essential. This project is the culmination of a number of studies and various engineering design proposals for such an access road. It is also the culmination of and distillation of thorough research and discussion on the likely implications of contructing such a road and what necessary inputs for balanced economic development should entail.

2. Socio-Cultural Feasibility

It was recognized by all parties that this project could not be viewed or designed as simply a road construction project. An undertaking of this sort which opens up hither to undeveloped areas to intensive capital investment carries with it many environmental, political, social, legal and fiscal issues. Hence, this project is holistically designed to provide St. Kitts and Nevis and the people of St. Kitts and Nevis with the necessary institutional and legal framework to cope with the physical development process.

Thus, road construction is but one component, albeit the most pivotal, in the entire project. This means, therefore, that the project is complex and potentially fraught with many problems. Successful completion of both road construction and the implementation of the institutional framework for managing Southeast Peninsula development will require serious commitment on the part of Government and individuals; it will require an intense influx of skills and talents, some of which will be provided locally, and much of which will be technical assistance provided by outside consultants.

St. Kitts and Nevis is among the smallest of the OECS countries in the Eastern Caribbean and suffers from scarcity of trained professionals to man critical areas in the Government bureaucracy. Too, as a small country the numbers of public-spirited citizency of stature is then, and most professionals in both the public and private sectors and stretched and serve on numerous statutory committees and voluntary organizations. Thus, in designing this project one had to be cognizant of the serious personpower constraints affecting its implementation and ultimate success. The institutional framework was designed with Kittitian professionals in a manner that all felt would best address the serious administrative needs without unduly burdening Government and individuals and without creating a bureaucracy unworkable because of fiscal and personpower constraints.

In fact, it is envisioned that an entity such as the Southeast Peninsula Land Development and Conservation Board with its technical arm could eventually serve as an authority for the entire country, not only the Peninsula, providing the necessary support system the Planning Unit certainly needs.

However, it is necessary to caution that although the institutional framework designed is both needed and appropriate, ongoing successful implementation will require political will on the part of this, and future Governments. There are equity issues, political issues and hard decisions which will have to be resolved in the area of land use management and physical development of the Peninsula. A deteriorating fiscal situation also impacts on Government's ability to provide the necessary resources to affect environmental controls and to fund and staff new positions.

In summation, RDO/C considers that the project design for the Southeast Peninsula Area Development Project is the most appropriate and the most feasible. It is also recognized that there are many unknowns and also factors which could inhibit the ultimate development of the Southeast Peninsula in a manner which best represents the interests of the people of St. Kitts and Nevis. Research and analysis, however, indicate that this project design provides the necessary checks and balances to ensure a high chance of success.

3. Participant and Beneficiary Populations

The design process of this project has been a thoroughly collaborative one involving South-East Peninsula landowners, prospective investors, regional environmental consultants, regional economists and most importantly, the political leaders and chief technicians of the Government of St. Kitts and Nevis.

Following the Government's request to RDO/C in April 1985, USAID sought to determine the environmental, technical and economic soundness of proceeding with project design of a road on the South-East Peninsula. USAID was willing to finance a team to examine the environmental questions and encouraged the Government to appoint three Kittitians to work with the Environmental Assessment team. The three comprised a landowner/hotelier, the Director of the Planning Division, and the Chief of the Water Department, a civil engineer. This exercise, resulting in a February 1986 Environmental Assessment Report, was completed with the complete cooperation of the appointed representatives.

Other areas of collaboration have involved Government and landowners in an investment promotion exercise bringing large tourism interests to St. Kitts; collaboration on a five year development plan; fiscal analysis of the Southeast Peninsula development project; and collaboration with Island Resources in designing a Land Use Management Plan for the Southeast Peninsula.

4. Equity Issues

The entire design thrust of this project, as a development project, rather than simply a road construction project, is to ensure as far as possible, that the opening up of the Southeast Peninsula for development is done in such a manner as to ensure long-term benefits for the majority of the population of St. Kitt-Nevis, including the environmental protection of this patrimony. Hence, project design has entailed a number of analyses resulting in a series of recommendations, many of which have been incorporated as conditions in the proposed road project. Other recommendations have been presented to the Government of St. Kitts and Nevis as choices to be made.

Additionally, and equally important, was an examination of the tax system as it affects the interest of landowners on the Peninsula. In the Memorandum of Understanding, USAID requested that St. Kitts and Nevis examine private sector oriented methods for recapturing some of the windfall profits which will be made as a result of public sector funding of the road and ancillary services. St. Kitts and Nevis has been asked to propose tax reform and has been assisted in this effort by fiscal reform experts from the AID-funded Public Management and Policy Project based in Antigua.

5. Social Impact and Spread Effects

Robert Nathan Associates, Island Resources Foundation and Neidcorp have all analyzed the growth potential of the Southeast Peninsula. These organizations have examined:

The Prospects for recovery of public investment in the road and other infrastructure.

The potential for significant tax revenue.

The tourist development potential.

The prospects for overall Peninsula Development.

The hazards facing the environment.

The effect of SEP development on the labor force.

While all these analyses postulate that construction of the road and the opening of the Southeast Peninsula to development will result in considerable private investment the generation of revenue, increase in job opportunities and moderately optimistic multiplier effects, it is difficult to forecast or measure this potential in a reliably quantifiable manner.

What can be postulated is that sitnificant tourist investment on the Southeast Peninsula, provided an equitable tax and revenue system is put into place, would measurably assist the poor fiscal situation of St. Kitts and Nevis, provide revenues which could benefit social welfare in many areas and have widespread positive social impact.

Secondly, significant components of the project are designed to ensure that investment on the Southest Peninsula benefits as wide a base of the local populace, Government, and indigenous private sector as possible. Institutional development is designed not only to provide for objective cirteria and balanced land use, but also for providing Kittitians with the necessary skills to oversee this balanced development. At the end of the project the foundations for: environmental protection and monitoring, land use management, an impoved tax system and better physical planning will be in place and can be built upon.

Thirdly, there is plenty of scope for negative social and environmental impact in the development of the Southeast Peninsula. To mitigate possible negative consequences an extensive environmental assessment was completed by Island Resources Foundation followed by a thorough proposal for a Land Use Management Plan. The latter includes not only proposals for institutional management and monitoring but proposals on: land classification and zoning, legislative changes, environmental planning development planning controls and guidelines including utilities, sewage, and solid waste disposal. The Government of St. Kitts and Nevis now has at its disposal a large volume of information and an agenda to allow it to institute the necessary measures which would ensure balanced growth and development on the Peninsula.

Additionally, the project is providing the Government with human resources and the expertise to begin to implement these measures and manage their implementation. Long-term successful implementation, however, will be predicated on the preceived importance of these measures by the Government and people of St. Kitts and Nevis.

Fourthly, a component of the project will be environmental education. The contractor for the environmental component of the project will be charged with working with the Ministries of Education and of Agriculture, Lands, Housing and Development to make the population more aware of their environmental heritage, the need for protection of certain areas, and to develop appropriate recreational facilities for the populace. It is hoped that a well-conceived public education program in conjunction with environmental monitoring and enforcement will assist concerned Kittitians and Nevisians to preserve the unique environment of the Southeast Peninsula.

BUDGET FOR TECHNICAL ASSISTANCE TO THE SOUTHEAST PENINSULA LAND DEVELOPMENT AND CONSERVATION BOARD

A.	**Technical Assistance**	
	1. 30 months of long-term TA ($10,000 x 30)	$300,000
	2. 30 months of host country TA	$100,000
	3. 30 months of local hire clerk typist	$ 32,000
	4. 15 months of short-term TA ($12,000 x 15)	$180,000
	Subtotal Technical Assistance	$612,000
B.	**Training**	
	1. In-Country	$ 10,000
	2. Site Visits	$ 40,000
	Subtotal Training	$ 50,000
C.	**Commodities**	
	1. 4 wheel drive vehicle, insurance & fuel	$ 18,000
	2. airconditioner	$ 1,000
	3. personal computer & supplies	$ 10,000
	4. office furniture for 3	$ 10,000
	5. meeting table and chairs for 8	$ 10,000
	6. office supplies	$ 10,000
	7. rubber dingy/motor for field work	$ 10,000
	8. copy machine	$ 5,000
	Subtotal Commodities	$ 74,000
D.	**Other**	
	1. environmental education programme materials	$ 30,000
	2. office rent, phone, electricity	$ 32,000
	Subtotal Other	$ 62,000
	Subtotal direct costs	$798,000
	G & A (8%)	$ 64,000
	Subtotal	$862,000
	Fixed Fee (8%)	$ 69,000
	Subtotal	$931,000
	Contingency and Inflation	$ 3,000
GRAND TOTAL		$ 934,000

TASKS OF TECHNICAL ASSISTANCE

1. Land Use Management

Provide support to the SEP board in carrying out their responsibilities.

(a) to evaluate residential, commercial, industrial, agricultural and other developmental schemes;

(b) to allot, reserve and zone land for different purposes;

(c) to control pollution and maintain the environmental quality of the Southeast Peninsula, including coastal conservation;

(d) to develop and implement an environmental protection plan;

(e) to draw up schemes to develop lands and make recommendations in respect of the development of land in terms of the Land Development (Control) Act;

(f) to carry out planning studies relating to the various sectors of the Southeast Peninsula; and,

(g) to monitor development schemes and if necessary to make future recommendations;

2. Environment

Prepare work plan and assure timely implementation of recommended actions in the Southeast Peninsula Environmental Assessment including:

(a) an environmental education program;

(b) a "Developer's Handbook";

(c) Environmental Impact Assessment procedures;

(d) Plans for: Erosion Control and Sediment Reduction,
Wildlife/Endangered Species Mngmt.,
Beaches and Dunes Management,

National Conservation Strategy,
Land Acquisition (recreation, parks, utilities, etc.)
Marine Resources Management,
Recreational Development and Management,
Parks and Protected Areas,
Reforestation,
Tourism Amenities/Utilities, and

(e) assistance in drafting promulgation of laws for parks and reserves enforcement.

3. Training

a. Through in-country workshops and/or one-on-one discussions, train appropriate Government staff (Planning, Education, Information Service, Agriculture, or Fisheries) in environmental fields relevant to their areas of expertise.

b. Organize a two week tour of model U.S. planned communities which display attributes of the Southeast Peninsula (e.g. recreational, small scale, etc.). This tour will be attended by the Minister of Agriculture, the five members of the SEP board, the Permanent Secretary of Finance, the Attorney General, and two private sector persons who are likely to be influential investors in Peninsula property.

4. Investment Analysis

Provide analysis to determine impacts of Government policies (various hotel aids ordinance provisions, taxes, surcharges, regulations, and waivers of these) on investment decisions and on Government's revenue collection requirements.

5. Administration

Examine investment approval procedures and, to the extent possible, establish systems to expedite the approval process through the many Government offices which have approval authorities.

ALTERNATE ROAD DESIGN

COST ANALYSIS

		FRIGATE BAY-SAND BANK (0 + 000 - 7 + 500)	FRIGATE BAY-MAJORS BAY (0 + 000 - 10 + 300)
I.	ROUGHTON DESIGN 1/	$ 6.3 Million	$ 7.3 Million
II.	ROUGHTON DESIGN 1/ ALTERED TO ACCOMODATE UTILITIES	$ 6.8 Million	$ 7.8 Million
III.	AS PER II + UTILITY 1/2/3/ INSTALLATIONS	$10.7 Million	$13.4 Million
IV.	ROUGHTON DESIGN 1/ MODIFIED TO UPGRADE PAVEMENT SURFACE	$ 6.8 Million	$ 7.9 Million
	UTILITY INSTALLATIONS 2/4/ ON ALTERNATIVE ALIGNMENT	$ 2.5 Million ± 25%	

Notes:

1/ Estimate includes engineering costs (construction supervision).

2/ Estimate does not include cost of reservoirs, pumping station, well development, external transmission mains, or distribution network for water supply system.

3/ Utilities designed to U.S. standards and installed by U.S. contractor.

4/ Utilities designed to local standards and installed by force account.

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ESTIMATED ENGINEERING/CONSTRUCTION COSTS

Earthwork		$2,445,000
Pavement Structure		$ 995,000
Drainage and Miscellaneous		$1,871,000
	Sub-Total	$5,311,000
Inflation @ 6% Per Year		$ 637,000
		$5,948,000
Contingency (20%)		$1,190,000
		$7,138,000
Engineering (Construction Supervision)		$ 800,000
	Total	$7,938,000
	Say	$7.9 Million

ANNEX L
(On File in RDO/C)

WATER SUPPLY PLAN

FOR THE SOUTHEAST PENINSULA

ST. KITTS, WEST INDIES

Report to the

U.S. Agency for International Development

Regional Development Office/Caribbean

Bridgetown, Barbados

Prepared by

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