

UNCLASSIFIED

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

JAMAICA

PROJECT PAPER

JAMAICA SHELTER SECTOR SUPPORT

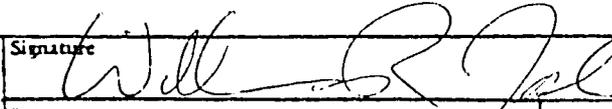
AID/LAC/P-247

Loan Number: 532-HG-012

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APPENDIX 3A, Attachment 1  
Chapter 3, Handbook 3 (TM 3:43)

AGENCY FOR INTERNATIONAL DEVELOPMENT <b>PROJECT DATA SHEET</b>				1. TRANSACTION CODE <input checked="" type="checkbox"/> A = Add <input type="checkbox"/> C = Change <input type="checkbox"/> D = Delete		Amendment Number <u>1</u>		DOCUMENT CODE <u>3</u>	
COUNTRY/ENTITY <u>JAMAICA</u>				3. PROJECT NUMBER <u>532-HG-012</u>					
4. BUREAU/OFFICE <u>LAC</u>				5. PROJECT TITLE (maximum 40 characters) <u>Jamaica Shelter Sector Support</u>					
6. PROJECT ASSISTANCE COMPLETION DATE (PACD) MM DD YY <u>11/23/89</u>				7. ESTIMATED DATE OF OBLIGATION (Under "B" below, enter 1, 2, 3, or 4) A. Initial FY <u>83</u> B. Quarter <u>4</u> C. Final FY <u>88</u>					
8. COSTS (\$000 OR EQUIVALENT \$1 = )									
A. FUNDING SOURCE		FIRST FY <u>83</u>			LIFE OF PROJECT				
		B. FX	C. L/C	D. Total	E. FX	F. L/C	G. Total		
AID Appropriated Total									
(Grant)									
(Loan) <u>HG*</u>					(40,000)		(40,000)		
Other									
U.S.									
Host Country						35,000	35,000		
Other Donor(s)									
TOTALS					40,000	35,000	75,000		
9. SCHEDULE OF AID FUNDING (\$000)									
A. APPRO- PRIATION	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH. CODE		D. OBLIGATIONS TO DATE		E. AMOUNT APPROVED THIS ACTION		F. LIFE OF PROJECT	
		1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan
(1)	729		860		25,000		15,000		40,000
(2)									
(3)									
(4)									
TOTALS				25,000		15,000			40,000
10. SECONDARY TECHNICAL CODES (maximum 6 codes of 3 positions each)							11. SECONDARY PURPOSE CODE		
		861		867					
12. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each)									
A. Code		BU							
B. Amount									
13. PROJECT PURPOSE (maximum 480 characters)									
Assist the GOJ in the implementation of its shelter policy thru: 1) Increased private sector production of shelter and related services thru accelerated delivery program; 2) Injection of housing funds into the public and private sector thru reactivation of secondary mortgage market; 3) Expanded public sector institution building.									
14. SCHEDULED EVALUATIONS					15. SOURCE/ORIGIN OF GOODS AND SERVICES				
a. Interim		MM YY	MM YY	Final	MM YY				
		01/5/85	01/4/86		12/87	<input type="checkbox"/> 000	<input type="checkbox"/> 941	<input type="checkbox"/> Local	<input type="checkbox"/> Other (Specify)
16. AMENDMENTS/NATURE OF CHANGE PROPOSED (This is page 1 of a _____ page PP Amendment.)									

17. APPROVED BY	Signature 	18. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION
	Title Director, USAID/Jamaica	

- / -

GUARANTY AUTHORIZATION

PROJECT NO. 532-HG-012

PROVIDED FROM: Housing Guaranty Authority

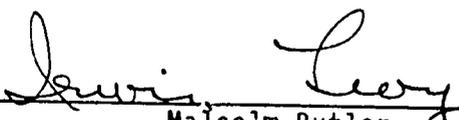
FOR: The Government of Jamaica

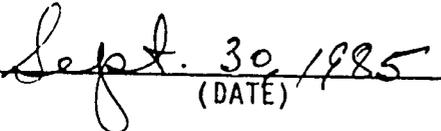
Pursuant to the authority vested in the Assistant Administrator, Bureau for Latin America and the Caribbean, by the Foreign Assistance Act of 1961, as amended (FAA), and the delegations of authority issued thereunder, I hereby authorize the issuance to eligible U.S. investors (Investors) acceptable to A.I.D. of guaranties pursuant to Section 222 of the FAA of not to exceed Fifteen Million U.S. Dollars (\$U.S.15,000,000) in face amount. The guaranties shall assure against losses (of not to exceed one hundred percent (100%) of loan investment and interest) with respect to loans, including any refinancings thereof, made to finance housing projects in Jamaica.

These guaranties shall be subject to the following terms and conditions:

1. Term of Guaranty: The loans may extend for a period of up to thirty years (30) from the date of disbursement and may include such terms and conditions as shall be acceptable to A.I.D. The guaranties of the loans shall extend for a period beginning with the disbursements of the loans and shall continue until such time as the loans have been paid in full.
2. Interest Rate: The rate or rates of interest payable to the Investor pursuant to the loans shall not exceed that prescribed pursuant to Section 223(f) of the FAA and shall be consistent with rates of interest generally available for similar types of loans made in the long term U.S. capital markets.
3. Government of Jamaica Guaranty: The Government of Jamaica shall provide for a full faith and credit guaranty to indemnify A.I.D. against all losses arising by virtue of A.I.D.'s guaranties to the Investor or from non-payment of the guaranty fee.

4. Fee: The fee of the United States shall be payable in dollars and shall be one-half percent (1/2%) per annum of the outstanding guaranteed amount of the loans plus a fixed amount equal to one percent (1%) of the amount of the loans authorized or any part thereof, to be paid as A.I.B. may determine upon disbursement of the loans.
5. Other Terms and Conditions: The guarantees shall be subject to such other terms and conditions as A.I.D. may deem necessary.

  
\_\_\_\_\_  
Malcolm Butler  
Acting Assistant Administrator  
Bureau for Latin America and the Caribbean

  
\_\_\_\_\_  
(DATE)

Clearances:

AA/PRE:NPeden	(SUBS)	Date	9/30/85
PRE/H:PMK1mm		Date	
LAC/DR:DJohanson	<del>DBA</del>	Date	9/27/85
LAC/CAR:MDagata	<del>10/1/85</del>	Date	9/27/85
GC/LAC:RMeighan	M. Meighan for F.W.	Date	9/27/85
GC/PRE:MK1tay		Date	
FM/LMD:TCully		Date	
PPC/PDPR:ARosenberg	AR	Date	9/27/85

GC/H:BVeret:9/20/85 #0059P

- 4. Fee: The fee of the United States shall be payable in dollars and shall be one-half percent (1/2%) per annum of the outstanding guarantied amount of the loans plus a fixed amount equal to one percent (1%) of the amount of the loans authorized or any part thereof, to be paid as A.I.D. may determine upon disbursement of the loans.
- 5. Other Terms and Conditions: The guaranties shall be subject to such other terms and conditions as A.I.D. may deem necessary.

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Malcolm Butler  
Acting Assistant Administrator  
Bureau for Latin America and the Caribbean

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(DATE)

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Clearances:

AA/PRE:NPeden		Date	
PRE/H:PMKimm	<i>for USIB</i>	Date	<i>9/27/85</i>
LAC/DR:DJohanson		Date	
LAC/CAR:MDagata		Date	
GC/LAC:RMeighan		Date	
GC/PRE:MKitay	<i>for</i>	Date	<i>9/27/85</i>
FM/LMD:TCully	<i>TJ</i>	Date	<i>9/27/85</i>
PPC/PDPR:ARosenberg	<i>AR</i>	Date	<i>9/25/85</i>

GC/H:BVeret:9/20/85 #0059P  
*B*

- 4. Fee: The fee of the United States shall be payable in dollars and shall be one-half percent (1/2%) per annum of the outstanding guarantied amount of the loans plus a fixed amount equal to one percent (1%) of the amount of the loans authorized or any part thereof, to be paid as A.I.D. may determine upon disbursement of the loans.
- 5. Other Terms and Conditions: The guaranties shall be subject to such other terms and conditions as A.I.D. may deem necessary.

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Malcolm Butler  
Acting Assistant Administrator  
Bureau for Latin America and the Caribbean

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(DATE)

Clearances:

AA/PRE:NPeden	_____	Date	_____
PRE/H:PMK1mm	<u>EW 4815</u>	Date	<u>9/27/85</u>
LAC/DR:DJohson	_____	Date	_____
LAC/CAR:MDagata	<u>[Signature]</u>	Date	<u>9/27/85</u>
GC/LAC:RMeighan	_____	Date	_____
GC/PRE:MK1tay	<u>[Signature]</u>	Date	<u>9/27/85</u>
FM/LMD:TCully	_____	Date	_____
PPC/PDPR:ARosenberg	<u>AK</u>	Date	<u>9/27/85</u>

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[Signature]

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## ACRONYMS

### INSTITUTIONS

Caribbean Housing Finance Corporation	CHFC
Estate Development Company	EDCO
International Bank for Reconstruction and Development	IBRD
Jamaica Co-operative Credit Union League	JCCUL
Jamaica Mortgage Bank	JMB
Kingston Restoration Corporation	KRC
Ministry of Construction (Housing)	MOC(H)
Ministry of Finance	MOF
National Housing Corporation	NHC
National Housing Trust	NHT
Sugar Industry Housing Limited	SIHL
Town Planning Department	TDP
Urban Development Corporation	UDC

### TERMS

Accelerated Rate Mortgages	ARM
Build on own lot	BOL
Graduated Payment Mortgage	GPM
Neighborhood Advisory Committee	NAC
Owner Originated Construction	OOC
Self-Policing Adjustable Rate Mortgage	SPARM
Special Activity Area	SAA
Start-A-Home	SAH

## Introduction and Summary

This PP Supplement is provided in accordance with AID/W instructions in order to establish the basis for AA/LAC authorization of the final \$15 million of the \$40 million described in the Project Paper. The Project as a whole continues AID support to the Government of Jamaica's efforts to implement its National Housing Policy. The Project makes affordable to the target, below median income, group sufficient new housing or squatter upgrades to make an appreciable dent in the overall gap. Combined with other GOJ efforts, it reaches the politically and economically important middle group of the market, providing a modest reassurance that Seaga's austere Structural Adjustment Program has not totally forsaken them. Moreover, it provides them with freehold title to their homes.

The Supplement proposes a slightly expanded concept from that originally approved in that it adds a significant private sector component. Private Sector builders and developers will have financing made available through commercial banks for construction and building societies for mortgages so that they can compete and hopefully earn a competitive rate of return in the 250 square foot "Start-a-home" market. Government has agreed that the private sector will not be disadvantaged in the competition by virtue of differential tax treatment, interest rate changes, or land valuation methods.

The private sector program is important at this time as it will begin the shift to private construction and development of low income housing and provide additional mechanisms for producing these housing solutions that are so critically needed in the next several years.

The upgrading components are also of critical priority at this time, particularly in the Kingston metropolitan area where the wounds of the late 1970's political wars are still festering in the form of rundown neighborhoods and abandoned properties. These wounds need to be healed soon, or they will affect the larger "body politic-economic". Investors who have decided against Jamaica frequently cite the shabby and littered state of Kingston as a reason for not investing here. By concentrating the Comprehensive Urban Upgrading activity on key parts of Kingston, synergistic effects will be felt in individual properties in the area as well as on the broader commercial and industrial areas nearby.

Since this is largely an ongoing program that has accumulated and incorporated a lot of "lessons learned", there is no known impediment to expeditious implementation other than financing. The construction sector has excess capacity as a result of the Jamaican austerity program and unemployment is high. The aspiration for upgraded housing is high.

The key issue identified by AID/W is the interest rate/affordability trade-off. Interest rates in Jamaica have been pushed to historically high nominal rates by the GOJ's restrictive monetary policy which has as its goal

the suppression of aggregate demand, price inflation, and exchange rate depreciation. The monetary policy is working and recent reports from the Bank of Jamaica show a marked slow-down in the growth of credit and monetary magnitudes. While mortgage rates on existing adjustable rate contracts are now up to 22 percent, virtually no new mortgages are being made at this time. The Building Societies were forced to put up these rates when they matched rates paid on deposits in other financial institutions.

At these rates of interest, no program of housing for the AID target group is likely to succeed. To make it possible, either the rate has to come down or income has to go up. And in fact, in the Jamaican context of the next few years, a combination of the rate of interest going down and incomes going up will occur, provided that external economic assistance inflows continue at a substantial rate. That is, if the austerity monetary policy is successful, the rate will come down some, but incomes will go up faster in nominal terms. Only if external donors do not support the structural adjustment program will we expect a continuation of high price growth, high nominal interest rates, and low income growth. It is inflows like the HG resources that make Seaga's program achievable.

This PP Supplement therefore proposes an innovative payment plan for the mortgages under the program. Initial interest rates will be derived from an affordability calculation for the very minimum house called a "Start-a-home". The monthly payment will move up at the rate of 10 percent every 2 years until it meets the "market" rate, presumably on its way down. Current analysis shows the mortgage rate becoming a positive real rate in 1987. However, if the market rate goes even higher, it means that Seaga has lost his support, that investment, export development, and traditional FX earners like tourism are in trouble, or that monetary and fiscal restraints have been abandoned owing to some unforeseen cause. The USAID attaches a fairly high probability to the converging rate scenario and recommends approval of this PP Supplement.

1

I. Project Rationale and Description

A. Project Rationale

1. Background and Purpose of Original Project

The Jamaica Shelter Sector Support Project (HG-012) was approved in September 1983, for \$40 million, of which \$25 million was authorized at that time. In late 1984, the Government of Jamaica (GOJ) contracted a loan for \$10 million from a U.S. investor (of which \$6 million has been disbursed). This amendment to Housing Guaranty Loan 532-HG-012 will increase the existing project authorization by \$15 million to the total project level of \$40 million and slightly expand the project purpose. The paper which follows describes a \$30 million program including the \$15 million anticipated by this amendment and the planned use of the \$15 million that is authorized but not yet in implementation.

The Project purpose contemplated assisting the GOJ in three key areas:

- Increased private sector production of shelter solutions and related services through an accelerated shelter delivery program;
- A reactivated secondary mortgage market through which housing funds could be injected into the private and public sector; and
- Rationalization and improvement of key public sector shelter institutions.

GOJ has provided access to housing to a large segment of the population since independence. In 1981, USAID and the GOJ initiated a policy dialogue relating to housing finance and production. This led the GOJ to develop a National Housing Policy, announced in 1982. This project is designed to assist the GOJ to implement that policy.

As a part of the 1981 Housing Policy formulation exercise, GOJ policy makers attempted to balance their desire to continue to meet this basic human need of their low income constituency with their growing appreciation of the costs of such a program. For the first time, as a part of the Policy exercise, the policy makers adopted a framework for Government provision of low income shelter that recognized that GOJ resources were limited, that the standards had to be reduced and that cost recovery mechanisms were necessary if the program was to have any success in meeting the shelter need levels.

The 1982 GOJ adoption of this National Housing Policy led to increased AID assistance to the shelter sector. Many of the goals and strategies set forth in the Policy dealt with improving the efficiency and effectiveness of public sector housing and the housing delivery system. However, the Policy also supported restructuring the housing finance system to provide initiatives for greater private sector participation in the production and financing of low and moderate income housing.

Since the adoption of the Policy, the GOJ, through the Ministry of Construction Housing (MOC/H) and various parastatal agencies, has made significant progress towards achieving its objectives. USAID has continued to support GOJ efforts to improve public sector housing production and finance and to involve the private sector to a greater degree in the delivery process. USAID has also provided funding for project development under the HG program as well as technical assistance in the areas of policy design and implementation, housing production, and housing finance.

AID has provided three Housing Guaranty loans to finance low income shelter since 1978. One of these loans was specifically designed to support the implementation of the Housing Policy objectives and a second was specifically amended to do so. HG-010, for which the loan was contracted in 1978, pioneered the GOJ's settlement upgrading program and initiated a private sector home improvement loan program through the credit unions. All physical works are complete on this project and sales of lots complete on all but about \$4 million of the \$15 million project. The delay on the remaining sales is the result of a laudable GOJ decision in 1983 to provide freehold title to the beneficiaries rather than the originally anticipated leasehold arrangement. This decision complicated the land assembly process since the MOC(H) was now obliged to purchase all sites. The successful credit union home improvement loan program has been complete for several years.

The 1981 \$15 million HG-011 project was amended in 1982 to support the GOJ shelter program elaborated in the 1982 Housing Policy. HG-011 was restructured to channel resources through the new institutional arrangements to support the GOJ's Settlement upgrading, Build-on-own-land and the new minimum Start-a-home programs. Resources were also earmarked to continue the credit union program for both home improvement and mortgage loans. Lessons learned to date from the HG-010 settlement upgrading program were factored into the site selection and design criteria for this program. HG-011 upgrading construction is complete on six of the seven sites and marketing of the lots should be completed by June 1986.

Under HG-011, AID provided financing for a continuation of the Start-a-home program pioneered by the MOC(H) in 1982. This unit is a 250 square foot core house with one room, kitchen space and a bath designed to be expanded by the owner when resources are available. This unit replaced the 500 square foot two bedroom units the MOC(H) had been building for this clientele when cost increases made the larger unit unaffordable without a substantial subsidy.

The 1984 evaluation of HG-011 found that improvements had been made in the design and production of shelter. Specifically, the evaluation pointed to significant progress in the HG-011 settlement upgrading program that had led to selection of appropriate sites where land could be acquired and where the level of infrastructure improvements proposed was suitable and affordable to the residents. All construction contemplated under the project is complete. Eighty percent of the \$15 million in this project has been disbursed against works in place. The remaining funds will be disbursed in 1986 when mortgages are executed.

AID authorized the first tranche of this HG-012 project in FY 83 and approved investor selection in September 1984 for a \$10 million loan to finance 1150 Start-a-home units on an accelerated basis. This project, which started in January 1985, is well under way. Two of the six projects will be marketed in November 1985 and the rest will be ready for marketing by June 1986. This project has tested several turnkey techniques which minimize the MOC(H) role and maximize the role of the private developer. Developers under this approach are responsible for completing the planning and design, and for managing the production of the houses. The finished project is then turned over to MOC(H). This replaces an arrangement where the parastatal development company completed the design and provided construction supervision.

During the last year, USAID, GOJ and the World Bank analyzed the capacity of the housing finance institutions to carry out their policy mandate. The three years of experience since the policy was adopted have been positive. However, it is clear that the institutional structure initiated in 1982 needs adjustment, in large part because of the serious problems the Jamaican economy has experienced. The GOJ and USAID have begun to identify system modifications that should alleviate some of the problems of the last several years and provide for a more effective system. This amendment provides for using HG resources to initiate and establish the new institutional arrangements.

During the last several months, the AID/GOJ policy dialogue on key issues has escalated and intensified leading to agreement on several major changes in the way GOJ will deliver shelter. In a series of meetings with the Prime Minister and his staff, the Minister of Construction (Housing), the Financial Secretary and key Bank of Jamaica officials, the key problems related to the sector were identified and agreement reached on a strategy to implement change.

AID and the IBRD were concerned about the impact of HG and other offshore borrowing on the domestic institution, the Jamaica Mortgage Bank (JMB), that traditionally borrowed under the HG program. The JMB has never grown into the role originally envisioned for it. Ever worse, it has been severely decapitalized as a result of meeting its US dollar obligations with devalued Jamaican dollars. There was a further concern since, as a result of this arrangement, the GOJ shelter program was "off budget". The preferred solution would be for the GOJ to be the Borrower of future HG loans. Since this would put the Government's shelter program on budget, consultations were held with the IMF to ascertain whether the IMF would allow the GOJ budget to increase by the amount of both the incoming HG resources and housing construction expenditures starting next Jamaica Fiscal Year (April 1986). A senior Bank of Jamaica official indicated that IMF accepted this idea in principle. GOJ has agreed to act as Borrower if -- but only if -- IMF will accommodate the budget increase. Should this not be possible, AID and GOJ will develop an alternative arrangement that protects the domestic institution, i.e., the GOJ will assure all foreign exchange risk.

GOJ has agreed to adopt policy and program elements that will support low income private sector initiatives to expand their housing market share below the top 15 percent of the population. Accordingly, this amendment reserves \$10 million of the additional \$15 million for a private sector program. The National Housing Trust (NHT), the major GOJ mobilizer of resources for shelter, will develop a "loans to lenders" program for channeling the HG resources to the private sector. GOJ has agreed that the new private program will not be disadvantaged by special considerations available to the public sector program, such as land valued at historic rather than current market value.

AID and GOJ have agreed that it is appropriate to encourage the private sector to expand its shelter delivery activities into the market traditionally serviced by the Government. A first step in using the public resources to leverage private participation with the GOJ's target group is the recently announced NHT mortgage certificate program. Under this program, which is outside the HG program described in this paper, NHT will provide certificates to eligible contributors to take to a private financial institution for blending with resources from that institution. The private institution will originate and service the loan and remit to the NHT its share of collections.

As a part of the 1982 Housing Policy, GOJ reduced the subsidies in its shelter program by abolishing the upfront price reduction and mandating that prices reflect the cost of producing and delivering the unit. By moving the project design and construction management out of the MOC(H), the new system added these costs to the price of the unit which is appropriate. GOJ also raised mortgage interest rates from 4 and 6 percent to the 6, 8, and 10 percent scale that is related to weekly income. In 1982, this schedule was only slightly below the prevailing 12 percent market rate. The GOJ also priced its resources below market cost since some of them were mobilized through the NHT tax, wherein the contributor/beneficiary receives a low yield but pays only a low interest charge on his house. The resulting structure allowed GOJ to deliver a minimum one room house to a low income person on affordable terms. In the current economic climate and tight budget situation, GOJ shares our concern that the below market interest rates charged in its program limit resources for financing shelter for low income households. GOJ and AID have been exploring potential mechanisms that allow low income households to qualify for the minimum shelter (the Start-a-home) being offered under the GOJ program while also providing GOJ sufficient recapture of investment to continue the program on the necessary scale. The escalating payment mortgage discussed below solves several problems. It allows the low income household to initially qualify to purchase a very small house which is priced based on its cost. But it also minimizes the subsidy each household receives since the regular payment increases quickly move the mortgage interest rate yield to market levels.

Until the last year, the impact of the Town Planning Department approval process on low income shelter delivery was marginal; MOC(H) was not obliged to obtain Town Planning approval for its projects and private developers were not proposing their own low income projects. Since May 1984, MOC(H) is obliged to submit all projects for Town Planning review and receive Cabinet approval for the activity. This process has surfaced a basic contradiction between Town Planning's minimum standards and appropriate standards for low income housing. During the design of this project, several private developers held informal consultations with Town Planning on their preliminary site plans. Town Planning requirements for open space, parking, street widths, and general level of infrastructure make these developments unaffordable for the HG target group. The standards preclude individual Start-a-home units at economic densities. Densities are only possible with mid rise structures, which are inappropriate for the target group because there is no possibility of individual expansion and resources are not available to build and finance the larger unit this type of construction implies. GOJ recognizes the basic problem. In a parallel activity, AID is providing a Development Grant to the Town Planning Department to help them redefine their role and become more responsive to the economic and development realities. The precedents for low income housing standards have been set in the existing MOC(H) shelter program. These standards now need to be applied consistently to both public and private programs.

MOC(H) and AID have recognized the continuing inefficiencies in the way the public sector delivers shelter. The 1982 Housing Policy mandated certain institutional realignment designed to improve the system. Servicing of the GOJ mortgage portfolio was taken out of MOC(H) and turned over to a financial institution - the Caribbean Housing Finance Corporation (CHFC), a well run organization with a strong collection record. MOC(H) phased out its direct construction program except for the provision of houses on individually owned lots which is an island wide ad hoc program of very limited scope (62 houses in 1984). The design and construction management capacity was moved out of the MOC(H) into a parastatal agency, Estates Development Company (EDCO), which finances its operations through fees charged for services. The Minister and his Permanent Secretary recognize the need for further streamlining of operations and improved accountability leading to more efficient delivery of the program. MOC(H) requested that a management audit of its operations and its relationship with its parastatals be carried out under the larger GOJ/IBRD Administrative Reform Project. The preliminary prefeasibility analysis is complete and the team has begun the larger effort. The objectives of the effort are to: clarify the mission and goals of the MOC(H); strengthen internal communication and coordination; carry out structural adjustments within MOC(H) by strengthening the Office of the Permanent Secretary, the Policy Secretariat, and the legal and personnel functions, and eventually phasing out the Construction and Maintenance, and Estate Management functions; clarify the roles and relationships between headquarters, field offices, and the project marketing task force/MOC(H); and clarify the responsibility and authority

of the finance and accounting and internal audit divisions and streamline the operations of the former. AID has been collaborating on this effort and will support the implementation of the recommendations. MOC(H) and AID have also agreed that tighter construction management procedures will be adopted, including revised criteria for prequalifying contractors and competitive bidding on all project elements. For settlement upgrading activities, land will be purchased before start of construction to assure expeditious marketing of lots once construction is complete. These project management changes flow from HG-011 evaluation recommendations and the experience in implementing these projects over the last 3 years.

## 2. Project Objectives, as Amended

In the two years since the project was approved, the economic situation in Jamaica has further deteriorated. The IMF's adjustment package required adoption of austerity measures that resulted in social hardships. This made it necessary to adjust some of the assumptions made in the original project design. As a result, the housing programs become politically more important as a means of providing low income households access to one of the few social goods still available. AID has adjusted its broader development assistance objectives for Jamaica to target resources to helping Jamaica keep afloat during this very difficult structural adjustment period. The shelter program has taken on increasing importance as a mechanism for meeting some of the basic human needs of poor Jamaicans during this period. The shelter program offers the opportunity to achieve significant improvements in the way GOJ and the private sector deliver shelter while at the same time providing employment, and quickly getting people into better shelter. During this period, GOJ and USAID undertook the policy dialogue described in the previous section of this paper. This process led to broadening the Project's objectives. The assumptions, and thus the rationale, have to be adjusted to reflect the project modifications and incorporate the changes. The revised project, therefore, reflects the following:

- (1) Private Sector: Greatly increase the participation of the private sector in the production of low income housing. Under the amended Project, the role of the private sector in the financing and delivery of low and moderate income housing will be greatly expanded. Up to \$10 million will be directed to the private sector to permit the development of projects for low income households. Builders will be expected to also act as developers, and assume the added responsibility and risk of marketing projects. Private sector financial institutions will become involved in financing low income units, a role not traditionally played by those institutions. The program design also anticipates that private developers and builders will play a larger role in public sector projects. Developers will deliver a completed project (including land) which they design and build on a timely basis to MOC(H). This will allow the public sector program to benefit from the private sector's ability to produce units more efficiently.

- (2) Public Sector. Streamline and improve the efficiency of public sector delivery of shelter. Considerable progress has been made to date in implementing the objectives of the National Housing Policy, as well as some of the recommendations of the Mortgage Finance Task Force. Specific actions now need to be implemented as outlined in the previous policy dialogue section to assure that shelter needs of very low income families are met, and help ensure that the private sector is strongly encouraged to participate.
- (3) Housing Finance. Encourage participation of private sector financial institutions (building societies, commercial banks, trust companies, credit unions) in what have been markets served only by the GOJ. The GOJ is currently financing a high proportion of the shelter being produced in Jamaica. This new activity will increase the number of new low income dwelling units on the market and set a precedent for private financial institutions to serve low income families. The success of the HG financed private "loans to lenders" program should convince private financial institutions that it is possible to profitably serve a lower income market. This should lead to private sector investment of some of their own funds in moderate income housing.
- (4) Affordability. Provide a basic shelter solution that is within the purchasing capacity of a low income household. Recent increases in construction costs resulting from the substantial devaluations of the Jamaican currency has pushed the price of traditional housing units beyond the purchasing power of all but rich Jamaicans. While lower cost solutions, (Start-a-home units) help fill the gap, innovative financing solutions are required to keep even these minimum solutions affordable. The continued application of the Graduated Payment Mortgage helps to make minimum solutions produced by the public sector affordable to many low income families. The successful application of an escalating payment mortgage proposed by this amendment in both private and public sector programs will permit greater initial qualification by low income people. It will also reduce the GOJ subsidy cost and target the subsidy to those households less able to pay. The program anticipates regular payment increases which will rapidly elevate the mortgage interest rate yield to market thus limiting the subsidy to early years. This will make more resources available for GOJ programs targeted to those with the greatest need. Those whose incomes do not rise sufficiently will be able to secure a postponement of the payment increase upon application.
- (5) Institutional Framework. Foster a viable institutional framework effective in generating and managing shelter sector funds. The JMB is mandated to borrow resources offshore and to activate a secondary mortgage market. Although it borrows offshore, it can only lend in the domestic housing market and thus has no possibility of maintaining the value of the foreign exchange (which it never sees).

It is also obliged to carry the HG financing costs of other GOJ subsidized housing programs since MOC(H) does not have resources to meet this obligation and the JMB has no real ability to collect from the MOC(H). Moreover, since JMB does not have a sufficient resource base, it has not been able to gain the confidence of private sector financial institutions to initiate and operate a secondary mortgage market facility. It has also found that the cost of its resources precludes it from launching GOJ programs to encourage increased private sector participation in lower income housing.

The Task Force on Mortgage Finance and an IBRD report on GOJ financial institutions recommended, and AID concurred, that an alternative arrangement should be made to facilitate the flow of funds to the housing sector. AID and GOJ are working out an arrangement for this project whereby the MOF will explicitly carry the exchange rate risk, thus unlinking the offshore borrowing from the domestic transaction. The private sector program will be managed by the NHT. This institution has the resource base (e.g. tax) to develop GOJ programs to leverage private participation and the longer term opportunity, when there is economic stabilization, to develop a secondary mortgage operation with greater private sector participation. Since NHT will manage its lender relationship with private financial institutions, it should avoid the JMB difficulties described above. If NHT plays a role in the public sector program, mechanisms will be incorporated that protect it from the JMB problems, including grace period on repayment during the construction period and interest rate obligations that are consistent with the mandated lending rates to beneficiaries.

### 3. Summary of Issues

The DAEC approval cable raised a number of issues to be addressed in the Project Paper amendment. The following summarizes those issues and the manner in which they will be resolved. The cable is attached as Annex A.

- a) Interest Rate Structure: The cable asks for a description of how the public and private sectors will structure their mortgage financing and for the rationale for the proposed structure.

Initial mortgage interest rates charged beneficiary households under the private sector program will be the same as the starting interest rate for public sector beneficiaries in the same income group, 10 percent. The institutional interest rate structure for the private sector program is described in Section II of this paper. Detailed cash flows showing financial viability of the program, assuming that the NHT will receive the funds from MOF at 10 percent are provided in Annex E. Should this be modified, the cash flows will be adjusted accordingly. The rate structure is summarized below:

GOJ rate to the NHT	- 10%
Construction lender rate to developer	- 16%
NHT rate to the mortgage lender	- 8%
Mortgage lender rate to the homebuyer	- 10%

The public sector payment schedules will reflect the Housing Policy mandate that established the interest rates for GOJ and NHT programs. The initial payment will be calculated assuming interest rates of 6 percent for purchasers whose income is less than J\$100 per week (about US\$17 per week), 8 percent for those earning between J\$100 and J\$200 per week, and 10 percent for those earning more than J\$200 per week (about US\$34 per week). The 10 percent rate will be charged on units to be directed to the same prospective buyers of units produced by the private sector.

- 1) Blending of Mortgage Money. The cable asks how the mix of HG funds with NHT funds will be determined and under what conditions mixed money will be available.

The program as presented in this amendment does not contemplate direct mixing of AID resources with NHT or private financial institution resources. NHT will manage the AID resources for the private sector as a separate program. NHT for its own account, from its own resources, will initiate the mortgage certificate program that will blend with private financial institution resources, not HG funds.

- 2) The cable requests that the GOJ and NHT below market mortgage interest rate structure, and the interest rate structure of the HG financed NHT program to the private sector be justified.

The determining factor is affordability. Housing costs have increased at a rate exceeding increases in income by so wide a margin that the application of market rates to the smallest, most stripped down units would push sales prices above the means of target group households. The initial 10 percent mortgage interest rate on Start-a-homes in the public and private sectors places the two programs in parity. Interest rates on both private and public sector loans are necessary to keep these minimum shelter units affordable to low income households. The current very high private market interest rate for mortgage loans for the top 15 percent of households is a result of rigid monetary policies under the IMF agreement and rapid devaluation of the Jamaican dollar. The devaluation has inflated construction costs. The combination of higher costs and higher interest rates has priced lower income families out of the housing market; and both directly result from the structural adjustment steps which we urged and support at the macro level. The use of the escalating payment mortgage loan, coupled with the expected decrease in inflation and a recovery of poor people's real income should lead to an equilibrium between the market interest rate and the mortgage interest rate applied under this project. But the initial below market rate is simply necessary.

The Project projects that interest rates under the private sector program will move to positive real rates by 1987. This forecast reflects USAID and IBRD projections of a rapid decline in the rate of inflation as a result of the structural adjustment and the tight money policy now in full implementation. It also assumes that beneficiaries' payments will escalate to increase the mortgage interest rate yield. Assuming the first mortgage loans are written in 1986, the real interest in 1986 will be a negative 5 percent. In 1987, the real rate will be 0.00 percent.

USAID is working with NHT, MOC(H) and the Ministry of Finance (MOF) to define how the escalating payment mortgage will be implemented for the public sector program. Annex E illustrates the strategy and schedule through which interest rates will be brought to market levels.

- 3) The cable proposes that alternative escalating rate mortgages (EPM) be examined for applicability to the program and as mechanisms for achieving positive real interest rates.

NHT and MOC(H) have agreed to design EPM mechanisms for use in their programs. EPM's will also be used in the private sector programs. As described in the previous sections, adoption of this mechanism keeps the Start-a-home unit affordable and quickly moves the mortgage interest rate to provide a positive real yield.

- b) The cable proposes that USAID develop an Action Plan for persuading the GOJ to open up the local credit system, and in conjunction with these activities move the housing sector towards market.

This will be a part of the Missions longer range policy dialogue with the GOJ. AID will continue to consult with the IMF and the IBRD which are pursuing financial institution deregulation as a part of their structural adjustment dialogue.

- c) The cable asks for a description of desired future roles of public agencies involved in the shelter sector and asks what steps are being taken to increase the participation of private sector entities in the financing and construction of low income housing.

These roles of the public sector and private sector institutions are briefly described in Section I.C.1. and detailed in Annex C. The private sector program is described in Section I.C.2. and detailed in Annexes D and E.

- d) The cable asks that the Project Paper Supplement demonstrate that costs used in setting the price of public sector and private sector units are equivalent.

Through the planning and implementation of HG-010, HG-011, and HG-012A significant progress has been made toward full cost recovery in the public sector. Estimates in the table under Annex B.1., Start-a-home section show very close total costs for the public and private sectors. MOC(H) sales

prices now include all construction costs, the cost of architectural and engineering services, and the historical cost of land.

- e) The cable requests a description of desirable future roles for public sector agencies and steps for helping them effectively play those roles.

GOJ instituted the institutional reforms recommended in the National Housing Policy. Additional changes beyond those anticipated by the Policy are being undertaken and under review by GOJ as described in the policy dialogue section at the beginning of this paper.

- f) The cable states that the Project Paper supplement should include a strategy or plan for establishing a secondary mortgage market mechanism.

The discussion in Section II.B.2 concludes that it is inappropriate to consider establishing a secondary mortgage market facility in Jamaica at this time. The strategy will be to improve financial linkages between the NHT and the private sector, test a leveraging program through NHT's mortgage certificates, and generally work toward consideration of a secondary mortgage market facility when general economic conditions improve.

- g) The cable requests the identification of counterpart resources and the means of assuring the availability of these resources.

Under stringent IMF restrictions, the GOJ has limited the resources budgeted for shelter. It has earmarked the NHT program as the GOJ shelter resource. As such, the NHT mortgage origination program will be the counterpart for this project. Annual contributions are estimated as follows:

1986	-	\$ 5.8 million
1987	-	\$11.7 million
1988	-	\$12.5 million
1989	-	\$14.2 million

- h) The cable requests a discussion of arrangements whereby the GOJ will continue to meet its HG repayment obligations.

The GOJ has kept current on its HG debt obligations since the October 1984 signing of the bilateral for rescheduling its debt with the U.S. Government pursuant to the Paris Club minute. The AID Administrator has authorized additional HG authority to be used to refinance rescheduled HG debt. Jamaica is one of the countries to receive borrowing authority for this purpose. The GOJ has stated publically on a number of occasions that it intends to meet its obligations. The evidence to date is that it lives up to its promises in these area, even though it is at some considerable cost. It would, however, be a self-fulfilling prophecy to deny the GOJ new access to HG because they were a credit risk.

## B. Project Description

### 1. Development Mechanism

This amended project will involve the private sector as well as the public sector in the design and implementation of the various project components. Expanding the role of the private sector will result in more efficient production of low income shelter solutions, while the institutional reforms inherent in the project design will help to improve the capability of the public sector to deliver similar shelter solutions.

Under the public sector mechanism, the MOC(H) will continue programs developed to date, such as the Start-a-home scheme and settlement upgrading, and will test new initiatives such as sites and services. MOC(H) will coordinate project development through Estates Development Company and Sugar Industry Housing Ltd. which will design and implement MOC(H) low income schemes. The turnkey delivery system, which involves the private sector developer/builder in the whole project development process, will be used extensively to ensure lower costs and increased efficiency. Assigning the Caribbean Housing Finance Corporation to manage the loan portfolio will help ensure prompt and efficient loan recovery.

The private sector mechanism contemplates a much larger involvement by private financial institutions, as well as an increased role by private developer/builders, with the latter assuming responsibility for producing units developed under the turnkey system. On the financial side, the National Housing Trust will serve as intermediary between the GOJ and the private sector mortgage lenders for this project.

The NHT will be responsible for compliance with the terms and conditions of the HG loan, but the private sector participants will be responsible for the entire development and financing process. A "loans to lenders" structure will be employed in the private sector initiatives approach. The essence of the

"loans to lenders" program is the channeling of long term loans using the escalating payment mechanism through financial institutions and developers willing to produce and finance affordable housing for families in the target income groups.

The NHT will lend funds to qualified financial institutions, which include building societies, commercial banks, trust companies, and credit unions. The institution will arrange construction financing for developers to design and construct housing schemes which meet low income program criteria established by USAID and the NHT. The resources will then be rolled into the mortgage issued to the buyer by the participating financial institution.

The essence of private sector involvement is the relative absence of government intervention. The private sector projects will be conceived, designed, constructed, financed and sold by the private sector. Public sector intervention will be limited to the regulatory and approval process inherent in traditional projects designed by the private sector for other than low income families. If successful, this private sector mechanism will constitute a breakthrough in the low income shelter delivery process. It will demonstrate to the private sector that such projects are viable and profitable and that they should be continued to be produced and financed by the private sector with their own resources.

## 2. General Description

The project will consist of four distinct, yet interrelated components. All four components will address the shelter needs of low income families through the provision of a variety of shelter solutions, ranging from basic Start-a-homes that can be expanded by the home buyer as time and finances permit to urban improvements that will bring shelter and community benefits to broader urban residential neighborhoods. It is expected that some 3,500 households will receive direct benefits from the project, i.e., new or improved shelter, while numerous additional families will benefit from neighborhood improvements.

The amended project envisages the four components as follows:

- o Start-a-home, which will consist of a basic core unit of about 250 square feet, either provided in volume, or built individually by an owner of a serviced lot;
- o Settlement Upgrading, which will consist of infrastructure improvements and provision of freehold title in low income squatter settlements;
- o Sites and Services, which will introduce the sale of serviced lots and provide access to building materials or home construction loans.
- o Comprehensive Urban Improvements, which will target a combination of program activities to contribute to the overall improvement of selected low income neighborhoods in Kingston.

<u>Component</u>	<u>Planned Solution/Loans</u>		
	<u>Public</u>	<u>Private</u>	<u>Total</u>
Start-a-home	2,235	1,380	3,615
Settlement Upgrading	1,920	-	1,920
Sites & Services	800	400	1,200
Comprehensive Urban Improvement	<u>NA</u>	<u>1,800</u>	<u>1,800</u>
Totals	4,955	3,580	8,535

Several components will overlap. For example, the success of the sites and services scheme is dependent on the beneficiaries access to additional financing for construction of a dwelling unit, most probably a Start-a-home. The Comprehensive urban improvement component will involve a variety of activities, such as sites and services, Start-a-homes, and home improvement loans. Settlement upgrading, a component in itself, may also be included in a Comprehensive urban improvement activity.

Both the private and the public sectors will develop projects. A private sector project is one in which all active elements are carried out solely by the private sector. This will include full responsibility for house sales, a role the private sector has not previously fulfilled for its low income housing clientele. A public sector project is one in which the public sector plays a role, albeit limited. Even a project where the only public sector role is to sell units developed by the private sector would be considered a public sector project for purposes of this program.

The four components are summarized below. More detailed descriptions of each are contained in Annex B. The resource allocation for each component is illustrative and may be changed by mutual agreement of AID and GOJ if implementation experience warrants.

a) Start-a-home, \$20.8 million

The Start-a-home program is a component of both HG-011 and the first phase of HG-012. The principal activity is the development and servicing of land and construction of one room houses for purchase by families in the AID target population.

USAID and MOC(H) gained considerable experience in the development of Start-a-homes with the last two HG projects. Under HG-011 a total of 281 units were built on five sites. In the first phase of HG-012, sites for 6 projects have been selected with a total of 1,150 units. Implementation of these projects has identified problems and difficulties in the development process as well as procedures for solving the problems. There are still inefficiencies to be resolved, but many of the difficulties encountered in HG-011 have been avoided in the implementation of HG-012.

One of the main problems to be addressed is the high cost of a Start-a-home which is beyond the limited capabilities of the intended beneficiaries.

During the last four years there have been dramatic increases in the cost of construction and land development. In 1982 the estimated cost of a Start-a-home and plot for the HG-011 program was J\$25,000, an increase in cost of close to 100 percent compared with 1979. The increase would have been even greater except that the unit's finishes and services were further reduced to a most basic level for the more recently constructed houses.

The Start-a-home is a basic unit which cannot be reduced and still serve as a habitable space for the purchaser. The present 250 square foot unit consists of a small bathroom with basic fixtures, (cold water shower) a kitchen alcove with a sink (no cabinets or other appliances) and a single room (no closets or storage space) of less than 200 square feet. The single room which is typically occupied by a 4-5 person household is about the size of an average AID Washington Office Director's office. The home has a metal roof, unfinished interior walls, and does not have an interior ceiling.

In this phase the Start-a-home program will have two subcomponents:

a. The public sector subcomponent will be a continuation of the existing AID financed program in the MOC(H) with the objectives of improving the administrative efficiency of the program in general and decreasing the cost of a unit. Activities will include:

- More efficient standards accepted for site development and unit design with the objective of reducing the cost of a completed unit by 10 to 20 percent.
- Modified procedures that will reduce the time needed for the review and approval of housing projects by Government agencies.
- Institution of procedures for the prequalification of contractors and competitive tendering of construction contracts.
- Improved coordination of implementation by the Ministry including contractor payment procedures, closer supervision of contracts and coordination of infrastructure and services.
- Implementation of MOC(H) management audit recommendations to streamline and improve administration of MOC(H).
- Improved EDCO and SIHL construction management.
- Improved MOC(H) and NHT assignment of houses to beneficiaries to assure that the units are promptly sold and occupied at the completion of construction.

b. The private sector subcomponent is an expansion of the limited initiatives taken in the first phase of HG-012 into a fully private sector program. The objective is to produce affordable Start-a-homes with all phases of development, financing and sales being carried out by private institutions. The coordinating institution for this subcomponent will be the National Housing Trust which will lend the funds and approve project proposals. The basic procedures for implementing the program are:

- The NHT will solicit proposals from the private sector for building and marketing of Start-a-home schemes.
- The NHT will review and evaluate the proposals based on predetermined criteria with approvals given for those projects found to be feasible.
- After satisfactory completion of the final plans, funds will be released to the bank(s) for interim financing and construction administration.

The marketing and screening of the potential purchasers will be carried out by the developer.

It is estimated that this component will finance approximately 2,235 Start-a-homes through the public sector and 1,380 through the private sector.

b) Settlement Upgrading, \$4.0 million

The object of this component is the rationalization and legalization of existing settlement areas to provide for individual plot purchase and the provision of basic access, infrastructure and/or services in high density urban neighborhoods. The Settlement upgrading program has been a major component of the previous two HG loans, 010 and 011. HG-010, which was authorized in 1977, was the first experience of AID in settlement upgrading in Jamaica. Since that time, the program has been adopted as part of the official government housing program and a great deal has been learned regarding program implementation.

At first many sites were selected in low density, often semi-rural areas; development standards were high; title was conveyed on a leasehold basis and a substantial subsidy was included in the costs to be recovered. Based largely on the experience of the HG-010 projects and in accordance with the new housing policy, HG-011 sites, which include some 850 plots, are in higher density urban areas; have been developed to minimal standards; are planned to recover full costs and title is conveyed on a freehold basis. After eight years of experience and the active support of AID, settlement upgrading has become the component of the government's housing program which serves the lowest income urban residents.

In this amendment the emphasis will be on improving the administration and efficiency of the program, including administrative procedures and training personnel. Component activities will include:

- Review of design and infrastructure standards to reduce costs and permit incremental improvement of the area.
- Site feasibility analyses to assure that the land can be acquired before a site is approved.
- Coordination with other activities in comprehensive urban improvement areas.
- Improved review procedures to reduce the time required for agency approvals.
- Better coordination of activities to provide for all utility system connections at the completion of the site work.
- A marketing program that is coordinated with the construction process so that plots can be sold to residents at the completion of the site work.

Approximately 2,000 households will receive freehold title and benefit from improved infrastructure services to their neighborhood.

c) Sites and Services, \$2.2 million

The original Project Paper contained a component for new solutions. While sites and services is not a 'new solution' in Jamaica, it has not been used for several years following an unsuccessful experience on a World Bank financed project. Given the unprecedented increase in costs since 1983, GOJ has proposed to try the sites and services approach again, initially on a pilot basis, to try to overcome the earlier problems. The design proposed here would utilize support from a series of sponsor groups. These groups would help to capture substantial informal self-help resources, especially in semi-rural areas, and channel these resources into self-help housing. The Minister of Construction has publicly endorsed the concept in a recent policy speech. This amendment therefore, includes funding for approximately 1,200 sites and services plots.

The Sites and Services component will include both the development of infrastructure for housing lots as well as support to assist the lot buyer to build a home on his lot. There are four objectives of this component:

1. To provide technical and institutional support necessary to assist a lot owner to build on the lot;
2. To involve elements of the private sector to the maximum extent possible;
3. To make maximum use of abandoned or premature subdivisions to lower overall development costs; and
4. To establish and test viable approaches to sites and services schemes in Jamaica.

There are three program options:

Option 1. Publically Serviced Lots: A government produced and financed lot made available through the National Housing Corporation (NHC), a subsidiary of the MOC(H).

Option 2. Sponsor Serviced Lots: A lot developed and sold by a land-owning sponsor in a joint venture with NHC for either self-built or contracted homes financed by credit unions.

Option 3. Privately Serviced Lots: A lot developed and sold by the private sector to owners who then contract for their home, also through a private sector.

In options 1 and 2, NHC will be the managing entity. For Option 3, project approval and overall project coordination would be the responsibility of NHT, as with other private sector components. Credit unions will be used where possible to finance lot purchase loans, building material loans, construction loans, and permanent mortgages.

Of the projected 1,200 lots, 400 are initially earmarked for each of the three options. For lot development, the estimated requirement is \$2.2 million of which \$1.5 million will be channeled through the public sector (Option 1), including the Option 2 public/private joint ventures, and \$0.7 million exclusively through the private sector (Option 3). For owner originated construction loans on these sites, 75% will be assumed to take advantage of USAID loans. For these 900 units, \$3.8 million will be required, \$2.6 million through the public sector, and \$1.2 million through the private sector. These loans will be derived from the Start-a-home component of this project.

d) Comprehensive Urban Improvement, \$3.0 million

The Comprehensive urban improvement component is intended to address housing problems in the densely populated low income residential areas of Kingston/St. Andrew through a neighborhood approach to revitalization. This component will permit the MOC(H) to bring together in one area the experience gained in both settlement upgrading and Start-a-homes and to coordinate these activities with private sector initiatives. Previous revitalization programs have either not touched these difficult urban neighborhoods, or have attempted with limited success to relocate residents through traditional urban renewal types of development.

A comprehensive approach will combine a variety of techniques, programs and other HG-012 components within selected Special Neighborhood Improvement Areas in order to achieve a critical mass of activity which will encourage additional spontaneous rehabilitation, revitalization and investment confidence within the targeted urban area. The techniques to be utilized will include:

- o Home improvement loans for eligible projects;
- o Settlement upgrading of unserviced or otherwise deficient lots and yards;
- o Infill housing including Start-a-home or Build-on-own-land solutions;
- o Commercial improvement loans for the premises of businesses which are closely tied to the socio-economic framework of the neighborhood;
- o Self-help projects such as paint-up/fix-up operations with volunteers and donated supplies; and
- o Environmental and infrastructure improvements to ensure the long term viability of other improvements.

A few neighborhoods will be selected from among several candidates, and will satisfy a range of selection criteria, including a preponderance of low income families and demonstrable physical problems. The selection process will seek a strong commitment by local groups such as voluntary business organizations as well as neighborhood leaders, local lending institutions and property owners to the various revitalization programs.

The Comprehensive Urban Improvement Component will emphasize private initiatives and privately sponsored loan programs for achieving major improvements. However, some resources will be available for environmental and infrastructure improvements serving an entire neighborhood. The program will also seek to involve other related AID programs in business development, education and training for self-help projects.

### 3. Expected Accomplishments

The amended project will continue to pursue the broadened goals outlined in the original project paper, which focuses on the implementation of the National Housing Policy. This amended project will expand the role of the private sector in the provision of low income housing, and conversely, begin to limit public sector involvement to areas beyond the purview of the private sector. The policy dialogue between AID and the GOJ with respect to the financing and delivery of shelter, which has been successful to date, will continue. The prospects for results from continuing to pursue the development of a secondary mortgage market will be examined carefully. The interest rate structure for mortgage finance will systematically move to one of positive real rates through the escalating payment mortgage mechanism in order to prevent distortions in capital markets.

The project will address the shelter needs of low income families, especially given the difficulties these families are experiencing as a result of the structural adjustment program. It will also introduce ways to more comprehensively upgrade Kingston low income residential neighborhoods to help meet the basic needs of this disadvantaged population and reverse the deterioration of these neighborhoods. In all these efforts, ways and methods of increasing the role of the private sector will be emphasized.

Finally, it is expected that the public sector agencies, particularly the MOC(H), will enhance their capabilities in their assigned roles in the housing sector. Part of this improvement is expected to result from the public agencies refocusing their activities on specific and precise areas as delineated in the National Housing Policy and subsequent revisions. The remaining improvements in the public sector will involve enhancing operational and administrative capabilities and addressing regulatory constraints through the provision of technical assistance in selected areas.

### 4. Affordability Analysis

In the last two years, economic events in Jamaica have critically affected the ability of Jamaicans to purchase housing. The rate of inflation has outstripped incomes, reducing the purchasing power of nearly all Jamaicans, particularly low and moderate income families. Private sector mortgage interest rates have increased by almost 100 percent, pushing payments on Jamaica's English style adjustable interest rate existing and new long term mortgages to all time highs. This has drastically reduced affordability, and accordingly, the demand for mortgage loans. Short term interest rates have

increased to an even higher level, raising the cost of construction finance for new homes. Affordability of new solutions under the private sector program of this amended project is therefore very constrained, particularly if market interest rates are to be applied.

While the same increases in construction costs have also affected affordability of low income housing produced by the public sector, the Graduated Payment Mortgage and improved project management have kept the Start-a-home affordable to households earning less than the median income. However, the same cost/income disparity has made the unit affordable to less target group households than two years ago.

Analysis of incomes in Jamaica as of mid 1985, indicates that the median household income is J\$12,000 per year (US\$2,000). Translated into monthly income to correspond to monthly payments, the income figure is J\$1,000 or US\$167 per family. Affordability is dependent on the percent of monthly income that a family can dedicate to amortizing a mortgage loan, the level of interest rates, the length of the loan, and the amount of down payment.

Lenders in Jamaica typically accept between 25 and 33 percent of household income as available for servicing a mortgage. For this program, it is assumed that an average of 30 percent will be accepted. While interest rates may vary, it is assumed that households will pay an initial rate of 10 percent per annum. The down payment will vary from 10 percent to 20 percent, depending on a household's financial fortunes. Applying the above terms, affordability can be calculated as follows:

- Median Income	J\$1,000	J\$1,000	J\$1,000
- Maximum Monthly Payment	J\$300	300	300
- Maximum Mortgage Amount @ a 10% interest rate for 30 years	J\$34,000	12%	15%
- Maximum Purchase price @ various down payments		J\$29,200	J\$23,700
a) @ 10%	J\$38,000	J\$32,000	J\$26,000
b) @ 15%	J\$40,200	J\$33,580	J\$27,250
c) @ 20%	J\$43,000	J\$35,000	J\$28,400

Therefore, a basic Start-a-home that sells for J\$40,000 is affordable to households at the top of the target group for this project. Other activities financed by this project such as settlement upgrading and sites and services will provide shelter to lower income households.

### C. Participating Agencies

#### 1. Role of Participating Agencies

The project contemplates the involvement of several institutions. The complexity of the relationships is due to the major private sector input as well as the number of project components, although most of the financing is

going to support activities in which there is a proven track record by the implementing agencies. The principal institutions, and the role of each, are summarized below.

Ministry of Finance: Will be Borrower of record or the Guarantor of maintenance of value if the IMF rejects placing the shelter program on budget. The Jamaican Dollar equivalent will go to the MOC(H) either through the budget or as a loan from the NHT for public sector programs. For the private sector program, the local currency equivalent will be lent to the NHT.

Ministry of Construction (Housing): Will receive and manage the funds for the public sector.

National Housing Trust: Will manage the on lending of the funds for the private sector and will originate mortgages for its beneficiaries under the public sector program.

Commercial Banks: Will provide construction or interim loans (with funds borrowed from the long term lender) to developer/builders participating in the private sector efforts.

Trust Companies: Will place long term mortgages (with funds borrowed from the NHT) with beneficiaries of the privately developed projects.

Building Societies: Will play a role similar to the Trust Companies, but also may provide loans under home improvement element of Comprehensive Urban Improvement

Credit Unions: Will participate as construction and mortgage lenders for private sector projects. Also will place home improvement loans.

Developer/Builder: Will design, develop and sell private sector shelter projects.

Estates Development Company and Sugar Industries Housing Limited: Will design and develop projects for the MOC(H) (Private builders will construct projects).

Caribbean Housing Finance Corporation: Will manage the loan portfolio, including collections, of MOC(H) developed projects and originate mortgages on public, non NHT Start-a-homes projects.

## 2. Private Sector Involvement

A number of developers and financial institutions have expressed interest in participating in the private sector Start-a-home component of this project. This means that private institutions will begin to serve a market they have not previously served. The mortgage finance institutions, for example, will have to service a socio-economic group with whom they have little experience. The developers must design, build, and then sell a dwelling unit to a target group outside their present clientele. The risk to those developers is

enormous, yet they and the financial institutions are willing to enter into this new market. For the developer, the prospect of new business in today's depressed construction and home building market is a great incentive. Most developers find themselves with little or no work, and the infusion of additional funds is welcome.

Currently, the developers are functioning far under capacity. The financial institutions are constrained by slow growth in net savings for channeling into mortgage loans (Building Societies). Therefore, the time is opportune to involve these institutions in this new market.

## II. Financial Aspects

### A. Revised Financial Plan

#### 1. Source and Application of Funds

Total Project funds will amount to US\$30 million, which will be allocated between the public and private sectors and among the several different components. One third of the money, and two thirds of the new money, will be dedicated to private sector programs. The distribution among program components is illustrative and resources may be shifted between components upon mutual agreement of the GOJ and AID.

<u>Component</u>	<u>Investment Plan</u>		
	<u>(J\$000,000)</u>		
	<u>Public</u>	<u>Private</u>	<u>Total</u>
- Start-a-home	\$13.50	\$ 7.30	\$20.80
- Settlement Upgrading	4.00	-	4.00
- Sites & Services	1.50	0.70	2.20
- Comprehensive Urban	<u>1.00</u>	<u>2.00</u>	<u>3.00</u>
TOTALS	\$20.00	\$10.00	\$30.00

Within the Private Sector program, included under the Comprehensive Urban Improvement Component, are funds for home improvement loans. Although Building Societies and Trust Companies both have the capacity to make such loans and may elect to do so, it seems most likely that these will be made primarily through credit unions. Such loans will be of much shorter maturity, so no adjustable interest rate mechanism will be necessary for them.

#### 2. Financial Scheduling

Using experience as a guide, disbursements for the project will begin in Spring 1986 to keep the public sector Start-a-home program begun under HG-012A moving at a rapid pace and to start financing the other initiatives which are now in design and will be ready for construction at that time. The implementation rate will be maintained as the various institutions gain experience with the procedures that will be required to meet project guidelines. This is especially true of the Private Sector component, where lending institutions have virtually no experience in dealing with households in the lower half of the income distribution, and where many developers have no experience in building low cost units.

Implementation Scheduling  
((\$000,000's))

<u>Component</u>	<u>Calendar Year</u>				<u>Total</u>
	<u>1986*</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	
Start-a-home	5.50	7.00	6.00	2.30	20.80
Settlement Upgrading	1.00	1.50	1.00	0.50	4.00
Sites & Services	0.40	0.80	1.00	-	2.20
Comprehensive Urban Improvement	-	0.85	1.45	0.70	3.00
TOTALS	6.90	10.15	9.45	3.50	30.00

\* April 1 - December 31.

Cash flow analyses are predicated upon disbursing no more than one million US dollars during the first year in the private sector component, and another US\$5.9 million is projected to be disbursed under the public sector component. The second year disbursements will be US\$2.5 million through the private sector and US\$7.65 million through the public sector. Year three will see US\$3.35 million disbursed through the private and US\$6.1 million through the public sector. The final year of the project will see private sector disbursements of US\$3.15 million and public sector disbursements of US\$0.35 million. (See Annex E, National Housing Trust's Cash Flow Position)

The private sector component disbursement schedule and cash flow analysis is presented in detail in Annex E. The cash flow analyses presented in Annex E assumes that the National Housing Trust will draw down twenty percent of the total funds available to begin the program, and make subsequent draws upon proof of outlays on project loans, either mortgages made to the target population or construction finance loans made to commercial banks.

The public sector is already accustomed to dealing with HG funds and has well developed procedures for doing so. The most important change in this project is that the Ministry of Construction will obtain the funds directly from the Ministry of Finance through the budget.

### 3. Project Sector Component Cash Flow Projections

The flow of HG funds in the private sector will be from the Ministry of Finance to the National Housing Trust (NHT). The Government's has agreed to assume the foreign exchange risk. The Ministry of Finance (MOF) will loan the money to the NHT at about the same rate that it borrows the funds from the U.S. lender. Further, the rate at which the MOF onlends the funds to the NHT will be structured to protect the NHT from variations in the US markets that would decapitalize NHT. The MOF may charge NHT a rate which is currently above the rate at which it is borrowing in the variable rate market to contribute to a sinking fund to be drawn on to offset devaluations of the Jamaican dollar.

The cash flow projections for this project assume that the MOF will borrow at a variable interest rate, probably 8.5% in today's market including fees, and loan the funds to the NHT at a fixed rate of 10%. By charging commitment fees and fees for the unused portions of letters of credit signed with the participating institutions, by earning local market rates on the funds and by enjoying a two year grace period from the MOF while granting only a one year grace period to the borrowing institutions, the NHT can on-lend to financial institutions at 8% and still have substantial excess reflows (see cash flow in Annex E).

The financial institutions will probably require up to a 2% spread on the mortgage finance they provide to the target population, and a 3% spread on the construction finance loans they make to commercial banks. They may also charge the normal commitment fees to developers. Developers will be able to obtain construction finance from the commercial banks who will probably set a 6% spread for administering this highly technical and somewhat risky kind of loan. These rates, however, are still far below current market rates, which will help to bring the projects in at an affordable cost.

The initial 10 percent mortgage interest rate made possible by this program will bring the private sector lending terms into parity with the public sector low income housing finance program terms. For both the public and private sector Start-a-home programs, the eligible households will have incomes qualifying them for a 10 percent starting mortgage interest rate.

#### B. Financial Concerns

##### 1. Interest Rate Rationalization

The Project contemplates a public sector element and a private sector element. Interest rates for these two elements will be similar. For the public sector, the initial rate will be either 6%, 8%, or 10%, depending on beneficiary income. The public sector will also continue to offer the graduated payment option for lower income households. The public sector will also adopt an escalating payment mortgage. Under the EPM, the monthly payment will increase periodically (every one or two years depending on program design) by a fixed percent. Payments will increase regularly unless a client

can prove (with tax returns) that his income has not increased, until mortgage interest rate yield is at market. The rate will then float at the market rate. NHT has submitted a proposal to MOF to change its mortgage instrument to an EPM. There is also a concensus at MOC(H) to adopt an EPM for its portfolio.

An EPM will also be utilized in the private sector program. Annex E contains an example of an EPM, and shows how the effective rate on such a mortgage is actually higher than the nominal rate. Based on calculations made on an EPM with a one year adjustment period, a beginning rate of 10%, and accelerating to a market rate of 20%, an effective yield of more than 15% is achieved. The cash flow analysis also shows that substantial excess cash flows will be generated by the EPM's. These are also examined in Annex E, an EPM with a two year adjustment period is shown to generate excess cash flows of nearly \$90,000 on a \$34,000 mortgage.

In the case of private sector mortgages these excess cash flows will be divided between the NHT, which will use the funds to finance subsequent housing loans to qualified families, and the Building Societies or Trust Companies, who will keep their portion as payment for the expense of servicing these escalating payment mortgages. One interesting aspect of the EPMs is that they tend to pay off much sooner than level payment mortgages with the same effective yield, which will facilitate using reflows in similar housing projects.

The program proposed by this amendment provides mortgage financing for low income households initially at below market interest rates for both the public and private sector programs. In the present depressed state of the economy, the target population simply cannot afford housing without this action. The present level of interest rates reflects the sudden surge of price inflation attendant upon a large devaluation. Interest rates in Jamaica have been pushed to these levels by a GOJ tight money policy (combined with exchange devaluation) designed to control inflation in the aftermath of devaluation. No observer expects the rate of devaluation to continue at the level of the past two years. Inflation and interest rates, therefore, are also expected to drop back to rates closer to historical norms.

Jamaica is not suffering from an inflation fueled by excess demand. Unemployment is 30 percent, historically high for Jamaica, and output in the key bauxite industry has fallen as the world demand for aluminum products has failed to keep pace with the supply. Jamaica is not a country with a long history of financing deficits in the Government budget by creating money, and in fact has enjoyed relative price stability throughout over half of its history as an independent country.

The country's current economic plight has almost nothing to do with poor fiscal and monetary policies. It has everything to do with the fact that Jamaica was so dependant for its foreign exchange earnings on bauxite and aluminum exports, a market which is practically moribund worldwide. The country's recent high inflation rates have been caused by the fact that the

Jamaican dollar has been rapidly depreciating in value in international markets since November 1983. This reflects adjustment to the significant overvaluation of the Jamaican dollar that evolved during the years of fixed exchange rates and high demand driven inflation. The decline registered in this "catch-up" phase included therefore, a major once only element.

Jamaican policy makers are single mindedly pursuing economic policies aimed at producing the necessary adjustment in the value of the Jamaican dollar without creating economic chaos. It is clear that both fiscal and monetary policy are focused on this problem. Interest rates also need to be high enough to offset any expected devaluations in order to encourage capital inflows, and high enough to offset expected domestic inflation in order not to discourage currency inflows (remittances) from Jamaicans working abroad.

Thus the high interest rates that result from the tight monetary policy are only one of the mechanisms being used by the GOJ to achieve macro-economic stabilization. Equally important are a series of other measures including for example substantial public sector layoffs and the rationalization of the tax structure. The success of the GOJ structural adjustment program, which AID, IBRD and the IMF are actively supporting, should lead in the longer term to interest rates returning to levels close to the probable opportunity cost of capital in Jamaica. In this context, mortgage interest rates for low income shelter that start at 10 percent in an instrument that is designed to quickly increase the mortgage interest rate yield to market are not inconsistent with long term market expectations.

For purposes of this project, the long term inflation trend has been projected and factored into the measurement of the real rate of interest to be charged low income beneficiaries. Inflation in 1984, as reflected in the Consumer Price Index, was at a record high rate of 31 percent. Compared to previous years (16 percent in 1983, 7 percent in 1982, 5 percent in 1981), the high rate in 1984 was clearly an aberration. The IMF has projected that the inflation rate in 1985 will be about 20 percent. Assuming that no external shocks affect Jamaica's economy, and that the GOJ maintains its current economic policies, the Mission expects inflation to fall to 15 percent in 1986, and fall further to 10 percent in 1987 continuing through the end of the decade. Obviously these are indicative estimates - not forecasts. However, they are consistent with the monetary, fiscal and exchange rate policy paths on which the GOJ has embarked.

The application of a 10 percent biannual payment increase to an initial 10 percent mortgage loan in the private sector will result in positive real interest rates by 1987, as shown below.

<u>Year</u>	<u>Inflation Rate (%)</u>	<u>Actual Interest Rate (%)</u>	<u>Difference (%)</u>
1986	15.0	10.00	(5.00)
1987	10.0	10.00	0.00
1988	10.0	11.07	1.07
1989	10.0	11.07	1.07

Under the public sector program, the EPM will also be applied to the NHT long term loans and the MOC(H) program. When the escalated payment results in an effective rate to the lender which is more than 2<sup>1</sup>/<sub>2</sub> percent above the rate charged by the NHT, the lender will be required to pass a portion of the excess payments through to the NHT. Thus, the lender will earn an increasing margin over the remaining life of the loan and the NHT will generate additional cash flows to fund its other private sector programs.

## 2. Secondary Mortgage Market

The JMB has been unable to fulfill its role as Jamaica's secondary mortgage market facility. The institutional structure anticipated by the Housing Policy for launching the secondary mortgage market probably is not feasible even in a favorable economic climate. JMB was mandated to borrow resources offshore to activate the secondary mortgage market. Although it was to borrow offshore, it can only operate in the domestic housing market and thus has no possibility of maintaining the value of the foreign exchange (which it never sees). It has been decapitalized by the currency devaluation. It has also been obliged to carry the HG financing costs of GOJ subsidized housing programs since MOC(H) does not have resources to meet this obligation and the JMB has no real ability to collect from the MOC(H).

Since JMB does not have a sufficient resource base, it has not been able to gain the confidence of private sector financial institutions to initiate and operate a secondary mortgage market facility. It has also found that its resources, because of their cost, do not lend themselves to launching GOJ programs to encourage increased private sector participation in lower income housing. JMB has actually functioned more as a discount house, or more appropriately defined, as a bank of banks. Only the availability of externally generated loans has permitted the JMB to even carry out that limited function.

A formal secondary mortgage market is not, per se, a prerequisite for a successful housing finance system. More important is the need to have a developed primary mortgage market able to funnel individual and institutional savings directly into mortgage finance. Nor is it feasible or even possible to establish a secondary mortgage market in every country. Certain basic conditions must exist to ensure successful implementation, these include:

- o a certain amount of excess liquidity within the financial system;
- o financial regulations must facilitate the ready transfer of financial instruments; and
- o informal arrangements between primary lenders and potential secondary lenders must be so tenuous that some sort of formal arrangement, i.e. a secondary facility, must be created to facilitate a flow of funds.

The above prerequisites are needed to establish a full functioning facility modeled on that found in the U.S. A more modest facility would not necessarily require that all the above conditions be in place. However, if a secondary mortgage system is contemplated in Jamaica, the following must be taken into consideration.

- o At the present time, there is no excess liquidity in the system. Commercial banks and trust companies are required to maintain high liquid asset and reserves ratios; due to high deposit rates, other financial institutions such as Building Societies find themselves in similar circumstances.
- o The transfer of financial instruments in Jamaica is both costly and relatively cumbersome.
- o Inter-institutional contact in Jamaica is both frequent and informal. Moreover, many potential secondary lenders own, in part or whole, a number of primary lenders.

The above considerations indicate that it is inappropriate to consider establishing a secondary mortgage market facility in Jamaica at this time. A more appropriate approach is that taken in this project whereby arrangements are being put in place to facilitate the flow of funds to the housing sector. The NHT which has the resource base to develop GOJ programs to leverage private participation will manage the private sector component. It will also test a leveraging program through the mortgage certificates it intends to issue to interested contributors. In the longer term, when there is economic stabilization, NHT should be in a position to develop a broader secondary mortgage operation with greater private sector participation.

### III. Implementation Arrangements

#### A. Implementation Plan

The institutional responsibilities under the amended project call for the designation of a different Borrower. The Jamaica Mortgage Bank will not be the Borrower, as was the case with the first phase of HG-012 and as was anticipated in the original project documentation. The agreements will be amended to show the Borrower as the Ministry of Finance, or some other mutually acceptable entity on behalf of the Government of Jamaica. Government will also provide the Host Country Guaranty. The Ministry of Finance will, in turn, make the equivalent Jamaican dollars available to the MOC(H) through its budget or as a loan to the NHT for the implementation of the public sector program and lend the equivalent Jamaican dollars to the NHT for the private sector program.

The role and responsibilities of the MOC(H) will remain the same except as stated above. All other agencies in the public sector will continue to carry out those functions defined in the original project. However, the NHT will expand its function to administer the private sector program as the lender to private financial institutions who participate in that program.

Implementation of the supplementary funding will flow from procedures now in operation and will take place over a three and one-half year period, ending in mid 1989. Assuming AID authorizes the amended project by September 30, 1985, the following six month period will be devoted to preparation of the amended Implementation Agreement, negotiation of the agreement and negotiation of a loan from a U.S. Investor. The first disbursement under the project is expected to occur by about April, 1986. Implementation of the four components is expected to occur in the following manner.

#### Implementation Scheduling ( \$000,000 's )

<u>Component</u>	<u>Calendar Year</u>				<u>TOTAL</u>
	<u>1986*</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	
Start-a-home	5.50	9.00	6.00	2.30	20.80
Settlement Upgrading	1.00	1.50	1.00	0.50	4.00
Sites & Services	0.40	0.80	1.00	-	2.20
Comprehensive Urban Improvement	-	0.85	1.45	0.70	3.00
<b>TOTALS</b>	<u>6.90</u>	<u>10.15</u>	<u>9.45</u>	<u>3.50</u>	<u>30.00</u>

\* April 1 - December 31

As the above table indicates, project implementation will continue aggressively in 1986. Implementation activities accelerate in 1987 and 1988, when the private sector component is in full implementation.

#### B. Monitoring and Evaluation

The Monitoring and Evaluation Plan described in the original project paper will be generally followed under the amended project. A MOC(H) project monitoring group has been established under the leadership of the Permanent Secretary, MOC(H). This group is exercising a strong management and trouble shooting role and is expected to strengthen its performance as it has access to an improved flow of management information from the maturing policy secretariate. The Jamaican project manager (public sector) will have the primary responsibility for preparing a revised evaluation plan in cooperation with RHUDO/CAR. This same practice will be followed by the private sector project manager. The new evaluation plans will reflect the changes noted below:

- \* The JMB will only continue to report on the activities it is undertaking under the first phase of this project. This includes reporting on mortgage status for loans disbursed through JMB (the first disbursement occurred in Dec. 1984). NHT and MOC(H) will assume the reporting responsibility for their respective components. The MOC(H) will report on the mortgage status of the public sector loans it disburses, while the NHT will perform that same function for the private sector loans.
- \* The Ministry of Finance, as the official borrower under the amended project will also be a party to reporting on project progress as well as the status of the mortgage loans.

#### C. Technical Assistance Plan

Jamaica has been well served by the present technical assistance program which has complemented the HG program in support of low income shelter development. This technical assistance has been largely the product of a \$1.1 million grant funded project which provided two long term resident advisers, short term consultancies and training. This project, initiated in January, 1983 and to be concluded in May 1986, is managed by the RHUDO/CAR which has supplemented the project with an additional \$200,000.

The technical assistance has succeeded in establishing a clear policy base and introducing basic improvements in sector policy, planning and operations (see Annex C, Part 1 and 532-0067 evaluation, 1984). This has included: the introduction of affordability as a primary planning criteria, initiation of a policy secretariate, divestment of MOC(H) responsibilities, (e.g. removing mortgage originations and servicing), institutional adjustments and initiating improved construction management and design processes. This has been achieved during a period of institutional reorganization and ongoing personnel reductions.

Technical assistance is required in support of accelerated implementation (US\$55 million portfolio), continued policy refinement and implementation, institutional development, technology transfer and training. The changes and process initiated to date need to be sustained, expanded and reinforced in order to institutionalize the basic MOC(H) policy, planning and monitoring role and establish (in some cases restore) sound financial, management and technical practices within and between key shelter institutions. This is particularly true given the desire to accelerate construction activity, the proposed opportunities for private sector involvement in low cost shelter development, and the major inter and intra institutional adjustments resulting from structural adjustments and policy dialogue.

A new technical assistance project is planned for FY 86 to complement this amended project. Project development will be initiated in October 1985. The current technical assistance contract may be extended to assure continuity and maintain institutional support.

Underlying themes of the proposed new technical assistance effort will be: To maintain support for policy and institutional changes made to date; to integrate, support and use, where applicable, more local resources (individuals, firms, training facilities, professional associations) in program implementation, institutional development and policy refinement (this will help multiply local impact and involvement, broaden professional interest and debate, build institutional capacity and reinforce local human resource development); to provide experienced, expert and sensitive adviser(s) for the government and the private sector in relation to policy, planning, financial, construction management and institutional development matters; to accelerate construction activity; and, to expand training .

The technical assistance project will be designed (1) to sustain policy refinement and implementation, (2) to address further institutional rationalization and development, (3) to accelerate implementation, (4) to alleviate supply side constraints, and (5) to support new initiatives. These matters will be more fully detailed during project preparation.

#### Illustrative Technical Assistance Budget

<u>Long Term Positions</u>	\$1,400,000
<u>Short Term Consultancies (External)</u>	400,000
<u>Local Consulting or Professional Services</u>	720,000
<u>Training</u>	380,000
<u>Commodities</u>	100,000
TOTAL	\$3,000,000

ACTION: AID5 INFO: AMB DCM ECON RF/9

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TOR: 19:01  
CN: 09060  
CHRG: AID  
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E.O. 12356: N/A

TAGS:

SUBJECT: JAMAICA HOUSING GUARANTY 012 INTERIM REPORT

THE DAEC REVIEWED THE INTERIM REPORT ON AUGUST 7. DEVELOPMENT OF A PP SUPPLEMENT, WHICH WOULD PROGRAM DOLS 15 MILLION IN UNCONTRACTED FUNDS UNDER THE PRESENT HG PLUS INCREASE THE TOTAL HG PROGRAM BY AN ADDITIONAL DOLS 15 MILLION, WAS APPROVED SUBJECT TO THE FOLLOWING GUIDANCE:

1. INTEREST RATE STRUCTURE. THE PROPOSED PROGRAM DESCRIBES A PUBLIC SECTOR COMPONENT, FOR WHICH MORTGAGE FINANCING TO THE ULTIMATE BUYER WOULD BE PROVIDED AT 6-10 PERCENT, AND A PRIVATE SECTOR COMPONENT FOR WHICH MORTGAGE FINANCING WOULD BE AVAILABLE AT SOME HIGHER RATE (I.E. 12-14 PERCENT). THE PP SUPPLEMENT SHOULD INCLUDE A THOROUGH DESCRIPTION OF THE INTEREST RATE STRUCTURE THAT WILL BE APPLIED TO MORTGAGE FINANCING ACTIVITIES BY SECTOR, FROM INVESTOR CONTRACT TO ULTIMATE BORROWER AND ALL POINTS INBETWEEN, AND THE RATIONALE FOR THE STRUCTURE PROPOSED. THE DISCUSSION SHOULD PARTICULARLY ADDRESS:

A. BLENDING OF MORTGAGE MONEY. WHERE A.I.D. SHELTER

FUNDS ARE MIXED WITH OTHER PUBLIC OR PRIVATE RESOURCES FOR ANY GIVEN NEW HOME OR MORTGAGE FINANCING ACTIVITY, THE PP SUPPLEMENT SHOULD DESCRIBE HOW THE MIX OF LOW INTEREST RATE PUBLIC SECTOR FUNDS AND HIGHER (RATE) PRIVATE SECTOR FUNDS IS DETERMINED, AND UNDER WHAT CONDITIONS MIXED MONEY WILL BE MADE AVAILABLE. IN THE COURSE OF PROJECT IMPLEMENTATION, THE MISSION SHOULD EXAMINE THE EFFECT OF BELOW MARKET PUBLIC SECTOR MORTGAGE INTEREST RATES ON THE PRIVATE SECTOR PROGRAM. THE IMPACT SHOULD BE MEASURED IN THE PROJECT EVALUATION AND THE RESULTS UTILIZED IN A.I.D.'S POLICY DIALOGUE WITH GOJ ON THE EXPANSION OF THE PRIVATE SECTOR PROGRAM.

B. LOAN TERMS. NEITHER OF THE TERMS FOR FUNDS LOANED UNDER THE PUBLIC OR PRIVATE SECTOR PROGRAMS REFLECT POSITIVE REAL RATES. THE PP SUPPLEMENT SHOULD JUSTIFY THE IMMEDIATE USE OF SUBSIDIZED INTEREST RATES BY THE GOJ

DATE RECEIVED: 9/16	
ACTION OFFICE: Rhuas	
INFO TO:	
DIR ✓	AIDO
D/DIR ✓	OHNP
OPPD ✓	OEHR
OPDS ✓	OPED
OEEE	CO
A/ECON	RHUDO
MGT	TGR
CONJ ✓	R, F ✓
DUE BY: 9/17	
ACTION TAKEN:	

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IN ITS PUBLIC SECTOR SHELTER ACTIVITIES AND THE ON-LENDING OF HG FUNDS FROM THE NHT TO THE PRIVATE SECTOR AT LESS THAN MARKET RATES, AND DEVELOP A STRATEGY WHEREBY THESE WOULD INCREASE TO POSITIVE REAL RATES BY THE END OF THE PROJECT (I.E. FIVE YEARS). THE MISSION SHOULD EVALUATE THE POSSIBILITY OF CONDITIONING THE INCREASED FUNDING ON FASTER PROGRESS IN MOVING TOWARDS POSITIVE REAL RATES; E.G. AN IMMEDIATE STEP IN INCREASING INTEREST RATES AS A CONDITION FOR CONTRACTING THE NEXT HG TRANCHE AND ACHIEVEMENT OF AT LEAST POSITIVE RATES WITHIN (PERHAPS) TWO YEARS.

THE USE OF ALTERNATIVE ESCALATING PAYMENT MORTGAGES SHOULD BE EXAMINED, INCLUDING ADJUSTABLE RATES AND NEGATIVE AMORTIZATION SCHEMES AT MARKET RATES. ESTIMATES OF EXISTING AND PROJECTED REAL INTEREST RATES SHOULD BE PRESENTED, TAKING INTO ACCOUNT EXPECTED INFLATION, AND THE ADEQUACY OF AVAILABLE PRICE INDICES TO CAPTURE REAL INTEREST RATES.

2. POLICY ISSUES. THE INTERIM REPORT PROPOSED THAT BOTH PUBLIC AND PRIVATE MORTGAGES GIVE THE HOMEBUYERS NEGATIVE

REAL INTEREST RATES AND REQUIRES SUBSIDIES FROM PUBLIC REVENUES. THE INTEREST RATES TO BE CHARGED THE HOMEOWNER UNDER THE PUBLIC SECTOR COMPONENT ARE 6 , 8 , AND 10 , DEPENDING ON THE INCOME OF THE BORROWER. UNDER THE PRIVATE SECTOR ACTIVITY, PRIVATE BANKS WILL BE GIVEN ACCESS TO LOAN RESOURCES SUBSIDIZED BY TAX REVENUES WHICH THEY WILL LEND WITH MORE COSTLY LOAN RESOURCES TO PROVIDE BELOW MARKET INTEREST RATES ON LOANS TO HOME BUYERS, PROBABLY ABOUT 12-14 PERCENT ACCORDING TO THE INTERIM REPORT. WE UNDERSTAND THAT PREVAILING FREE MARKET RATES ARE ROUGHLY 24 PERCENT AND THAT THE RATE OF INFLATION IN JAMAICA IS NOW ABOUT 30 PERCENT.

WE ARE CONCERNED THAT THE SUBSIDIZATION OF INTEREST RATES ON THE HG RESOURCES TO BE CHANNLED THROUGH PRIVATE BANKS FOR HOME MORTGAGES WILL DEFEAT WHAT COULD BE THE MOST IMPORTANT BENEFIT OF THE ARRANGEMENT: I.E. TO DEMONSTRATE TO THE PRIVATE FINANCIAL SECTOR THAT CONSTRUCTION AND FINANCING OF HOUSES FOR LOW INCOME FAMILIES CAN BE PROFITABLE UNDER FREE MARKET CONDITIONS. THE CURRENT INTEREST RATES APPLICABLE TO HOME FINANCING PROVIDE LITTLE OR NO INCENTIVE FOR CONTINUED PARTICIPATION BY PRIVATE ENTITIES IN THE HOUSING SECTOR AFTER ACCESS TO SUBSIDIZED PUBLIC LOAN FUNDS IS TERMINATED. THEREFORE, WE BELIEVE THAT ACCELERATED PROGRESS TOWARD ACHIEVEMENT OF AT LEAST POSITIVE INTEREST RATES, IF NOT MARKET RATES, SHOULD BE A PRIORITY OBJECTIVE OF THE HG PROGRAMS IN JAMAICA.

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## AIDAC

WE RECOGNIZE THAT IT IS DIFFICULT TO DEAL WITH INTEREST QUESTIONS RELATING TO A SINGLE SECTOR WITHOUT TAKING INTO ACCOUNT OVERALL INTEREST RATE DEVELOPMENTS. FOR THIS REASON WE BELIEVE THE USAID SHOULD DEVELOP AN ACTION PLAN FOR PERSUADING THE GOJ TO ACCELERATE ITS PROGRESS TO REAL INTEREST RATES AND ULTIMATELY MARKET RATES FOR THE ENTIRE HOUSING SECTOR WITHIN THE CONTEXT OF ITS OVERALL STRATEGY TO OPEN-UP THE LOCAL CREDIT SYSTEMS TO FREE MARKET FORCES AND TO CREATE A BETTER CLIMATE FOR PERMANENT AND PROFITABLE PRIVATE SECTOR PARTICIPATION. THE PLAN SHOULD GIVE THE MISSION'S BEST JUDGMENT ON HOW DISBURSEMENT OF HG RESOURCES CAN BE LINKED TO SPECIFIC STEPS TOWARD THIS GOAL. IT IS OUR UNDERSTANDING THAT JAMAICA IS NOW STARTING TO LIBERALIZE THE FINANCIAL SECTOR. WE ALSO UNDERSTAND THAT THE GOVERNMENT OF JAMAICA HAS ABOLISHED THE CEILINGS ON HOME MORTGAGES WHICH HAS UNDOUBTEDLY BEEN THE BIGGEST DISINCENTIVE FOR THE PRIVATE SECTOR TO PARTICIPATE IN THE HOUSING FIELD. IN ITS ACTION PLAN THE MISSION SHOULD CONSIDER HOW THESE DEVELOPMENTS CAN BE LINKED TO ADVANCES TOWARD HIGHER INTEREST RATES IN THE

HOUSING SECTOR. WE CONCLUDE FROM THE FACT THAT THE GOVERNMENT HAS ESTABLISHED ELABORATE PROCEDURES FOR DETERMINING WHO MAY PURCHASE THE SUBSIDIZED PUBLIC HOUSING THAT THE CURRENT EFFECTIVE DEMAND EXCEEDS AVAILABILITIES. THEREFORE, THERE SHOULD BE SOME ROOM FOR RAISING THEIR COST THROUGH HIGHER INTEREST RATES AND STILL THE MARKET WILL BE CLEARED. PERHAPS SOME EXPERIMENTATION BY THE GOVERNMENT WITH SALES ON THE FREE MARKET OF THE HOUSING PRODUCED FOR SALE BY THE NHT WOULD YIELD USEFUL AND CURRENT INFORMATION ON WHAT THE CURRENT MARKET WILL BEAR.

3. INSTITUTIONAL ARRANGEMENTS. THE DAEC WAS CONCERNED THAT THE MISSION'S INTENTION OF INCREASING PRIVATE SECTOR ACTIVITY IN SHELTER FINANCE WAS NOT SUFFICIENTLY SUPPORTED BY THE NATURE OF THE PROPOSED ACTIVITIES. FOR ONE THING, ONLY DOLS 10 MILLION OF THE DOLS 30 MILLION WILL FINANCE PRIVATE SECTOR ORIGINATED MORTGAGES. FOR ANOTHER, THE FINANCING TO BE MADE AVAILABLE THROUGH THE NHT FOR UNITS BUILT AND FINANCED THROUGH THE PRIVATE SECTOR MAY BE MORE EXPENSIVE THAN FOR UNITS FINANCED THROUGH PUBLIC SECTOR INSTITUTIONS. THIS COULD PUT THE PRIVATE SECTOR AT A COMPETITIVE DISADVANTAGE WITH THE PUBLIC SECTOR. FINALLY, THERE IS NOT A CLEAR PROGRAM FOR PHASING OUT THE FIVE PUBLIC AGENCIES INVOLVED IN FINANCING AND IMPLEMENTATION (NHT, MOC/H, CHFC, EDGO, AND SIHL) FROM PUBLIC SECTOR SHELTER DELIVERY. MISSION REPRESENTATIVES POINTED OUT THAT THE DOLS 10 MILLION WAS ABOUT ALL THE PRIVATE SECTOR COULD BE EXPECTED TO HANDLE WITHIN A REASONABLE TIME FRAME IN ITS FIRST VENTURE INTO LOWER COST HOUSING PROJECTS; THAT THE DIFFERENCE IN INTEREST (10 PERCENT FOR PUBLIC VS 12-14 PERCENT FOR PRIVATE) WON'T MAKE MUCH OF A DIFFERENCE IN MONTHLY PAYMENT; AND THAT IT DESIRED TO EXPAND NHT'S ROLE AS THE SOURCE OF RESOURCES FOR FINANCING THE GOJ'S SHELTER

## PROGRAM.

THE PP SUPPLEMENT SHOULD DESCRIBE THE DESIRABLE FUTURE ROLES FOR ALL PUBLIC SECTOR AGENCIES INVOLVED IN THE SHELTER SECTOR AND THE SPECIFIC STEPS THAT WILL BE TAKEN TO HELP THEM EFFECTIVELY PLAY THOSE ROLES. THE PP SUPPLEMENT SHOULD INCLUDE A STRATEGY OR PLAN FOR ESTABLISHING A SECONDARY MORTGAGE MARKET MECHANISM. ON THE OTHER HAND, A DECREASING INVOLVEMENT OF THE OTHER AGENCIES, AND A TARGETING OF MOC/H ACTIVITIES TO LOWER INCOME HOUSEHOLDS IS EXPECTED OVER TIME. THE PP SHOULD ALSO DESCRIBE THE STEPS, BEYOND MERELY INCREASING MORTGAGE FINANCING AVAILABILITY, THAT WILL BE TAKEN TO INCREASE THE PARTICIPATION OF PRIVATE SECTOR ENTITIES IN

THE FINANCING AND CONSTRUCTION OF LOW INCOME HOUSING. TO REDUCE THE IMMEDIATE COMPETITIVE DISADVANTAGE OF THE PRIVATE SECTOR, THE SALES PRICE OF THE PUBLIC SECTOR UNITS SHOULD INCLUDE ALL COSTS, INCLUDING, WHERE APPLICABLE, LAND AT MARKET VALUE. THE PP SHOULD DEMONSTRATE THAT THE COSTS INCLUDED IN SETTING THE PRICE OF PRIVATE UNITS ARE ALSO INCLUDED IN THE COST OF PUBLIC UNITS, AND THAT BOTH ARE CALCULATED AT MARKET VALUE, IN SO FAR AS POSSIBLE. EXPERIENCE GAINED FROM THE INITIAL PRIVATE SECTOR PROJECTS SHOULD BE EVALUATED AND ADJUSTMENTS TO THE ONGOING PROGRAM CONSIDERED BASED ON ACTUAL EXPERIENCE.

4. DEBT-SERVICING CAPABILITY. DESPITE ITS SERIOUS DEBT SERVICING PROBLEM, THE GOJ HAS BEEN MEETING ITS SCHEDULE OF HG PAYMENTS. AS JAMAICA'S ECONOMIC PROBLEMS ARE LIKELY TO CONTINUE AT LEAST IN THE NEAR TERM, THE PP SUPPLEMENT SHOULD DISCUSS ARRANGEMENTS WHEREBY THE GOJ WILL CONTINUE TO MEET ITS HG REPAYMENT OBLIGATIONS, AND DESCRIBE THE AID BILATERAL RESCHEDULING AND IMPLEMENTING AGREEMENT AS IT APPLIES TO THESE ARRANGEMENTS.

5. COUNTERPART. IT WAS RECOGNIZED THAT THE GOJ COUNTERPART FOR AID PROJECTS HAS NOT ALWAYS BEEN FULLY AVAILABLE WHEN NEEDED TO ENSURE TIMELY PROJECT  
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IMPLEMENTATION. THE PP SUPPLEMENT SHOULD IDENTIFY THE RESOURCES THAT WILL BE PROVIDED BY THE GOJ IN THE PROPOSED PROGRAM AND INCLUDE THESE IN THE PROJECT AGREEMENT. THE SUPPLEMENT SHOULD ALSO DESCRIBE THE STEPS THAT WILL BE TAKEN TO ENSURE THAT GOJ COUNTERPART WILL BE AVAILAELF WHEN NEEDED.

6. TIMING OF APPROVAL. THERE WAS DOUBT AS TO WHETHER THE WEIGHTY POLICY ISSUES DISCUSSED ABOVE COULD BE SATISFACTORILY ADDRESSED IN TIME TO ALLOW FOR PROJECT APPROVAL IN FY85. THE MISSION IS ENCOURAGED TO CONSIDER WHETHER DEFERRING PP PRESENTATION UNTIL FY86 WOULD BE A BETTER COURSE OF ACTION. SHULTZ

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Annex B: Technical Descriptions of the Four Project Components

1. Start-A-Home

This subcomponent will be a continuation of the Start-a-home program of HG-011 and will also continue the first phase of HG-012. The efforts to improve administration and increase involvement of the private sector in Ministry of Construction (Housing) sponsored programs will continue. These efforts support the Government's policy of moving the Ministry out of direct production and into a supervisory and administrative role. The project shelter solutions are described in the original HG-012 Project Paper. However, the experience of projects HG-011 and HG-012 has led to extensive improvements over the original solution. The new units are smaller in areas (240 sq. ft. vs 580 sq. ft.), have fewer finishes, go on smaller lots and use more efficient construction technology. These new model Start-a-homes face prevailing realities of affordability; the process of cutting costs and improving efficiency will continue under this project.

A comparison between the costs associated with a typical project produced by the public sector and one produced by the private sector is illustrated by the following table. Three construction alternatives are analyzed, each for a 240 sq. ft. Start a home on an 1800 sq. ft. lot in a 200 - 300 unit development. For purposes of comparison the land costs and infrastructure costs are assumed to be the same (see table B3, Sites and Services). The first alternative is for a unit produced by a builder under contract to the MOC(H).

The second is a home contracted for by the owner after purchasing a developed lot (see Option 2, sites and services) and the third is a completely privately produced unit. It is assumed that the unit in alternatives 1 and 3 is produced by a builder in volume through an improved industrialized system (at J\$104.00 per sq. ft.). The unit in alternative 2 is assumed to be produced by traditional methods of construction (at \$120 per sq. ft.). Many of the cost reduction techniques discussed elsewhere in this project paper are incorporated in the table.

Table B1

Comparative Costs for Alternative Approaches(a)

Component	Public Sector	Private Sector	
	Volume Construction	Owner Originated Construction (b)	Volume (c) Construction
Site Costs			
Land Cost (.75¢ sq.ft.)	\$ 2,250	\$ 2,250	\$ 2,250
Infrastructure Cost (d)	9,000	9,000	9,000
Subtotal	11,250	11,250	11,250
Construction Cost	25,000	29,000	25,000
Other Costs			
Professional Fees (f)	2,210	1,520	1,400
Interim Financing (g)	0	760	700
Marketing	0	0	500
Contingency (2%)	0	780	720
O.H. & Profit (h)	0	2,415	2,900
Closing Cost	3,400 (i)	500	500 (g)
Subtotal	5,610	5,975	6,720
TOTAL COST/UNIT	\$41,860	\$46,225	\$42,970

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Notes for Above Table

- (a) Costs given in J\$/housing unit. Unit assumed is a 240 sq.ft. start-a-home on a 1800 sq.ft. lot in a 200-300 unit development.
- (b) Assumes developer provides serviced lots in joint venture with NHC, then lot owner contracts for complete house using traditional construction.
- (c) Assumes unit to be fully privately financed and built for sale. (Developer must assume marketing risk).
- (d) Development costs taken from Table 2, Option 2, in Sites & Services.
- (e) Assumes J\$120/sq.ft. for owner originated traditional construction and J\$104/sq.ft. for volume construction using a housing system.
- (f) Assumes 4% of infrastructure and construction costs in private sector, and a 6.5% fee for engineering and supervision in the public sector.
- (g) Assumes 12% construction financing over four months.
- (h) Overhead and profit is assumed at 8% for the third example and 6% for the second, due to its being developed by a public/private joint venture, where the private partner is a sponsor, such as a church.
- (i) For public sector units, this is a 10% fee to the National Housing Trust, 5% to cover interim financing and 5% to cover closing costs. Approximately one-third of public units are marketed through CHFC which does not charge this fee.
- (j) For privately financed units, this assumes exemption from both a 5% stamp tax and a 7.5% transfer tax.

The table illustrates that most of the cost differences do not occur in the land, infrastructure and construction components but rather in other development costs. In the public sector, the MOC(H) generally pays a fee for project management and design ranging from 5% to 10% of the project cost depending on the type of service provided. The NHT also charges an additional 10 percent to cover closing costs and the cost of interim financing. Depending on the degree to which the private sector is involved, additional costs will include professional fees, interim financing, marketing costs and contingency allowances. In addition, there are the builder's overhead and profit and closing costs. Each of these has been estimated conservatively because of volume production and the rigid project parameters established from the outset.

One of the major differences in public and private production of housing lies in the transfer tax (7.5%) and the stamp tax (5%) that are assessed at the time of a title transfer. If MOC(H) has title to the land prior to transfer, the transfer tax and the stamp tax are waived. In the case of private development, it is assumed that the government may waive the transfer tax if it so chooses. For this analysis, each alternative is assumed to be exempt from the transfer and stamp taxes.

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The analysis does not reflect all the costs associated with housing production in the public sector. Some project management costs are absorbed by MOC(H) and do not affect the final cost of the unit. Moreover, inefficiencies such as delays due to funding interruptions and lack of contractor incentive to finish on time as well as redesign costs affect the final cost of the unit but are not reflected in the analysis. Efforts are underway to reduce these inefficiencies through technical assistance. The net effect could cause the final cost of the unit to exceed that of the same unit produced by the private sector.

The analysis shows that the present total cost of a unit produced by the private sector is somewhat higher than the same unit produced by the public sector, but the difference is close enough to merit evaluation on a case by case basis. All areas of costs will have to be reduced by design and carefully managed in construction to fall within affordability limits.

## 2. Areas of Cost Reduction

No single component of the development process will be able to realize a percentage cost reduction large enough to affect the entire project cost. As stated, all areas must achieve cost reductions to achieve project feasibility. Site selection is important, not only because of land costs, but to minimize the cost of infrastructure development. Slope and subsurface conditions must be carefully considered. Also important is ready accessibility of site utilities.

Perhaps the largest area of potential cost reduction is in efficiencies due to site layout and design. Lot size reductions from the minimum standard of 3,000 sq. ft. to a more practical level of 1500-2000 sq. ft. will reduce costs considerably. Economies in water and sewer line layout will likewise be realized from higher densities and better design. Reduction of construction standards such as narrowing road widths from 18 feet to 16 feet, eliminating curbs and gutters and reducing pavement specifications will also result in savings. Reduction of parking and open space standards will help as well. Reductions realized from site related components can be as high as 40% of construction built to current design standards. (See Table B-3, Annex B, Sites and Services). Likewise, redevelopment of abandoned or premature subdivisions, thereby taking advantage of sunk investment costs, can provide further reductions.

In the area of building construction, unit costs are already at the low end of the spectrum, particularly for traditional construction (\$120/sq. ft.). Further reductions may be found in the use of building systems. For example, one producer has suggested a "four plex" start-a-home for \$25,000/unit. The new post and panel system being developed by MOC(H) may also prove to be more cost effective. Two alternatives to reducing construction costs include producing less than a full house, leaving the owner to complete the unit, and allowing the owner of a serviced lot to contract for the entire house himself, providing some management and sweat equity. Advantages and disadvantages of this approach are discussed in Annex B, sites and services.

This component will therefore introduce new concepts for site and unit design which, together with measures described above, will demonstrate to public agencies, private developers and the target population how the start-a-home program can continue to serve low income families. Other accomplishments will be obtaining acceptance by government agencies (Town Planning and the National Water Commission) for more efficient site design and infrastructure concepts and a faster approvals process.

## 2. Settlement Upgrading

### A. General

Settlement upgrading (provision of tenure, improved access and some degree of urban services) is one of the components of HG-011 and a planned activity for HG-012. Since settlement upgrading is discussed in the HG 012 Project Paper only the basic outlines and refinements of the program will be covered here. The upgrading activities being implemented under HG-011 have provided valuable experience but have improved only a fraction of the many squatter areas in urban settlements. No figures are available on the total need for upgrading in Kingston but the approximately 1,400 plots improved with A.I.D. financing represent only a small percentage of those in need of improvement.

This activity is a vital part of the overall housing program as it provides benefits to the lowest income urban population. Since many residents in squatter settlements are in the lowest percentiles of the income distribution (in some areas over half of the residents are below the 25th percentile), they cannot afford the cost of other housing programs. Therefore, settlement upgrading improves the living conditions of households that would not otherwise be served by A.I.D.'s activities.

This activity is a vital part of the overall housing program as it provides benefits to the lowest income urban population.

### 1. Problems

Experience with HG-010 and HG-011 has improved the implementation process but particular problems need to be addressed to reduce costs and spread benefits. These problems include:

- Increased material and labor costs making even basic improvements unaffordable to some of the target population.
- The high cost of land and the lengthy process for land purchase by the Government.
- A cumbersome and slow process to provide land titles to project residents.
- Delays in connecting project water and sewer lines into the main systems.

### 2. Objectives

Objectives for this component are to:

- Provide secure land tenure and improve living conditions of the urban poor
- Identify various options to reduce costs while still responding to site conditions as well as the needs and income levels of residents of the upgrading areas.
- Improve project management and efficiency and minimize the problems experienced in earlier projects.

Focus upgrading activities and coordinate them with other programs in a comprehensive improvement package (See Annex B4, Comprehensive Urban Improvement).

Increase involvement of the private sector in upgrading activities through joint ventures with land owners.

## B. Implementation Strategy

### 1. Project Activities

The activities of this component are as outlined in the HG 012 Project Paper:

Rationalization or legalization of the upgrading areas including the legal requisites and surveys required for individual plot purchases.

Regularization of road/footpath alignments and reservations to provide adequate access to and circulation within the area but with minimal use of land.

The provision of basic urban services such as paved roads, storm drainage, water supply and sewerage. Provisions of services may possibly be on an incremental basis.

This component will build on the activities being implemented under HG 011. Upgrading is an important part of the Government's housing program and should be retained but with modifications to improve the efficiency of implementation and affordability of solutions.

### 2. Site Selection

A more comprehensive site selection process for settlement upgrading has been initiated for potential HG-012 projects. A land feasibility study, required before a site can be approved for A.I.D. funding, identifies the present ownership patterns and possible complications with the acquisition process. Sites with complex acquisition problems are not accepted. In addition other criteria have been established concerning physical characteristics, availability of utilities and services, densities, incomes and planning considerations. Legal access to land will be required before the start of implementation.

Another consideration will be to coordinate settlement improvement to the extent possible with other activities in neighborhoods selected for Comprehensive Urban Improvement. Under HG 012, settlement upgrading will be limited to urbanized areas.

### 3. Design Standards

Upgrading programs present constraints imposed by existing conditions thus giving less flexibility in setting land use and design standards. The target population of projects is also pre-determined usually with a high percentage of very low-income families. Therefore it is necessary to design individual affordable programs for each project area to solve the environmental problems. Table B2 lists options to be used in settlement upgrading projects. The minimum upgrading package (option 1) will include the nationalization and legalization of the site for individual plot purchase. Urban services and infrastructure will be provided based on need and affordability constraints.

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Table B2  
AVERAGE PER LOT UPGRADING OPTIONS  
SEPTEMBER 1985

	Estimated Cost (J\$)
<u>Option 1</u>	
Minimum upgrading package --- legalization/regularization (including land purchase of average lot size of 35' x 70' (2450 sq. ft.))	5,500
<u>Option 2</u>	
Option 1 plus improved average 15' wide road network (incl. minimal storm drainage) of 9' base course with double surface dressing, curb, no sidewalk	10,000
<u>Option 3</u>	
Option 2 plus 51mm PVC pressure pipe with standpipes serving 30-40 families ea.	10,300
<u>Option 4</u>	
Option 2 plus 100mm PVC water distribution network with individual lateral connections	12,500
<u>Option 5</u>	
Option 3 plus 14' x 18' 4 stall W.C. and shower/sanitary block with absorption pit	10,700
<u>Option 6</u>	
Fully upgraded site (Option 4 plus 200mm PVC plastic pipe sewage collection network with individual lateral connections	16,000

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#### 4. Methodology

The institutional responsibilities and basic procedures will not be significantly changed from those outlined in the PP but efforts will be concentrated on providing continued technical assistance and training to improve the administration and management of improvement activities by the MOC(H) and Estate Development Company (EDCo.) as well as to involve the private sector. Areas for improvement include:

##### Private Sector Involvement

Because of the high cost of land and difficulties with the acquisition process, it is proposed for this component that the Ministry establish joint ventures with private land owners. The Ministry would advertise for expressions of interest from landowners and evaluate the acceptability of sites based on project selection criteria established jointly by the MOC(H) and USAID. Under the joint venture the owner would contribute the land and MOC(H) the development expertise and management through EDCO or a private consultant. Once the upgrading has been finished, long-term financing from the HG loan would be used to pay the land owner for his contribution.

##### Approvals Process

MOC(H) will continue to work with the Town Planning Department to modify development standards for upgrading areas. This will be coordinated with the U.S.A.I.D. technical assistance program to Town Planning.

##### Coordination of Activities

The current program has experienced difficulty with delays in connecting water and sewer systems into the main lines of the city. Procedures have been initiated at EDCO for advanced planning and with utility agencies for connection of project systems. The USAID Resident Advisor has and will continue to work with EDCO to improve performance and institutionalize improved procedures.

##### Land Titles

Survey work and preparing plot plans for titling of properties in an upgrading area is a complicated and time consuming process which in the past has often delayed the marketing of plots. Procedures have been established to initiate survey work early in the implementation period to provide time for completion of legal documentation. The Resident Advisor will continue to monitor the application of these procedures.

##### Unit Allocation

One of the major problems has been delays in the allocation of lots once projects are completed. In addition to the title and survey problems, delays have also resulted from not starting the marketing process until the site work has been completed and the final cost known. To improve the efficiency of this process, a pre-sell program based on estimated costs will be initiated so that all the lots are under contract before the completion of the site work, and can be sold shortly thereafter.

## 5. AID Involvement

Technical assistance to the Ministry will continue. Resident Advisors monitor site selection, preparation of plans, implementation and marketing of settlement upgrading projects.

### C. Component Costs

#### 1. Estimate of Costs

Table B2 shows current estimated costs for various upgrading options proposed for implementation in HG-012.

Those estimates are based on present costs and standards. It may be possible to achieve modest reductions in costs by careful planning and some reductions in infrastructure standards. Option 4 which includes legalization for land purchase, roads with curbs and individual water connections is the level of upgrading most often provided. At a cost of J\$12,500 per plot it will be possible to improve 1,920 plots under this component.

#### 2. Cost Recovery

Land and Site development costs as well as professional fees are recovered by the sale of plots to the residents. Under USAID criteria, improvements must be affordable to at least 85 percent of the target households to be approved for HG financing. Based on surveys of household income an affordable upgrading package is designed for the neighborhood. In the present economic climate, it will be necessary to carefully monitor the preparation of projects to minimize costs while providing a viable package of improvements.

### D. Institutional Responsibilities

The responsibilities for this component will remain the same as outlined in the HG-012 Project Paper. Technical assistance and training will continue to be provided to improve the planning, design and administration of new projects.

### 3. Sites and Services

#### A. General Problems and Component Objectives

##### 1. Problems to be Addressed

Historically, Sites and Services has been defined as the purchase of land and the infrastructure improvements necessary to make that land ready for construction. Usually this has meant the disposition of lots to owners who then pursue the construction of their house on their own account. Among lower income families, this definition poses problems due to the lack of financial and technical capacity available to carry out this construction. In Jamaica, except for homes of the simplest construction methods, this problem is compounded by earthquake and hurricane resistant structural capacity requirements which are met by traditional block and steel or modular construction that require some skilled labor, making a completely self-built urban home difficult. Even so, many homes are built in this way, with the owner financing and directing the work as cash becomes available. Any assisted program of sites and services, therefore, must consist not only of the

infrastructure services (roads, water, sewer, etc.) but also the institutional services necessary to aid the lot buyer to build or have built his home (technical assistance, financing, construction management). Therefore, this component will address both sites and services and "owner originated house construction", assuming that about 75 percent of lot purchasers will take advantage of some form of assistance in constructing and financing their home. The technical problems associated with infrastructure development can be addressed in terms of the final cost of delivering a "serviced" lot ready for construction. For current start-a-home development (1985 projects) it is not unusual to see finished lot costs approaching J\$20,000, including land costs. If approximately J\$38,000 (assuming 10 percent down) is the total start-a-home price to reach A.I.D. income affordability limits and house construction and other costs range from J\$30,000-\$35,000 per unit at best, the magnitude of the infrastructure development problem is clear. If one buys a J\$12,000 lot at 25 percent down financed over 15 years at 10 percent he will be paying J\$128/month, or 13 percent of his salary just for a plot of serviced land.

In order to reduce the cost of the serviced lot, two categories of cost savings must be examined. The first concerns reducing the costs of development per se. More efficient site planning will lower costs considerably. Lot arrangements that reduce lengths of road, water and sewer line and reduce site preparation costs are important considerations. With good design, construction standards can be lowered without negatively affecting the project, particularly if road widths can be narrowed, curbs and gutters eliminated, construction specifications lowered, and utilities moved to the side of the road. Start-a-home lots can be reduced as low as 1200 sq.ft. in some cases which will provide considerable savings over the current 3000 sq.ft. lot size requirement. Parking requirements at lower income levels can likewise be drastically reduced. Also important is the selection of the site itself to minimize development costs. Slope, subsurface conditions and access to infrastructure are important variables. These cost reduction measures are illustrated on Table B3 where raw land development costs of conventional subdivision design are compared to those of a more efficient design.

The second major category of cost reduction concerns the development of land where some infrastructure investment has already been made. Jamaica has many abandoned or premature subdivisions at various stages of completion. In 1979, a Project Evaluation team established by the Government reviewed over 70 of these subdivisions, preparing an analysis of 18 of them. While location, site conditions, amount of development, sales activities, and legal conditions vary considerably on each one, they all possess some degree of historic costs of infrastructure development. Further, land costs are currently depressed in Jamaica which may bring discounted prices on land held for some time where the cost basis is low. (A recent solicitation by the Task Force on Marketing produced numerous small plot offerings, many at prices less than current market value). The risk in improving this "historic" land is that the existing subdivision patterns, location and site conditions may not meet the site selection and design parameters mentioned previously. Likewise, marketing and Parish approval may prove to be difficult. Nevertheless, the parcels offer excellent opportunities for cost reduction and should be given first priority in site evaluations.

In addition to the technical and cost problems of serviced lots, there are institutional issues as well. The most generic of these is that there are virtually no pure "land" developers in Jamaica. Due to difficulties of dramatic land speculation and premature subdivision development in the 1970's, the Town Planning Department has pursued a policy of requiring any developer of a

subdivision to "build or cause to have built" the housing as well. This has not always resulted in a 1:1 "seeding", (raw lot to house construction) but it has, along with general economic conditions, effectively discouraged development of lots only. Today land developers and builders are one in the same in Jamaica, which further suggests a program that addresses both the infrastructure development and housing construction together.

A second institutional question concerns the extent to which the private sector will be attracted to just lot development and sales. With economic feasibility, and therefore affordability, already made difficult at the lower income levels, the margin of profit above overhead and other costs for a J\$10,000 lot may be unattractive for conventional private sector involvement. Further, conventional financing of lot sales very often requires as much as 50% down with shorter terms (10-20 years) than full mortgages. This activity may not be attractive to private financial institutions unless the prospect of construction and long term financing is available as well.

A third institutional question concerns what kind of services to offer to the lot purchaser. At one end, as mentioned, the low income lot owner is not equipped to build his own house without assistance of several kinds. Further, "self-help" housing schemes have not fared well historically in Jamaica. A recent exception is Orange Bay, near Negril, managed by the Urban Development Corporation. Essentially a squatter relocation project, UDC provides minimally serviced lots (including pit latrine sewage disposal) under a lease purchase plan for J\$5,500 per lot in phase II (1985). Owners can build a temporary shelter until they are ready to build a permanent house at which point UDC provides technical assistance during construction. At the other end, negotiating a construction contract, not to mention short and long term financing, is likewise unlikely for the low income lot owner.

Providing partial construction along with the lot has fared no better. The World Bank Jamaica Sites and Services Project (Loan 1003-JM), initiated in 1974, contained 6,000 lots spread over 8 sites with three options; completed party wall, constructed sanitary core, or sanitary core and shell shelter. The project was terminated in 1983 with mixed results. In addition to management and design deficiencies and cost overruns, the project audit questioned the aided self-help idea at a fundamental level and points out inherent difficulties in managing this kind of project.

The build-on-own-land project managed by MOC(H) has also encountered some difficulty. Since land owners may contract with a contractor to build a previously approved design for larger houses or a start-a-home from the KIW building system. MOC(H) disburses construction funds to the contractor and provides the permanent long term financing. Despite low volumes of construction due in part to scattered sites, the MOC(H) has a regionalized technical staff in place capable of handling a substantial volume of construction.

Despite these questions, the affordability problems associated with both public and private start-a-home construction virtually dictates that feasible sites and services schemes must be found as a viable alternative to low income housing delivery. Three options are posed here, each seen as a pilot program to test a particular sites and services approach.

## 2. Component/Objectives

The following objectives are posed for the Sites and Services Component:

1. To provide a target of 1200 serviced lots to households within the affordability limits for the purpose of building or having built their own home.
2. To provide the technical and institutional support necessary to assist low income "lot owners" to build or have built their own home.
3. To involve elements of the private sector to the maximum extent possible in both the lot development as well as the home building process.
4. To make maximum use of previously sunk investment in premature or abandoned subdivisions to lower the costs of development.
5. To establish and test viable sites and services schemes in Jamaica.

### B. Implementation Strategy

#### 1. Project Activities

The Sites and Services component is distinguished from Start-a-Home by the method of delivery of the housing unit. Sites and Services includes the means by which the individual builds or has built his unit whereas Start-a-Home is defined by a unit, at some degree of completion, that is made available for sale to a prospective owner. Within the Sites and Services component, three main options are proposed. The options are defined by two main features; first, the degree of public and private sector involvement and second, the method of construction employed for the house, either primarily self-built or contracted. These options are outlined as follows with detailed descriptions below:

- Option 1 - A government produced and financed lot made available on a lease-purchase plan to owners who then build their own homes (400 units).
- Option 2 - A lot developed and sold by a land-owning sponsor like a Church in joint venture with the NHC for either self-built or contracted homes with loans available through a local Credit Union (400 units).
- Option 3 - A lot developed and sold by the private sector to owners who then contract for their home, also through the private sector (400 units).

#### Option 1 - Publically Serviced Lots

Description: These subdivisions are intended for primarily rural applications with lower land costs and larger lots (2500 sq.ft.) which can include small agricultural plots. Land and infrastructure development are provided through the NHC and EDCO. Lots are disposed on a no down payment, lease-purchase plan over a ten year period. After 25% of lot cost is contributed (which could be as a single down payment) the plan can be converted to a straight loan. The owner is able to build a temporary shelter on the lot as he wishes but must commit to permanent construction at some point. He must choose from among plans offered by NHC or present a plan for approval. EDCO will be responsible for approving the design and

for technical assistance and supervision during construction. EDCO's fee will be included in the cost of the lot. Building material disbursement will be made available by NHC with CHFC or NHT providing and then servicing the permanent mortgage. A second option for home construction would be for the owners to contract with a small local contractor through NHC. In this way NHC disperses funds to the contractor and supervises construction, while CHFC or NHT assumes the graduated permanent mortgage.

Site Services: Minimal infrastructure will be provided including "Barber green" roads without curb and gutter and water service laterals only (individual connections to be added as necessary). The lot will come equipped with a pit latrine which could be upgraded to an absorption pit/septic tank system by the owner at a later date. Site design must be efficient to minimize road lengths and utility runs.

Institutional Services: NHC and EDCO will provide project management with EDCO assuming responsibility for design approval and permitting and for technical assistance, training and construction supervision. Local Credit Unions will make short term building material loans available for owners pursuing construction of their own house.

Feasibility: Lots will be targeted for price of J\$8,000-J\$10,000 which is well within the affordability limits, particularly with the graduated payment permanent mortgage.

#### Option 2 - Sponsor Serviced Lots

Description: This option is intended for land holding institutions (such as Churches) who are both able and willing to act as project sponsor. The sponsor will act as project manager, responsible for marketing lots and general management of the construction program.

The sponsor will joint venture with NHC with the land title going to NHC. NHC will finance the infrastructure costs. EDCO will manage the infrastructure development and the technical assistance as proposed in Option 1. The owner may purchase a lot outright, finance lot and construction together, or take out a loan for only the lot development costs in order to hold the lot while waiting to build. The owner has two alternatives for house construction. The first resembles Option 1 where he builds his own house, taking short term loans from a local Credit Union. At 90 percent completion the owner will be entitled to a USAID. financed mortgage through a Credit Union or perhaps through NHT or CHFC, if he qualifies. The mortgage will pay off the other loans and reimburse the sponsor for the land cost at a previously agreed upon price. In the second alternative the owner contracts with a builder for construction of the house. This process is described in Option 3.

Site Services: Subdivisions will be fully serviced with water, roads without curb and gutter, and sewage disposal system, either a central system such as pond or package plant or an individual pit/tank system, as site conditions and development costs will allow. Lot sizes will be in the 1500 sq.ft. to 2500 sq.ft. range, depending on the nature of the market in that location and the development economics involved. Site design efficiencies must be incorporated to achieve desired sales prices.

Institutional Services: The Sponsor is clearly the key actor in this option, providing general marketing and management and willingness to carry the land until the final take out. Under the self-build alternative, EDCO provides technical assistance as in Option 1. The local Credit Union (presumably that of the Sponsor, if a Church) provides both short term lot and building loans as well as permanent mortgages. NHI and CHFC may also provide permanent mortgages, if owners qualify. Once NHI has selected and begun work on a particular subdivision, the sponsoring Credit Union(s) can be identified with the assistance of JCCUL. NHI then will be authorized to place an agreed upon amount of funds with that Credit Union.

Feasibility: Lots will be targeted for a price of J\$10,000-J\$13,500, including land costs. In the first alternative, with a lot down payment of \$2,500 (25% of the J\$12,000 sales price minus J\$2,000 for land cost) and a construction cost of J\$22,000 (at 90% completion and with 15% sweat equity labor) the permanent mortgage equals approximately \$31,500 which meets the affordability criteria. The feasibility of the second alternative will be outlined in Option 3.

### Option 3 - Privately Serviced Lots

Description: This option takes maximum possible advantage of private sector involvement in each phase of development; land, infrastructure and house construction. The development of the lots will be carried out by a builder/lender team approved by NHI who will also be approved for house construction as well. The lot owner can finance the lot separately or finance the lot and house construction together. The builder agrees to build one of several approved start-a-home designs with a mortgage that falls within the affordability limits (the down payment varying according to the house type). By contracting with the builder/lender team, the owner arranges long and short term financing, as well as a construction contract at the same time, resulting in a one-stop-shopping approach. In some cases more than one builder/lender team could be approved for a given subdivision, giving the owner some flexibility of choice. However, this will result in two transactions, the purchase of the lot and the contracting for house construction. In essence, this option is a privately financed build-on-own-land approach where the owner's land is within a serviced subdivision, providing efficiencies that B.O.L. schemes have not had in the past.

Site Services: Subdivisions will be fully serviced with roads without curb and gutter, water, sewage disposal, either a central system or individual pit/lank units as site conditions and development costs will allow. Lot sizes will be in the 1500 sq.ft. to 2500 sq.ft. range depending on the market and development costs, as in Option 2.

Institutional Services: As with other private sector components, NHI will manage the process, prequalifying builder/lender teams, house plans, and providing minimal construction supervision. The approved lender provides construction loans, lot purchase loans and permanent financing, as necessary.

Feasibility: Lots will be targeted for a price of J\$12,000-J\$14,000, which includes interim financing, builder's fees, profit, marketing, and overhead on the lot development itself. Where the lot development and house construction are combined, the builder's overhead and profit can be rolled into the permanent financing bringing the actual lot prices to J\$10,000-J\$13,000. At 25 percent down, the amount required to secure just the lot would be J\$3,000 J\$3,750.

## 2. Site and Developer Selection

Site Selection: The selection of sites for public projects or the review of sites proposed by builders for private projects will follow the same criteria for all proposed options. Premature subdivisions will have additional criteria to consider. As a general rule, once market and accessibility criteria are met, the site is evaluated on the basis of total cost of development; will it deliver a lot at the targeted sales price? To do so, cost savings must be realized in virtually every category.

Raw Land: For projects on raw land, sites will be evaluated on much the same basis as start-a-home projects. Low land costs; minimal environmental problems, particularly with respect to development costs; proximity to existing infrastructure; proximity to transportation, employment, and community facilities; and proximity to housing demand are all obvious considerations. In addition, site layout and design must provide efficiencies if target costs are to be reached. Where this necessitates lowering standards, effort should be made in advance to gain necessary approvals.

Premature Subdivisions: In addition to the above, the following special considerations should be applied to abandoned or premature subdivisions:

1. Most premature subdivisions are platted for middle income housing, with lots in the 8,000-10,000 sq.ft. range. Therefore, even if the investment is there, it must lend itself to efficient "retrofitting" for low income development and lot sizes.
2. In larger subdivisions, it is possible that only a portion of the site will be available or desirable for low-income lots. The marketability of this mixing of lot sizes must be tested and the acceptability by the Parish Council assured prior to site approval.
3. Many subdivisions have pre-sold lots and some even construction. Potential title and other legal problems must be assessed. In some cases it may be necessary to buy out existing lot owners which may make project costs prohibitive.
4. Previous infrastructure investment must be thoroughly checked. Water and sewer lines must be inspected. Costs of repair or additions may ultimately be more than starting from scratch.
5. Premature subdivisions are not an automatic windfall. If previous land and development investment are assigned a current market value, costs will probably be higher than those on raw land. Significant discounting to some level of historic cost are necessary for the premature subdivision to be attractive.

### Developer Selection

Option 1: In this option, small contractors in the area in which the subdivision is located will have to be prequalified for those lot owners who do not choose to build their own home. Standards need only include documentation of skill level and some degree of past performance. When the owner chooses from among a number of acceptable plans, EDCO will need to work with the contractor in negotiating a price, which will be the final step in the selection process.

Option 2: In this option where a sponsor enters into a joint venture with NHC to develop the land, criteria for evaluating sponsor proposals will have to be formulated. The site must first meet site selection criteria. The sponsor must then be evaluated on his ability to market the land and carry the land costs. Consideration will be given to the sponsor's relationship to the proposed credit union for construction and permanent financing. Builders would be qualified in much the same way as for Option 1.

Option 3: In this purely private sector option, a single full proposal from a prospective builder with a piece of land must be evaluated by NH1. In addition to evaluating land, infrastructure, and construction costs for several alternative house designs, the builder must prove his capacity to do the work. He must also have technical approval for his proposed house plans and his proposed relationship with a construction/permanent lender must be approved.

In summary, despite the presence of several options the selection process for options 1 and 2 can be handled by NHC while Option 3 will be managed by NH1. This minimizes the points of liaison with USAID which would need to approve the project at three main points; site and developer selection, lot development and, house construction.

### C. Component Costs

#### 1. Unit Costs

Table B3 presents a comparison of the cost to develop a lot using required design and construction standards with that of a lot based on design and construction efficiencies. These designs are shown on Figure B1, which analyzes various alternatives for redesign of a typical premature subdivision. Table B3 indicates that up to 40% may be reduced from the cost of a "standard" lot by using good design practice with some reduction of design standards.

Table B4 presents a comparison of the total development costs for each of the three options. Some savings in costs are incorporated in Option 1 as discussed previously. Table B4 clearly shows the increasing 'soft' costs with each successive option with a cost of \$2,350 for Option 3, or 16 percent, which is on a lot produced entirely by the private sector. Some reduction in each of these soft costs could be achieved if the lot sale and the house construction were contracted together rather than selling the lot as a separate transaction. This is the recommended approach for Option 3.

#### 2. Component Costs

Table B5 shows the suggested number of lots to be allocated to each of the options, with 800 allocated to the public sector and 400 allocated to the private sector. Based on these allocations and on an assumed final typical mortgage amount of J\$34,000 per unit (30 percent assigned to the lot and 70 percent to the house) to meet the affordability criteria, the total program amount for sites and services alone is approximately \$2.2 million, \$1.5 million for the public sector and \$0.7 million for the private sector. (See table B-6)

If one assumes that among the 1200 houses, 300 will be owner built and financed, then 900, or 75% will need A.I.D. supported financing. This would amount to \$3.8 million of program funds being allocated to these owner originated construction projects.

TABLE B3  
SITES AND SERVICES  
COMPARATIVE COSTS OF LAND DEVELOPMENT (a)

	Alternative A Built to Standard (b)	Alternative B Proposed design (c)
Land Costs (d)	J\$ 3,920	J\$ 2,500
Infrastructure Costs		
Site Clearance, allow (e)	1,500	1,000
Site Drainage, allow (e)	500	250
Roads (f)	4,200	800
Footpaths (g)	0	680
Water Supply	1,800	1,240
Sewer Lines	3,600	2,100
Sewage Treatment (h)	3,200	2,295
10% Miscellaneous	1,480	836
Subtotal	J\$16,280	J\$ 9,201
Total Development Cost/Unit	J\$20,100	J\$11,701
X Number of Units	252	392
Project Cost	J\$5.1 million	J\$4.6 million

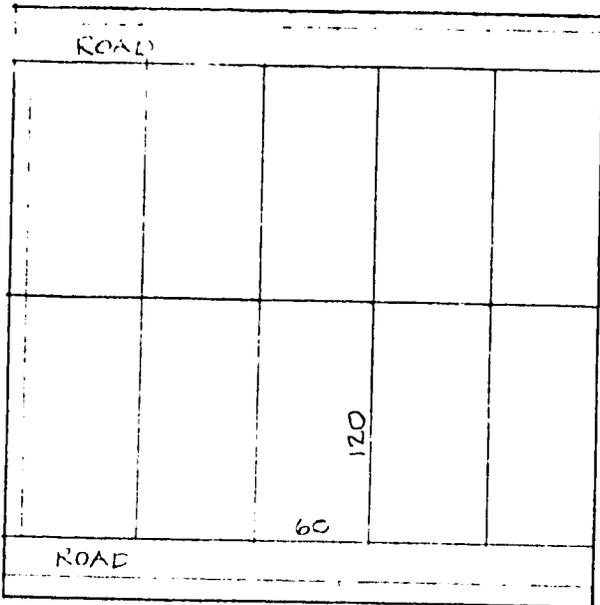
- (a) Costs are given per unit. Project is assumed to be thirty acres with some land assigned to open space and sewage treatment pond. Costs are figured on actual quantities and unit costs (provided by EDCO and other sources) calculated for each alternative. Costs compare favorably with similar comparison done for Old Harbour Villas Start a Home project in March, 1985.
- (b) Alternative 1 follows all of required town Planning standards (except those for open space) which yields 252 units on 3000 sq.ft. lots (see figure B1a).
- (c) Alternative 2 follows design presented on figure B1c which yields 392 units on 1800 sq.ft. lots.
- (d) Raw land costs assumed at 75¢/sq.ft.
- (e) Site assumed to be relatively flat and free of drainage problems.
- (f) Alternative 1 built to standard with curb and gutter; Alternative 2 assumes 16' 'Barbergreen' roadway without curb and gutter.
- (g) Footpaths are ample to allow vehicles if necessary: 20 ft. right-of-way with 10ft. of paving.
- (h) Central sewage treatment facility assumed to be of pond type.

TABLE B4  
SITES AND SERVICES  
COMPARATIVE UNIT COSTS FOR THREE FINANCING OPTIONS(a)

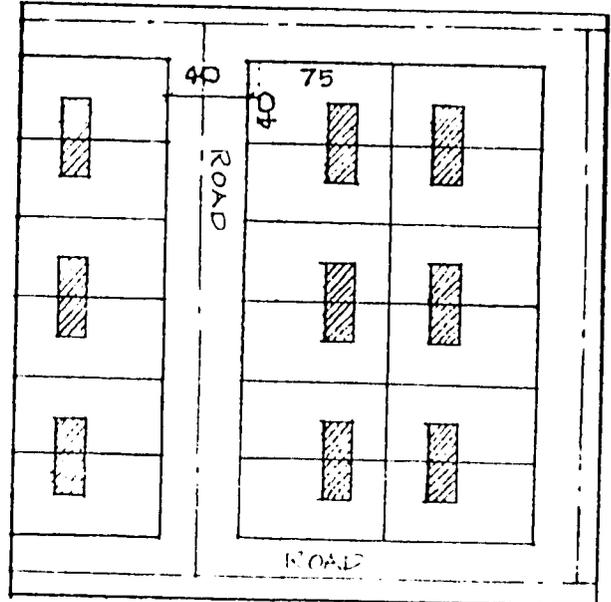
	Option 1 Publically Serviced Lots	Option 2 Sponsor Serviced lots	Option 3 Privately Serviced Lots
Lot Size	2,500 sq.ft.	1,800 sq.ft.	1,800 sq.ft.
Land Cost (b)	J\$2,000	J\$ 2,500	J\$ 2,500
Infrastructure Cost			
Site Clearance	1,000	1,000	1,000
Site Drainage	250	250	250
Roads (c)	600	800	800
Footpaths	750	680	680
Water lines (d)	1,240	1,240	1,240
Sewer lines	0	2,100	2,100
Sewage treatment(d)	2,000	2,295	2,295
Misc. (10%)	584	835	835
Subtotal	6,424	9,200	9,200
Other Costs			
Fees (e)	650	650	650
Interim Financing	0	0	200
Marketing	0	0	250
Contingency	0	250	250
OH & profit	0	250	750
Closing (f)	800	250	250
Subtotal	1,450	1,400	2,350
TOTAL COST PER LOT	J\$9,874	J\$13,100	J\$14,050

- (a) Each option is described in text of Annex B-3. Base costs are taken from proposed design illustrated in figure 1c and cost analyzed in Table B3.
- (b) Land cost assumed at 50¢/sq.ft. for Option 1, and 75¢/sq.ft. in Options 2 and 3.
- (c) Option 1 has less road length and more footpath length than others.
- (d) Option 1 assumes that water connections and absorption pit sewage system has been installed. However, these can be forestalled until owner is ready resulting in an J\$1,800 initial cost reduction.
- (e) Design and engineering fees figured at 7% whether in public or private sector.
- (f) Option 1 closing costs include a fee to NHC of 10% to cover all interim financing, overhead and closing costs. Option 2 and 3 closing costs are assumed exempt from transfer and stamp tax.

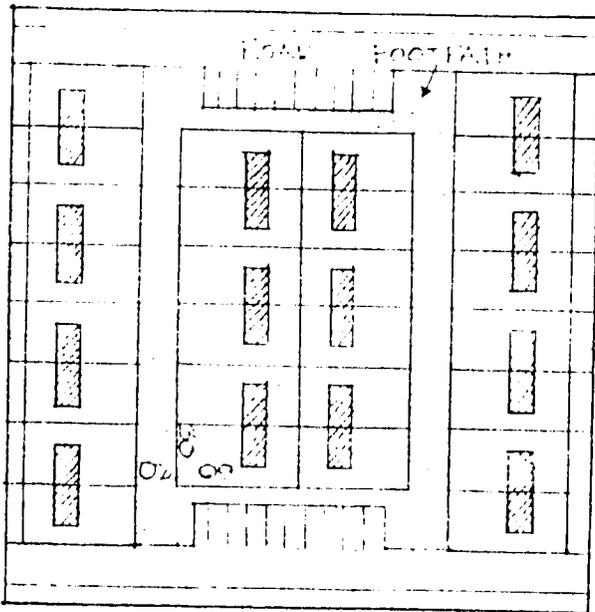
FIGURE B-1  
SITES AND SERVICES  
START-A-HOME SITE DESIGN ALTERNATIVES(a)



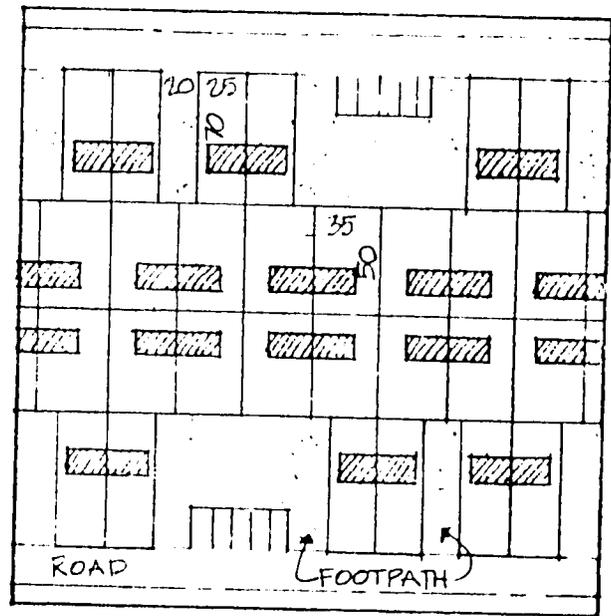
a. Existing Premature Subdivision  
8000 Sq.ft. lots  
10 units, 5.6 units/acre



b. Subdivision Redesigned to Existing Standards  
3000 Sq.ft. lots  
18 units, 10 units/acre



c. Revised Design A  
1800 sq.ft. lots  
28 units, 17 units/acre



d. Revised Design B  
1800 sq.ft. lots  
28 units, 17 units/acre

(a) Assumes a typical premature subdivision with road network and water lines previously installed. More efficient site designs could be achieved for b, c, and d if starting with raw land. Comparison is made on a 1.8 acre portion of subdivision.

TABLE B5  
SITES AND SERVICES

A. TARGET PRODUCTION VOLUME AND INSTITUTIONAL ROLES

Option	Sites and Services		Owner Originated Construction		Number of Units
	Lot Development	Lot Purchase	Construction	Permanent	
Option 1--Public Self built or Modified build on own land	NHC	NHC	NHC	CHFC, NHI	400
Option 2--Sponsor Self-built or contracted	NHC	Cr. Unions	Cr. Unions	Cr. Unions NHT, CHFC	400
Option 3--Private a. Privately financed (through NHT)	Banks	Banks	Banks	Banks	400
Total					1,200

B. MORTGAGE FUNDS REQUIRED BY SOURCE(a)

Source of Financing	Sites and Services		Owner Originated Construction		Total J\$'s
	Number of Units	Millions of J\$'s	Number of Units	Millions of J\$'s	
Public Funds	400	4.74	400	11.06	15.80
Credit Unions	400	4.08	400	9.52	13.60
Banks	400	4.08	400	9.52	13.60
TOTAL J\$		12.90		30.10	43.00
TOTAL \$		2.15		5.02	7.17

(a) Assumes an affordable mortgage of J\$34,000 for privately financed units and a J\$44,000 total unit cost. If this is divided 30% to the lot and 70% to the house, J\$10,200 of the mortgage is assigned to the lot and J\$23,800 is assigned to the house. For the public sector a graduated payment mortgage of J\$39,500 is assumed (5% downpayment) which produces an assignment of J\$11,850 to the lot and J\$27,650 to the house.

TABLE B6  
SITES AND SERVICES  
TOTAL COMPONENT FUND ALLOCATION(a)

Sector	Number of Units	Sites and Services	Number of Units(b)	Owner Originated Construction	Total
Public Sector					
Option 1	400	\$ .79	300	\$1.38	\$2.17
Option 2(c)	400	.68	300	1.19	1.87
Subtotal	800	1.47 (1.50)	600	2.57 (2.6)	4.04 (4.1)
Private Sector					
Option 3	400	.68 (.70)	300(b)	1.19 (1.2)	1.87 (1.9)
TOTAL	1,200	\$2.15	900	\$3.76	\$5.91
Rounded		\$2.2		\$3.8	\$6.0

(a) In millions of U.S. dollars

(b) Assumes AID will support financing for 75% of total units built or 900 of 1200 units since some lot owners will pursue construction on their own.

(c) Option 2 is assumed to be publically financed. Although funds will be placed with credit unions for lot purchases and permanent mortgages, NHC will be responsible for site development.

Of this total, \$2.6 million would be allocated to public sector and \$1.2 million to private sector projects. These amounts are allocated to the Start-a-home component (See Annex B1). The total A.I.D. component cost for both sites and services and owner originated construction is \$6.0 million, \$4.1 million allocated to the public sector and \$1.9 million allocated to the private sector, (see table B6).

#### D. Institutional Responsibilities

The institutional responsibilities have been described in the discussion of each option. Therefore, a summary of the institutions involved with both Sites and Services and Owner Originated Construction is presented below:

National Housing Corporation: NHC will function as the overall project manager for Options 1 and 2, taking full responsibility for the lots and houses produced by the public sector, as well as responsibility for selection and contractual arrangements with all private sector entities in Option 2, including joint venture arrangements with land owners.

Estate Development Company: EDCO will function as the technical arm of NHC, providing reviews of sites, site plans and house plans; technical assistance to lot owners pursuing self-build options; and construction monitoring in all options.

National Housing Trust: NHT will manage Option 3, placing funds with lending institutions as projects are approved. This process is identical to the private sector Start-a-Home program. NHT can also provide permanent mortgages for publicly provided lots and units where owners qualify.

Caribbean Housing Finance Corporation: CHFC will provide permanent mortgages for publically provided units and act as a back-up lender to local Credit Unions in Option 2.

Jamaica Cooperative Credit Union League and Local Credit Unions: The Credit Unions will provide lot purchase financing and construction financing in Option 2. Construction financing will be either as full construction loans or as smaller building material loans to lot owners pursuing self-build options. They will also provide permanent mortgages in Option 2 and act as back up lender to NHT and CHFC in Option 1.

Building Societies: The banks will provide land development loans, lot purchase loans, construction loans and permanent financing in Option 3.

#### 4. Comprehensive Urban Improvement

##### I. General Problems and Component Objectives

##### A. Problem Statement

Approximately 35 percent of the island population of 2.3 million lives in the Kingston Metropolitan Area (KMA) and although the island population is growing at an average rate of 1 percent per annum, Kingston grew at more than twice this rate over the 12 year period from 1970 to 1982 (1). This has placed serious strains on the existing urban fabric and infrastructure particularly in the older more centrally located neighborhoods which have often deteriorated from stable middle-income areas to overcrowded deteriorating low income areas. Despite these problems, the assets which the urban neighborhoods possess are significant:

- \* Housing stock, usually of substantial construction, although deteriorating through lack of maintenance;

(T) 1982 Census Preliminary Results

- \* Infrastructure - roads, water, sewer, electricity -- in place, although needing some upgrading
- \* availability of urban amenities - clinics, schools, churches and shops, often developed as an integral part of each neighborhood;
- \* High accessibility to urban area employment, either by walking or public transport;
- \* A strong sense of "community"; difficult to quantify but reflected in the high concentration of church groups, volunteer business groups and political activity.

Former attempts to address problems of urban residential deterioration have largely contributed to decentralization. Relocation of families in highly subsidized 3 and 4 storey apartments through urban renewal, and sponsorship of low-cost housing and squatter upgrading on the periphery of the core urban area has been the pattern. (HG-010 included an urban tenement yard upgrading component but it wasn't initiated because of political tensions.) With the severe inflation in recent years, particularly in building materials, the cost of providing new housing has risen to the point where even basic Start-a Homes are barely affordable to low income families. The three basic elements of land, infrastructure and construction, when combined to produce a new home, result in a product beyond the means of many low-income families. The basic thrust of a comprehensive urban improvement program is to concentrate on areas where one or two of these three basic elements are already available, and by providing assistance through various permutations of public and private programs to effectively revitalize these areas, neighborhood by neighborhood into healthy, safe environments.

Virtually all of the older high density neighborhoods in Kingston lie within an area bounded by Hagley Park Road and Waltham Park Road on the west, Retirement Road, Cross Roads and South Camp Road on the north, and the Kingston/St Andrew Parish boundary to the north east. This area is designated by Kingston Town Planning Department as suitable for a density of 150 habitable rooms per acre, the highest in the metropolitan area. This translates to approximately 50-75 dwelling units per acre. It includes neighborhoods such as Delacree Pen, Whitfield town, Trench Town, Denham town, Jones town, Allman town, Campbell town, Franklyn town, Passmore town, Bournemouth Gardens, Rollington town, Norman Gardens and Springfield. Many of these are well-defined neighborhoods with boundaries defined by major arterial roads, gullies and larger tracts of institutional lands such as hospitals, cemeteries and other government properties.

A schedule of areas of upgrading was identified in the Urban Growth Management Study<sup>(2)</sup> prepared in 1978. A short list of typical neighborhoods is shown in Table B7 below.

A comprehensive socio-economic analysis has never been undertaken for these neighborhoods. However, with 1982 census data becoming available it will be possible to document income, employment, housing conditions and tenure on a census track basis. This, coupled with windshield surveys of land use, building conditions and environment will enable an up-to-date analysis to be made of each area in a reasonably short period of time.

Table B7  
Potential Urban Upgrading Areas

<u>Special Area</u>	<u>Percentage of Households Sharing Toilet Facilities</u>	<u>With more than 4 Person/Room</u>	<u>Population Density Person/Acre**</u>	<u>Open Space Acres/1000</u>
Delacree Pen	77%	34%	28	.53
Cockburn Pen	75%	36%	24	-
Trench Town	68%	37%	44	.29
Whitfield Town	87%	27%	38	-
Jones Town	91%	34%	52	-
Denham Town	95%	35%	58	-
Allman Town	98%	21%	52	-
Passmore Town	87%	24%	48	-
Last Downtown	89%	27%	22*	.
Waltham Gardens	64%	25%	20	-
Newton Square	74%	16%	21	-

Source: TPO

\* This figure appears to be low compared to recent analyses by Kingston Restoration Corporation (KRC) showing a density of 68 persons per acre.

\*\* This information needs to be correlated with 1982 census results as a few areas of West Kingston had large population decrease due to political reasons.

Recent analyses of 1982 Census data by Kingston Restoration Corporation of the East Downtown neighborhood (in the Barry St/High Holborn St/Hanover St area) indicate the following:

Table B8

East Down Town Housing Conditions

Population	5811	(a 14.4% reduction from 1970)
Households	1747	
Avg. Household size	3.3 persons per family	
Neighborhood area	85 acres	
Density	68 persons per acre	
	20.5 households per acre	
Dwelling types:	51.7% Separate house	
	12.3% Semi-detached	
	10.0% Apartment building	
	6.5% Part Commercial building	
	1.4% Other	
	(24.6% No response)	
Dwelling size: 1 room	49.1%	
2 room	15%	
3 room +	7.6%	
	(28.3% No response)	

Source: Kingston Restoration Company

Approximately 40% of the East Downtown residents who responded to the 1982 Census were employed. Approximately 27% were unemployed, 12% were students and 23% were either home-makers or retired. On this basis, then, there is an average of 1.3 employed persons per family, and thus a reasonably good expectation that many families would be able to participate in loan programs designed to rehabilitate, extend, or improve the infrastructure of their homes.

#### B. Component Objectives

The overall objective of the Comprehensive Urban Improvement Component is to improve housing standards and living conditions at nominal unit cost, by building on urban fabric, neighborhood interest, infrastructure, private and public institutions and other related urban programs which are already in place. Construction, lending programs and any acquisition of land to facilitate construction will be firmly centered in the private sector, although overall coordination may be funded by the public sector. Individual project design and management will be derived from specific neighborhood considerations and consultations.

The following additional objectives will apply:

1. Ensure a sufficient "critical mass" of revitalization activity, by concentrating a variety of housing-related programs in a small area - typically a well-defined neighborhood;
2. Stimulate revitalization of existing housing stock in areas where:
  - (i) A majority (percentage to be defined) of families earn less than the median income.
  - (ii) The inherent value and quality of the housing stock is substantial, but in need of urgent repair if it is not to become dilapidated beyond the point of reasonable recovery (This may be measured by the number of structures of inherently sound masonry construction, requiring only improvement of secondary components such as roofs, doors, windows, plumbing.)
  - (iii) There are historical investments in public amenities such as schools, clinics, churches, etc.
  - (iv) The improvement of housing stock can stimulate and support improvements in nearby commercial and employment zones.
  - (v) There is clear evidence of local based neighborhood leadership.
3. Encourage private initiatives by property owners, developers and individuals to improve existing homes and land;
4. Substantially increase the incidence of freehold tenure in order to safeguard investments and ensure proper maintenance in the future;
5. Maximize the involvement of community groups, private non profit organizations, and the adjacent business community in all phases of planning and implementation; and

6. Enlist the active support and participation of neighborhood banks, building societies and credit unions as project lending institutions. Minimize the burdens of supervision by public agencies, by placing the responsibility with private lending agencies to ensure contractor efficiency and timely completion of construction projects.

### C. Target Population

The immediate target population for the Comprehensive Urban Improvement program is those families or households living in neighborhoods selected for the program located within or immediately adjacent to the high density zone of Kingston as defined by the Town Planning Department (See for example, table B7).

The general beneficiaries will be the entire population of these selected neighborhoods, with additional benefits to commercial establishments in and adjacent to the neighborhoods. Assuming three neighborhoods are selected for the Component, with an average density of 30 dwelling units per acre, and a combined residential area of 150 acres, the beneficiary population will be 15,000 or approximately 4,550 families. Since the overall intention of the Component is comprehensive upgrading, a further goal should be established to directly involve at least 40% of all families in at least one of the improvement programs. Thus the direct target of this component is approximately 1800 households.

### II. Implementation Strategy

#### 1. Project Activities

Within each selected neighborhood or Special Activity Area, a variety of revitalization projects with either private or public sponsorship will be eligible for funding. A preliminary list includes:

- i) Development of infill housing on vacant sites, either as Start-a-homes (SAH) on larger lots or as individual build on own land (BOI) units.
- ii) Settlement upgrading, providing basic infrastructure, access and utilities, to homes within yard areas, with subdivision, sale and freehold occupancy by beneficiaries.
- iii) Home improvement loans for eligible improvements to owner-occupied units. Eligible improvements will include, but not be limited, to:
  - Plumbing and sanitary fittings;
  - Repair or replacement of secondary structural items such as roof, doors, windows, provided that the primary structure is sound, or can be made so relatively cheaply;
  - Add-a-room, typically a bedroom area, but also a wet-core (kitchen and bathroom) if none exists; and
  - Drainage, regrading and yard improvements, resulting in protection of homes from flooding or other health and safety problems.
- iv) Commercial Building Improvement Loans for structures used for both residential and business purposes.

- v) Self-help projects involving simple Paint-up/Fix-up improvements, using materials donated by suppliers, volunteer organizations and/or partly funded by donor grants for equipment, training.
- vi) Environmental Improvements such as removal of street rubble, extension or improvement of infrastructure, street lights, bus shelters, benches, pocket parks or tree planting.

Finance for development, upgrading and improvement loans (item i through iv) above would most likely be provided through local building societies or credit unions and to be undertaken within the private sector. The measure of success within a neighborhood would be the rapid commitment of funds earmarked for these activities. Environmental improvements (item vi) would be undertaken to fund capital improvements which will benefit the entire community. Funds will be released only when a substantial commitment of funds and self-help has been made to improvements in other areas (Item i through v).

An initial commitment of funds will be made to each Special Activity Area, divided between Private Construction Projects and loans (65%) and Environmental Improvements (35%). Distribution of financing among the various construction projects, and improvement loans will depend on planning priorities initially set within each neighborhood. A Neighborhood Improvement Plan will be prepared with close consultation and input from all segments of each community. Funds for Environmental Improvements will probably be triggered by the substantial achievement of all the goals of a Neighborhood Improvement Plan.

Technical assistance will be needed to help small contractors design and build settlement upgrading improvements. Assistance may also be provided to lenders who typically have not processed this type of loan. It should be noted that this is the first time that settlement upgrading has been attempted in Jamaica with a strong private sector orientation.

## 2. Selection of Special Activity Areas (SAA)

The process of selecting a limited number (3 or 4) Special Activity Areas (SAAs) is described elsewhere, but will involve a rigorous analysis of problems and opportunities for revitalization of a larger number (5 or 6) candidate areas. A suggested short-list of Selection Criteria is outlined below. Each selected Special Activity Area will satisfy the following conditions:

- a. The SAA must fall within, or be immediately adjacent to, the high density area (150 habitable rooms per acre) established by the Town Planning Department.
- b. The SAA must comprise a single neighborhood, with well defined boundaries (major arterial roads, drainage gullies, significant change in land use) and no major internal barriers to pedestrian movement.
- c. The majority of families in the neighborhood should earn less than the median income. (Statistics to be taken from 1982 Census data). Income data should verify the general affordability of programs to be offered in each SAA. Typical income data from HG 010 areas is shown in Table B10.

- d. The SAA should exhibit potential for all the eligible revitalization projects; i.e. there should be pockets of vacant land suitable for infill development, as well as yards and sections in need of upgrading. It is assumed that potential for utilization of Home Improvement Loans will exist in all areas. This condition is not intended to imply that all programs must ultimately be applied to each SAA, but merely that the potential exists.
- e. A large portion of residential structures should have substantial "life" in the primary structural elements (foundations, walls) as determined by expert windshield surveys.
- f. The SAA must be "sponsored" by at least two local community groups, churches or other non-political organizations who subscribe to the objectives of the Comprehensive Urban Improvement program and are willing to participate in Self Help programs. Sponsorship may be by letter, following initial group meetings.
- g. The SAA may not include or encroach on any other development or redevelopment areas of either UDC or MOC(H).
- h. The SAA must have central water and sewer systems adjacent to or serving at least (a portion) of the neighborhood. The SAA boundaries (as described under Condition 2, above) should not be artificially adjusted to satisfy this requirement. The SAA should also preferably be served by basic community facilities such as schools, clinic, convenience shopping and churches either within or adjacent to the neighborhood. Pocket parks need not be considered, since they may be provided in the Environmental Improvement program.

Following recommendations to be made in a Phase 1 report to MOC(H) and A.I.D., the Special Action Areas will be designated by MOC(H) under the Housing Act.

3. Criteria for Eligible Infill Housing and Settlement Upgrading Projects within Special Activity Areas

To encourage maximum activity in the SAA, public sponsored start-a-homes and upgrading activities will be combined with private sponsored improvements. Local buildings societies and credit unions will be invited to entertain applications for construction funds from developers, land owners and yard owners. Guidelines will be issued to these lending agencies indicating which projects should be considered eligible. A short list of guidelines is suggested below:

- a) All project sites should be entirely within the SAA.
- b) New homes (SAH or BOL) should benefit eligible low income families under the same guidelines of Component #1 of the HG-012 program.
- c) Yard upgrading should benefit a minimum of 10 homeowners per project (adjacent sites may be considered together) or at least 90% of the tenants of the project site whichever is greater. Retention of large portions of yards by a landlord will not be permitted. Upgrading projects must result in freehold tenure under the same Guidelines as Component #2 of the HG-012 program.

- d) Construction funds will be reserved based on submission of a outline proposal by developers.
- e) Construction funds will be released when the developer or property owner demonstrate:
  - o All valid permits have been acquired (Town Planning, Water, Sewer hook-ups, etc.)
  - o Clear title or a valid option to purchase clear title to any land involved
  - o A marketing plan including affordability by the target population
  - o Previous experience and on-time performance with other projects.

These conditions must be certified to project management in addition to any performance bonds or other safeguards which the lending institution may require.

Applications for construction funds will be cut off 18 months after announcement of the creation of a Special Action Area, or earlier if earmarked funds are fully committed. The 18-month cut-off will allow diversion of funds to other eligible programs within the SAA.

Start-a-Home or Build-on-own-land projects will generally be single-storey structures. However, where existing walk-up apartments predominate, infill housing projects may be of a similar type, provided affordability can be demonstrated and strata titles may be issued.

#### 4. Methodology

A four-phase implementation program has been devised for the Comprehensive Urban Improvement Component. The essential elements are:

##### Phase 1 Pre-Planning

By the Selection Committee (see below). Finalization of criteria for selection of Special Activity areas;

By consulting firm engaged by MOC(H). Data collection and analysis for Candidate Areas leading to selection and designation of 3 or 4 Special Activity Areas.

##### Phase 2 Neighborhood Planning

Assignment of a Neighborhood Improvement Coordinator (NIC), from MOC(H) staff and appointment (by Selection Committee) of a Neighborhood Advisory Committee (NAC). Preparation of plan for public sector activities and guidelines for private sector activities by the same consulting firm which completed the studies for area selection.

##### Phase 3 Implementation of Private Projects

Implementation and monitoring of all Construction, Commercial and Home Improvements under monitoring of private A & E, design and implementation of Self-Help projects (Paint-up, Fix-up, Street Cleaning, etc.)

Phase 4 Implementation of Environmental Improvements

Design, contracting and implementation of public environment improvements with private activities.

5. Project Task Descriptions

Phase 1. Pre-Planning

- Task 1.1 Finalization of selection criteria (see Section B2) for SAA's BY SAA Selection Committee consisting of representatives from public and private organizations including MOC(H), (Chairperson), Town Planning, Kingston Restoration Company, Association of Building Societies and the Jamaican Cooperative Credit Union League; in discussions with USAID.
- Task 1.2 Finalization of selection criteria (see Section B3) for eligible infill housing and settlement upgrading projects.
- Task 1.3 Finalization of criteria for public expenditures on Environmental Improvements (see Phase 4), listing of eligible improvement projects and percentage of Component financing for this element. (Suggested 35%).
- Task 1.4 Selection of Planning Consultant by MOC(H) to operate under private contract with MOC(H) to prepare Tasks 1.5 through 1.10 below:
- Task 1.5 General Data Collection in the urban area, including socio-economic data, census data, planimetric maps, infrastructure maps, delineation of UDC, KRC and other development projects. Collection of all relevant planning documents and development standards.
- Task 1.6 Identification of Candidate Neighborhoods (5-6) and analysis of data pertaining to selection criteria (task 1.1).
- Task 1.7 Obtain Aerial Photos of candidate areas.
- Task 1.8 Preliminary discussions with Banks, Building Societies, Credit Unions, etc., in candidate areas to enlist participation as designated lending agencies.
- Task 1.9 Finalize Management Framework including procedures and timing of SAA designation, appointment of Neighborhood Advisory Committees, reporting procedures, planning standards.
- Task 1.10 Recommend Special Activity Areas Report to the SAA Selection Committee and A.L.D.
- Task 1.11 Initial discussions with Community leaders from churches, Kiwanis, Jaycees, business groups, sports groups, etc.. Solicit "sponsorship" by at least two groups in each SAA.
- Task 1.12 Designation of Special Activity Areas by MOC(H) under Housing Act, after approval by SAA Selection Committee.

## Phase 2 Local Planning

The purpose of this phase is to develop a physical, financial and management plan for each SAA which has the full input of the community via their Neighborhood Advisory Committee (NAC). The development plans will be prepared by the private consulting firm. The Neighborhood Improvement Coordinator will be responsible for monitoring the preparation of plans, presentations to the NAC and coordinating private and public development activities. The NAC will not act as an approval body. It will report to MOC(H).

- Task 2.1 Appointment of Neighborhood Improvement Coordinators for each SAA by MOC(H).
- Task 2.2 Appoint Neighborhood Advisory Committees with local community, church and business leaders, representatives from MOC(H), town Planning and local lending institutions. Appointments should be apolitical and broadly reflect all community interests. Appointments to be made by Selection Committee.
- Task 2.3 Review Local Problems and Opportunities with NAC . Identify potential areas for settlement upgrading and infill sites by MOC(H) and private owners. Identify land-ownership problems, poor infrastructure, etc. Review opportunities for Improvement Loans, Self-Help, Environmental improvement.
- Task 2.4 Solicit Applications (by Lenders) for Construction Loans Lenders to receive proposals for the reservation of funds.
- Task 2.5 Local Data Collection. "Windshield surveys of land-use, building condition, environmental problems, architectural quality. Sample interviews to supplement census data on income, family size, etc., to determine affordability limits.
- Task 2.6 Preparation of Base Maps from Aerial Photos for planning and development purposes.
- Task 2.7 Preparation of Problems/Opportunities Report. Review with NAC, then with AID, MOC(H).
- Task 2.8 Preparation of Alternative Plans for each neighborhood. Possible alternatives would explore
- o Home improvements vs Commercial Improvements
  - o Settlement upgrading vs Home Improvements
  - o Private self-help (paint, fix up school; parks)
  - o Invironmental improvement on key internal pedestrian streets vs commercial arteries.
- The financial implications of each plan would be reviewed with the NAC and a preferred plan selected with community improvement targets.
- Task 2.9 Report on Preferred Neighborhood Improvement Plans. Review and approval by AID, MOC(H), town Planning, MOF

## Phase 3 Implementation of Private Projects

- Task 3.1 Deposit AID funds to Local Lending Institutions with guidelines for eligible projects and targets for Infill Housing/Settlement Upgrading/Home Improvement Loans/Commercial Improvement Loans from the Preferred Neighborhood Improvement Plan.
- Task 3.2 Solicit Qualifications and Prequalify Local Contractors for Home Improvement contracts. AID and MOC(H) to review qualifications. A limited number of contractors will be selected, specializing in different aspects of construction work, such as roofing, plumbing, masonry, etc.
- Task 3.3 Home Improvement Loan Applications. Homeowners to apply to Building Societies and for Credit Unions for Improvement Loans for specific projects.
- Task 3.4 Lending Institutions Select Eligible Projects. After reviewing construction estimates against each applicant's financial situation, the lending institutions will notify successful applicants and complete loan agreements with them. Qualified applicants may arrange for direct payroll deductions to repay loans.
- Task 3.5 Contractors undertake Projects, certify completion to lending institution and submit invoices for payment. Lenders prepare and submit title transfers where appropriate.
- Task 3.6 Enlist support for Self-Help Projects. Neighborhood Improvement Coordinator to contact suppliers for donations of paint, hardware, glass, etc. Business groups solicited for donations to defray costs. AID and/or other organizations to contribute "matching grant" of training, technical assistance, materials. Establish timetable, plan and budget. Review with NAC.
- Task 3.7 Undertake Self-Help Projects possibly on a street-by-street basis, with workshops on "how-to-do-it", a timetable for completion, and on-site assistance.
- Task 3.8 Monitoring of Private Projects. Lending institutions to provide quarterly summaries of construction activity, to Neighborhood Improvement Coordinator and MOC(H).
- Phase 4 Implementation of Environmental Improvements
- Task 4.1 Prepare Outline Plan and Budget of Environmental Improvements (by Improvement Coordinator) based on achievement of targets set in each Neighborhood Improvement Plan. Submit Outline Plan to EDCO for design and cost estimates. Review designs and costs with NAC. Select final preferred projects for approval by AID and MOC(H). Eligible projects include streetscaping, provision of additional infrastructure, improvements to public facilities such as parks, school play areas.
- Task 4.2 Approval of Environmental Improvement Plan by AID MOC (H).
- Task 4.3 Contracting by EDCO (or other agency) for approved projects.
- Task 4.4 Project Completion Report

B6. Implementation Schedule

The Comprehensive Urban Improvement Program is scheduled in four phases as follows:

Table B9  
Component #4 Timetable

	Months
Phase 1 <u>Preplanning leading to selection of 3 or 4 SAA's.</u>	1 through 6
Phase 2 <u>Neighborhood Planning for each SAA</u>	7 through 10
Phase 3 <u>Implementation of Private Projects</u>	
· Major construction	12 through 24
- Home and commercial Improvement Loans	12 through 24
- Self Help Proects	16 through 24
Phase 4 <u>Implementation of Environmental Improvements</u>	
· Planning, Design	12 through 16
· Contracting & Construction	16 through 28

C. Component Costs

Flexibility is called for in planning and implementing the Comprehensive Urban Improvement component, including important input by each Neighborhood Advisory Committee. It is thus not possible at this stage to identify exact numbers of units to be built or improved. It is suggested initially, that a 65% - 35% split be adopted between privately funded projects and public projects. The 65% of total component cost will be provided to private lending institutions for allocation to Start a Home, Build-on-own-Land, Settlement upgrading, Home Improvement Loans and Commercial Improvement loans. The precise disposition of these funds will be partly a function of market demand, and partly subject to certain constraints of each preferred Neighborhood Improvement Plan.

A sample budget, based on a total Component Cost of US\$3 M (J\$18 M) is shown in table B9.

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1. Cost Estimates and Budget

Table B9 Sample Budget, Component #4

	Units	Unit Cost	Total
<u>Private Projects</u>		J\$	J\$
Start-a-Home	100	40,000	)for cost purposes these projects are included in component #1
Build-on-own-Land	100	30,000	- )
Settlement Upgrading	200	12,500	2,500,000 )
Home Improvement Loans			
- Minor elements	800	4,000	3,200,000
- Add-a-room	400	10,000	4,000,000
Commercial Improvement			
Loans (Res/Commercial Bldgs.)	200	10,000	2,000,000
<hr/>			
TOTAL PRIVATE PROJECTS	1,800		11,700,000 (65%)
<u>Public Projects</u>			
<hr/>			
Self-help training and materials			800,000
Environmental improvement			5,500,000
<hr/>			
TOTAL PUBLIC PROJECTS			6,300,000 (35%)
TOTAL COMPONENT COST			18,000,000 (100%)

Professional assistance in Phase 1 (Preplanning) and for the administration of each SAA by Neighborhood Improvement Coordinators are not included.

## 2. Cost Recovery

All private projects in this component will be financed directly through Building Societies and Credit Unions. Local banks may be involved with improvement loans to Commercial/Residential premises. These loans will be approved, monitored, and collected directly by the lending institutions. The only involvement of the public sector will be at the approval stage for each Neighborhood Plan, when guidelines will be offered to the lenders reflecting community preferences among the various private projects. Cost recovery is thus the direct responsibility of each lender.

Public projects such as Environmental Improvements are designed to benefit the community at large. Betterment Tax legislation is in effect, but has never been implemented. It may be possible to use the Comprehensive Urban Improvement Program as a vehicle for collecting Betterment tax on a neighborhood basis for each SAA. Assuming a target population of 15,000 persons, a J\$5,500,000 public improvement program amounts to \$367 per person or \$1211 per average family.

Discounting interest, this amounts to a levy of J\$20 per family per month over 6 years. In view of upcoming land reassessments, it may be possible to incorporate repayment of this portion of the component cost into the revised taxes for SAA's.

## C3. Affordability for Home Improvement Loans

Data from HG10 and HG11 squatter neighborhoods shows average monthly income in low income urban neighborhoods of between J\$600-800.

Table B10 shows typical examples and the percentage population in each income strata.

Table B10 URBAN INCOME IN SQUATTER NEIGHBORHOODS

Neighborhood	Sample Size	Percentage Families by Income (J\$ Monthly)					Average Monthly Income * J\$
		0-300	300-500	500-1000	1000-1500	1500+	
Waltham Park	60	20%	27%	42%	8%	3%	677
Tredegar Park	49	31%	39%	27%	2%	2%	590
Ackee Walk	82	18%	29%	34%	11%	7%	713
Standville	136	43%	10%	24%	16%	7%	786
Cassava Piece	84	23%	24%	27%	17%	10%	800

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Target  
Population

(Source: MOC (H) Community Services Department Interviews)  
 1983-84 Data

\* Average Monthly income of families excluding the lowest income category (J\$0 - 300 per month).

The typical family requiring a Home Improvement Loan will also have existing commitments in terms of a mortgage and maintenance costs on their home. Assuming these amount to 10% - 15% of monthly income, and that lending institutions consider a total of 25% as the maximum which is affordable for shelter costs, we can allow 12 1/2% of monthly income for repayment of home improvement loans. Table B11 shows the maximum loan and cost of improvement which are affordable by income categories.

Table B11 AFFORDABILITY OF HOME IMPROVEMENT LOANS  
(Minor Improvements)

Monthly Income J\$	12 1/2% of of Income for Monthly	Loan Principal (5 yrs. @ 10%) J\$	Down Payment (10%)	Total Affordable Improvement Cost
500	62.50	2941	294	3235
600	75.00	3530	353	3883
700	87.50	4118	412	4530
800	100.0	4707	471	5178

Those families wishing to add a room will clearly fall into one of two categories in order to afford the additional cost (approximately J\$10,000).

- Families with lower existing shelter commitments, able to devote, say 20% of their monthly income to loan repayments.
- Families able to make a down payment of considerably more than 10%, say 30%.

The high construction cost of J\$10,000 may warrant a longer repayment period. Table B12 shows the repayment period for a J\$9,000 loan (10% down payment) when 20% of income is devoted to loan repayment.

Table B12 AFFORDABILITY OF HOME IMPROVEMENT LOANS  
(Add a room @ J\$10,000)

Monthly Income J\$	20% of Income for Loan Repayment	Loan Repayment Period (Principal: J\$9,000 Interest: 10%)
500	100	14 yrs
600	120	9 yrs 10 mths
700	140	7 yrs 8 mths
800	160	6 yrs 4 mths

Table B13 shows the repayment period for families wishing to make a larger (30%) downpayment but unable to devote more than 12 1/2% of income to loan repayments. Note that the lowest income category (J\$500) cannot afford this method, since monthly payments do not cover interest charges.

Table B13 AFFORDABILITY OF HOME IMPROVEMENT LOANS  
(Add a room @ J\$10,000)

Monthly Income J\$	12 1/2% of Income for Loan Repayment	Loan Repayment Period (Principal: J\$7,000 Interest: 10%)
500	62.50	-
600	75.00	15 yrs 1 mth
700	87.50	11 yrs
800	100.00	8 yrs 9 mths

4. Typical Home Improvement Construction Costs

Home improvements generally involve some demolition and removal of existing materials. It is assumed that the salvage value of existing material will offset the costs of demolition and hauling away. Therefore no cost has been included for these items.

Table B14 assumes that home improvements are being made for a 250 sq. ft. one-room house in urban Kingston. Costs would be higher outside Kingston. It is further assumed that primary structural elements of foundations and walls are basically sound. These costs are inclusive of an anticipated labor increase of 40% which has the effect of adding 10 - 12 1/2% to 1984 unit prices.

Table B15 shows costs for addition of a complete room to an existing home, inclusive of breaking out existing walls, new footings, etc. Two types of rooms are shown; a bedroom of 125 sq. ft., with no plumbing and a complete wet core (kitchen and bathroom) of 80 sq. ft.

Table B14 TYPICAL HOME IMPROVEMENT COSTS  
(late 1985 prices)

Building Element	Size J\$	Unit Cost J\$/sq.ft.	Price J\$
Roof -- Complete, inc. structure	300 sq. ft.	\$12.00	\$ 36.00
-- Replace with aluminium sheeting	300 sq. ft.	\$ 5.80	\$ 17.40
Window	15-20 sq. ft.		\$375 each
Door -- External inc. hardware	Standard		\$440 each
-- Internal	Standard		\$200 each
Electrical -- Additional Outlet			-
-- Totally new system inc. meter/connection fee		\$20.00	\$5000
Plumbing -- Water hook-up inc. meter	50 ft run		\$2500
-- Sewer hook up inc. 3 manholes	50 ft run		\$3000
Sanitary fittings -- toilet	Standard		\$ 700
-- Washbasin	Standard		\$ 600
-- Kitchen Sink	Standard		\$ 600
-- Shower Tray	Standard		\$ 275

Source: EDCO

Table B15 TYPICAL HOME IMPROVEMENT: ADD-A-ROOM COSTS  
(late 1985 prices)

Building Element	Inclusive Cost
Bedroom (125 sq. ft.) Traditional block construction including break-out of existing wall, provision of window, door, electrical.	\$13,000
Wet Core (80 sq. ft.) Traditional block construction including break-out of existing wall, provision of window, door, electrical; all plumbing fixtures and hook-ups.	\$18,500

Source: EDCO

Annex C: Institutional Analyses

1. National Housing Trust

A. Background

The National Housing Trust continues to be the major source of financing for housing in the public sector. NHT derives its resources from a joint employer/employee salary tax. Total contributions have increased by over 300 percent since the NHT's establishment in 1976 through March 31, 1985 (the end of GOJ FY 85). Although actual contributions in 1984/85 (J\$113 million) exceeded projections by J\$7 million, future contributions are expected to grow less rapidly due to the general decline in the economy. Projected contributions for 1985/86 and 1986/87 are J\$110 million and J\$115 million, respectively.

Employing a staff of some 334, the Trust is considered a well managed organization. It has progressed from a position of substantial losses in the late 1970's to a surplus from operations of J\$26.7 million in 1984/85 with a projected surplus of J\$42.5 million in 1985/86. After expenses and disbursements for on-going projects, it is expected that approximately J\$103 million and J\$116 million will be available for housing in 1985/86 and 1986/87, respectively. The distribution of NHT mortgages by benefit types and institution is shown in table C.1

The Table shows that the vast majority of benefits have been for housing in new projects (15,278) versus home improvement loans (2,071) and Build on Own Land (BOL) (2,684). Although the number of mortgages awarded annually has increased substantially since 1982, only 20,446 people or 6.4 percent of the approximately 320,000 contributors have received benefits to date.

The number of mortgages approved by the NHT in 1984 increased by 13.4 percent to 3,245 over 1983, but the total value decreased by 2 percent to J\$128.4 million. On the other hand, both the number and value of disbursements increased - by 1.6 percent and 6.5 percent respectively.

Prior to 1982, the NHT was providing construction financing for projects being developed for its contributors. The National Housing Policy, approved that year, restricted NHT to the provision of mortgage finance only, while private and public developers, including the MOC (H) provided construction financing on NHT sponsored schemes. Limitations on MOC(H)'s budget reduced the availability of construction finance preventing that policy change from being implemented fully.

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Table C.1

DISTRIBUTION OF NHT MORTGAGES BY  
BENEFIT TYPES & INSTITUTIONS

<u>NHT MORTGAGES</u>	<u>AS AT</u>						<u>TOTAL</u>	<u>NEW PROJECTS</u>
	<u>31/3/81</u>	<u>81/82</u>	<u>82/83</u>	<u>83/84</u>	<u>84/85</u>	<u>85/86</u>		
Build On Own Land	869	137	309	387	457	525	2,684	
Home Improvement	1,500	73	41	94	243	120	2,071	
Open Market	228	59	18	33	30	45	413	
Development Schemes inc. (including Start-a-Home)	4,224	953	1,289	2,078	2,233	2,247	13,024	13,024
<u>Other Institutions:</u>								
Sugar Industry Housing Limited	1,067	189	563	95	-	-	1,914	1,914
Jamaica Teachers' Association	135	105	100	-	-	-	340	340
	<hr/>							
TOTAL	8,073	1,156	2,320	2,687	2,963	2,937	20,446	15,278
	<hr style="border-top: 1px dashed black;"/>							

Source: National Housing Trust, Research and Planning Department, September 1985

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B. Role of the NHT in the Project

The NHT will serve as intermediary financial agency between the GOJ and the mortgage lenders for the proposed amended project. In that role the NHT will be responsible for compliance with the HG loan, with supervision limited to initial approval of projects to be financed, review and approval of applications from borrowers, and periodic reporting by the participating lenders.

In 1985/86 the completion of a number of long delayed projects, in addition to projects financed by HG-011 and HG-012A, will allow the MOC(H) to roll-over funds received from the NHT into new projects. In addition, it is planned that funds for the public sector portion of the present project will be channelled to MOC(H) through the budget. Resources for the project should therefore assist the MOC(H) and the NHT to better perform the functions stipulated for them in the policy, i.e. low income shelter development and mortgage finance, respectively.

The previous section indicated that in spite of increasing revenue, NHT benefits have only served some 6.4 percent of total NHT contributors. One of the objectives of this project is to enable the NHT to serve not only a larger number of its contributors but also to broaden its base such that it can serve a greater portion of the population as a whole. At present, the NHT has various proposals before its Board and the Ministry of Finance which would allow it to begin to achieve this objective. These proposals can be summarized as follows:

- (1) A mortgage certificate whereby the beneficiary could elect to take his benefit in the form of a mortgage certificate (equivalent to the price of a Start-a-Home) which he can combine with a mortgage loan from a private institution. This will allow those beneficiaries who can afford it to obtain a larger house than that offered from the Trust as well as engage private financial institutions in financing moderate income housing.
- (2) An escalating payment mortgage whereby mortgage payments would increase by a fixed percentage each year unless the beneficiary could show, through tax receipts, that his income had not increased proportionately. The escalating payments would remove interest rate subsidies over time as NHT mortgages moved to market rates. They would also substantially increase NHT revenues.
- (3) Savings certificates whereby NHT contributors could buy certificates which would add to their qualification points under the Priority Entitlement Index and be used as a downpayment upon the award of a benefit.
- (4) Assignment of benefits whereby contributors who already own a house or are too wealthy to receive a benefit could assign their contributions to a lower income contributor (relative, employee, etc.) and obtain an equivalent tax deduction.

The foregoing are designed to broaden the base of the Trust such that not only low income families but also moderate and upper income families can benefit from their NHT contributions. At the same time, the mortgage certificates allow the Trust to bridge to the private sector through collaboration with private financial institutions. This effort should be accelerated by the private sector 'loan to lenders' component provided for in the project. Experience with this component should allow the NHT to play a broader fiduciary role in the sector as a whole, allowing the private sector to serve increased numbers of middle and moderate income families while the public sector concentrates on the lowest income groups.

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2. Financial Intermediaries

A. Building Societies

Building Societies play the predominant role in the provision of conventional residential mortgage finance in Jamaica. Operational for more than a century, the six building societies account for more than 90 percent of all long term residential mortgages. By law, the Societies can only invest in residential mortgages. While the Societies are eager to diversify their assets, to date such diversification has not been permitted.

1. Savings Activity

The rate of savings in Jamaica, estimated at 13% of income, is reflected in the high percentage of Jamaicans who maintain a Building Society account. Including both savings deposits and shares, the total number of savings accounts reached 445,000 by the end of 1984. Of the total population of about 2.3 million Jamaicans, roughly one in five persons maintains an account with the Societies. The growth in the numbers of account holders has been significant, with more than a 125 percent increase in the last 10 years. In 1975, there were 196,000 accounts, as compared to the much higher figure in 1984. This 12.7 percent annual percentage increase in savings accounts far exceeds the population growth rate, indicating that more and more Jamaicans are taking up the savings habit. The amount of money in savings shares and deposits has also grown significantly. In 1975, savings attained J\$122 million, while by 1984, this figure had grown to J\$504 million, an annual increase of 41.2 percent. Even after adjustment for inflation, the annual increase reflects a positive growth in savings.

Table C.2

Building Societies - Savings Activities

Year	Accounts	(J\$000,000)					Average
		Savings Balance	Savings Receipts	Total Withdrawals	Total Change	Net Savings	
1975		195,737	122.4	-	-	-	\$ 625
1980		315,488	294.7	180.4	143.2	37.2	934
1981		346,906	366.5	237.4	185.9	51.5	1,056
1982		387,852	473.4	326.3	247.9	78.4	1,220
1983		407,041	545.5	355.8	323.2	32.6	1,340
1984		445,206	626.9	451.4	423.4	28.0	1,408

Source: Building Societies Association

In spite of the overall high growth in savings over the last 10 years, the growth rate has slackened since 1982. For example, net savings increased by only J\$32.6 million in 1983 and J\$28 million in 1984, which reflects increases in net savings of only 6 percent and 4.5 percent respectively.

Table C.3

Building Societies - Lending Activities

Year	Outstanding Loans (\$000,000)	Loan Balance	# of Loans Made	Average Size of Loan
1975	12,206	94.0	2,623	\$13,220
1980	16,298	224.3	2,650	22,930
1981	16,395	271.0	2,337	30,790
1982	17,055	357.7	3,041	39,370
1983	18,158	444.9	2,363	51,670
1984	19,196	528.2	1,866	63,400

Source: Building Societies Association

Nevertheless, the Building Societies find themselves at a competitive disadvantage with other financial institutions, especially the commercial banks, which are paying as much as 24 percent for funds. The fact that many Building Society savers are small account savers, who often use the saving account as a checking account and who do not need or have access to commercial banks, prevents a wholesale disintermediation of the Building Societies funds.

The Society's assets are invested almost exclusively in mortgage loans, mostly residential. With the removal of the 16 percent ceiling on mortgage lending rates this year, interest rates have increased rapidly. New loans being originated by the Societies today are being made at a 20 percent rate, which remains above the cost of funds to the Societies. In 1983, the average yield on the Societies mortgage loan portfolio was 12.8 percent, increasing to 14.3 percent. In all probability, it will increase this year to somewhere in the 16 to 17 percent range.

For the past several years, all mortgage loans have contained a clause that permits the Societies to adjust interest rates according to a fixed formula. In general, this clause has allowed the Societies to maintain a positive spread between their cost of funds, and their earnings. However, there are a number of older mortgages that do not contain that clause and these mortgagors continue to pay at rates as low as 8.5 percent. While the outstanding number and percentage of these accounts decrease annually, they still have a negative effect on the mortgage yield of the Societies' portfolio. This also compels the Societies to keep their cost of funds as low as possible in order to maintain their earnings. While this balance has been maintained, it has affected the competitiveness of the Buildings Societies vis-a-vis other financial intermediaries to attract funds.

4. Financial Condition

By law, Building Societies are strictly limited in their activities. Liabilities are essentially shares and deposits, both passbook and time. Assets are invested in mortgage loans. Building Societies have not been permitted to seek

other sources of funds, nor have they been able to seek alternative investments. Therefore they are highly vulnerable to external factors, such as rising construction costs, fluctuating interest rates and falling business activity. Nevertheless, the Building Societies have remained profitable.

During the past three years, the Building Societies have operated profitably, albeit at a low margin. Excluding the foreign exchange gain made by one Society, the Societies have earned between J\$3 million and \$3.8 million in 1982 through 1984. As a percent of total income, the Societies made a return of 5.4 percent in 1982, 4.5 percent in 1983, and 4.2 percent in 1984. Income also increased each year, each Society showing an annual increase in income as well as profit. Accordingly, reserves have increased, and the ratio of reserves to total liabilities has fallen from 24 to 1 in 1982 to 14 to 1 in 1984, which demonstrates increased strength on the part of the Societies to withstand adverse conditions.

Table C.4

	<u>Interest Rate Spread</u>		
	1982	1983	1984
Net loan yield	12.4	12.8	14.3
Average cost of savings	<u>8.4</u>	<u>8.3</u>	<u>11.0</u>
Average Spread	4.0	4.5	3.3

Source: Building Societies Association

Table C.5

	<u>Building Societies - Consolidated Balance Sheet</u> <u>(J\$000,000)</u>		
	<u>1982</u>	<u>1983</u>	<u>1984</u>
<u>Assets</u>			
Loans - Net	357.7	444.8	528.2
Liquid Funds	126.2	120.4	120.7
Fixed Assets	12.2	13.6	24.8
Other	<u>4.1</u>	<u>1.2</u>	<u>1.5</u>
Total Assets	500.3	558.0	675.2
<u>Liabilities</u>			
Deposits	98.8	89.1	84.4
Shares	374.6	456.3	542.4
Other Liabilities	5.8	2.4	1.2
Total Reserves	<u>21.1</u>	<u>32.2</u>	<u>47.2</u>
Total Liabilities	500.3	558.0	675.2

Source: Building Societies Association

Table C.6

Building Societies - Consolidated Income Statement  
(J\$000,000)

	<u>1982</u>	<u>1983</u>	<u>1984</u>
Total income	56.0	69.1	90.7
Less: Operating Costs	<u>18.7</u>	<u>23.5</u>	<u>31.0</u>
Operating Surplus	38.3	45.6	59.7
Less: Interest	<u>35.3</u>	<u>42.5</u>	<u>55.9</u>
Income	3.0	3.1	3.8
Foreign Exchange Gain	-	<u>3.2</u>	<u>1.2</u>
Net Income	<u>3.0</u>	<u>6.3</u>	<u>5.0</u>

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Source: Building Societies Association

5. Reserves

Building Societies have a major advantage over other financial intermediaries as to their liquid reserve requirements. At the present time, the Societies must maintain a minimum of 3.5 percent of total deposits in a liquid asset reserve. On the other hand, other financial institutions are required to maintain higher reserves; for example, commercial banks must keep reserves at a 48 percent level today, of which 20 percent must be in cash and 28 percent in below market interest rate government stock. This is a tremendous advantage to the Building Societies which helps offset the lower interest rate paid on deposits.

However, the Societies operate conservatively and keep more than 3.5 percent of deposits in liquid reserves. In 1984, the ratio was 19.2%, which would appear to be more than adequate to cover short-term liquidity requirements. Moreover, the liquid assets are kept in relatively high yielding paper, which yield almost as much as the assets placed in mortgage loans (12.6 percent on liquid assets vs 14.3 percent in mortgage assets in 1984).

6. Diversification Efforts

As mentioned earlier, the Building Societies consider that they are at a disadvantage with respect to other financial intermediaries. This is especially true with respect to competition for savings. Conversely, commercial banks have been able to enter into the mortgage lending business through the establishment of Trust Companies, which are able to compete with the Building Societies for the same business. Moreover the Trust Companies have a much smaller percentage of low yielding mortgage loans. To overcome this disadvantage, the Building Societies are considering taking a number of steps. One of the two major societies has recently purchased a commercial bank which will permit that Society to invest its assets in other sectors. Secondly, the Societies have prepared a revision to the Building Societies Act which will be presented shortly to government and which contains a number of liberalizing provisions permitting the Societies to undertake a wider range of investments.

7. Assessment

The Building Societies have weathered the economic convulsions of the past decade fairly well. Conservative lending practices and sound portfolio management are major reasons for this success. The increase in the number of persons having a savings account at a building society augers well for future growth and success. On the other hand, there are constraints to future development. The Societies must be able to compete better with other financial institutions in attracting funds. The Societies must also obtain more funds in order to satisfy the mortgage requirements of their savers, and thereby reduce the downward trend in the number of savers per borrower. The societies must also identify and finance housing that is affordable by more of their savers.

B. Credit Unions

Since the first Credit Union in Jamaica was formed in 1941, the credit union movement has grown rapidly, both in numbers and importance. Membership totaled 293,000 at the end of 1984, more than 300 percent increase over the last decade. While membership has grown, the number of credit unions has decreased through amalgamations of the less viable unions with stronger ones. From a peak of 132 Credit Unions in 1969, the number has fallen to 96 by the end of 1984, and expectations are that that figure will decrease further, producing an even stronger movement.

1. Savings

Like the Building Societies, the larger number of Jamaicans who maintain a savings account in a Credit Union reflects the high propensity to save throughout the country. With 293,000 members, approximately one in eight Jamaicans are members of a Credit Union. The increase in membership of Credit Unions has exceeded the growth of the Building Societies, which demonstrate the appeal of Credit Unions. The average amount of savings in 1984 was 1,067, approximately 75% of the average building society account. This lower Credit Union account balance reflects generally the appeal of the less formal Credit Unions to the more formal Building Societies.

Table C.7

Credit Unions - Savings Activities  
(J\$000,000)

<u>Year</u>	<u>Savings Accounts</u>	<u>Savings Balance</u>	<u>Net Increase In Savings</u>	<u>Average Savings</u>
1975	81,067	31.5	-	289
1980	197,647	146.8	35.4	743
1981	221,619	185.1	38.3	835
1982	252,109	224.4	39.3	890
1983	274,128	269.8	45.4	984
1984	292,871	312.6	42.8	1,067

Source: JCCUL

The balance of C.U. savings in 1984 was \$312.6 million, an increase of about 1000 percent over the savings balance 10 years ago. Even the 1984 increase of nearly 16 percent was in excess of the Building Societies increase, which indicates that, in spite of lower rates, Credit Unions remain competitive in attracting the Jamaican saver.

## 2. Lending Activity

Lending has grown in tandem with savings. Outstanding loans at the end of 1975 were J\$31.5 million, almost equal to savings, while by the end of 1984, the total had reached J\$266.4 million, an increase consonant with the growth in savings.

## 3. Interest Rates

Rates on both savings and loans are generally the lowest among all financial institutions. Currently, interest on C.U. savings accounts earn between 8 and 10 percent, while dividends pay 6 percent. These figures are much lower than the rates paid by Building Societies (17 to 19 percent) and by Commercial Banks (15 to 20 percent). The recent rapid increase has placed the Credit Unions at a distinct disadvantage vis-a-vis other financial institutions. This is a relatively recent phenomenon in that the 11 percent interest rate paid last year by Building Societies was only slightly higher than the Credit Union rate. When interest rates began to rise this year, the Credit Unions failed to let interest rates move upward along with their competitors. The Credit Unions recognize this problem, but maintain that thus far, there has been no disintermediation.

Interest rates on loans are currently capped at 12 percent, which, of course, is a very favorable lending rate, given that commercial banks, the principal competition of the C.U.'s, are charging up to 34 percent. If savings rates are considered by some too low to warrant remaining in a Credit Union, the low lending rates off-set that disadvantage.

## 4. Mortgage Lending

Generally Credit Unions provide short-term loans for a number of consumer and commercial purposes. Loans for home improvement are included in this category, although such loans have never been a major component of the Credit Unions' portfolio. U.S.A.I.D. has provided assistance to the C.U.'s through HG loans for housing purposes. HG-010 allocated a portion of the loan proceeds for home improvement loans, while HG-011 allocated funds for both home improvement and mortgage loans. The former is being successfully implemented, while the latter is experiencing some delays due to the uniqueness of the mortgage loan operation. The Jamaican Cooperative Credit Union League, which is the umbrella agency for the Credit Unions, is managing the HG loan programs. The JMB, which is the official borrower under those two HG loans, loans the funds to JCCUL which in turn disburses the loans to individual credit unions (home improvement loans) and individual credit union members (mortgages) participating in the program. The Credit Unions make individual home improvement loans to borrowers, as well as manage the loan. The JCCUL provides advice and assistance to the C.U.'s in implementing this lending program.

5. Assessment

The financial condition of the Credit Unions is generally good, even though some of the smaller credit unions are weak. Consolidation of the movement to fewer, yet stronger C.U.'s will continue and will further improve their financial health. The potential for disintermediation is real, but the loyalty of the memberships has prevented this occurrence.

The JCCUL and some C.U.'s have demonstrated a capacity to originate and service housing loans. Much of this activity has consisted of home improvement loans, some of which has been financed under previous HG loans. More recently, the movement has begun to make mortgage loans again under a HG-011 authorization, and while the level of activity is still low, preliminary evidence indicates a significant capacity on the part of both the JCCUL and the participating C.U.'s to implement successfully this latter activity. Conversations with the JCCUL also indicate a willingness to expand further this activity in order to provide greater benefit to Credit Union members.

C. Commercial Banks/Trust Companies

There are ten commercial banks in Jamaica, serving as deposit taking institutions and providing short and medium term lending. In addition, there are eight trust companies, seven of which are owned by Commercial banks and operated as departments of those banks. The trusts receive long term deposits and provide long term credit in the form of mortgage loans.

1. Deposit Operations

Since 1977, total assets in Commercial Banks have grown by almost 400 percent as of the end of 1984. Much of this growth has been recorded in time deposits, which has shown more than a 1000 percent increase over the same period. In 1984 Commercial bank deposits grew by 22.5 percent, which was greater than the growth in the other two primary deposit taking institutions - the Building Societies and the Credit Unions. Total deposits and other liabilities at the end of 1985 stood at J\$4,622.5 million.

Table C.8

Commercial Banks - Deposit Operations

Year	Demand Deposits	Time Deposits	Saving	Other	Total Liabilities
1977	286.5	163.8	451.4	67.0	968.7
1980	430.5	443.7	736.0	219.2	1,829.4
1981	484.8	723.7	873.2	217.9	2,299.6
1982	543.3	908.4	1,084.5	254.9	2,791.1
1983	669.9	1,378.5	1,202.9	506.7	3,758.0
1984	717.0	1,733.2	1,400.3	712.1	4,622.5

Source: Bank of Jamaica

## 2. Lending Operations

Commercial Banks account for the bulk of the credit provided to the economy with assets representing approximately 75 percent of the total assets of the financial sector.

Table C.9  
Commercial Bank - Credit Operation

Year	Credit to Government	Credit to Private Sector	Deposit with BOJ	Foreign Assets	Total Assets
1977	274.7	627.3	93.0	(26.3)	902.0
1980	343.1	1,082.1	391.8	12.4	1,425.2
1981	508.5	1,486.3	301.8	3.0	1,994.8
1982	661.8	1,964.9	111.1	53.3	2,626.7
1983	705.8	2,452.8	372.0	227.4	3,158.6
1984	642.9	2,752.4	1,015.3	211.9	3,395.3

Source: BOJ

During the last year, new commercial bank loans increased by J\$296.4 million, a 12.2 percent increase over the twelve month period, slightly less than the rate of inflation. The outstanding balance on installment credit actually decreased in that same period. By the end of the 1984, loans to the manufacturing sector comprised 24.8 percent of the loan portfolio while loans for construction and land development were a close second at 22.5 percent. Of the J\$617.4 million in loans to the construction sector, slightly more than half, or J\$328.1 million, was in construction loans and with the remainder in land development and acquisition loans.

## 3. Interest Rates

Interest rates have increased rapidly this year. The floor on the deposit interest rate was recently raised from 15 percent to 20 percent increasing the cost of funds to commercial banks. Commercial and installment loans are being made at interest rates as high as 34 percent. The removal of the 16 percent interest rate cap permitted the mortgage interest rate of trust company loans to move upward and today they are in the 22 to 23 percent range for residential mortgages and up to 26 percent for commercial mortgages.

#### 4. Reserves

Both commercial banks and trust companies are required by the Central Bank to place a percentage of assets into what is referred to as "liquid asset reserves". This reserve requirement is calculated as a percentage of total deposits and currently is 48 percent for commercial banks and 15 percent for trust companies. The 48 percent for commercial banks is split between 20 percent kept in cash and 28 percent placed in government paper. This not only limits the funds these two groups have available for lending, but also affects earning potential.

#### 5. Trust Companies

Loans and advances by Trust Companies stood at \$367 million at the end of 1984, a figure that is only slightly in excess of Commercial Bank construction loans, indicating that most of the commercial bank construction lending is eventually covered by mortgage financing from the trust companies.

#### 3. Ministry of Construction (Housing)

Traditionally, the MOC(H) has been responsible for overall shelter policy and planning and design and implementation of GOJ's shelter program. Prior to 1980, much of the construction activity was undertaken by force account. The MOC(H) spearheaded the 1982 shelter policy exercise. This resulted in significant changes in the roles and responsibilities of the MOC(H).

The MOC(H) was directed to concentrate and expand its policy formulation and monitoring and updating, program formulation, funding and control, land acquisition and title transfer, and project finance and accounting. The MOC(H) has decentralized many of its line functions. In contrast to the previous administration where all development functions from the acquisition of land to handing over the units were performed internally. Important functions such as project design and construction, project marketing, and mortgage finance and collections have to a large extent been transferred to other agencies. The following is a partial list of the progress the MOC(H) has made in implementing the housing policy:

- \* MOC(H) is no longer originating mortgages on its schemes;
- \* The majority of its portfolio (5,000 sales agreements) has been turned over the CHFC for servicing;
- \* The Ministry has established a policy planning secretariat;
- \* The Estate Development Company (EDCo) has been established to carry out for the Ministry most of the design, tendering and construction supervision for settlement upgrading and smaller new projects;
- \* Sugar Industry Housing Ltd. (SIHL) and the National Housing Corporation (NHC) manage the construction of large low income housing schemes for the Ministry.
- \* The Ministry has made significant strides towards implementing the policy of program affordability and full cost recovery;

- \* The Ministry has shifted from leasehold to freehold tenure for all program beneficiaries.

In spite of the transfer and decentralization of many of its functions, the Ministry until recently, had a large staff which performed most of their functions as they did in the past. Due in part to the serious economic situation and structural adjustment, the Ministry is currently going through a staff reduction program, reducing both its establishment and number of staff.

Up to the present some 183 staff have already been made redundant with an additional 200 targeted for redundancy. In addition, MOC(H) is consolidating its thirteen field offices to six, with many of their functions combined into one division.

Most significant for the future operations of the Ministry, however, is a current management review being undertaken by Government's Administrative Staff College with the assistance of World Bank consultants. The purpose of the management review is to make recommendations to the Ministry which, if carried out, will allow it to more effectively implement the 1982 Housing Policy. A preliminary review of MOC(H)'s operations has already been undertaken and objectives for an in depth analysis have been accepted by the Minister and the Permanent Secretary. The Major objectives are:

1. Clarify the mission and goals of the Ministry viz-a-viz the national housing policy;
2. Strengthen internal communication and coordination;
3. Carry out structural adjustments within the Ministry as follows:
  - a. strengthen the office of the Permanent Secretary, the Policy Secretariat, and the Legal and Personnel functions with special emphasis on staff training and development for the latter function;
  - b. Scale down and eventually phase out the Construction and Maintenance and Estate Management functions and streamline the finance and accounting division;
4. Clarify roles and relationships between:
  - a. Headquarters and field offices;
  - b. The Project Marketing Task Force and the Ministry;
5. Clarify the responsibility and authority of the Finance and Accounting and the Internal Audit Divisions.

The study began in August 1985 and is scheduled for completion in November 1985. The result of the study, if implemented, should not only go a long way in making the MOC(H) a more effective organization in implementing the housing policy but should also provide a basis for AID technical assistance in the public sector.

#### 4. Developers Profile

The thrust of the revised HG-012 program will be to involve private developers in low-cost housing programs in every component except Squatter Upgrading although private initiatives in Settlement Upgrading will be encouraged in Component No. 4 (Comprehensive Urban Improvements). In the present economic climate many developers and contractors have closed or been forced into bankruptcy, while those who remain are forced to diversify in order to survive. Large contractor/developers who previously built for the office and upper income sectors are now becoming interested in the low-cost housing sector as a means of keeping key pools of skilled labor together.

Most private developers in Jamaica are also contractors, with the exception of the two public limited liability companies, EDCO and SIHL. However, most contractors only develop low-cost housing on a turn-key basis for the MOC(H) and/or the NHT. They have not taken initiatives to market the units. The largest developer/contractors operate island wide; smaller general contractors operate in the Kingston area, and some small contractors are often operational only within sub-areas of Kingston due to difficulties in crossing historic socio-political boundaries.

#### Major Developer-Contractors

There are only a handful of major developer-contractors operating on the island. All of these firms employ building systems for their projects, while some are exclusive building system representatives. The majority of these developer-contractors are able to obtain construction financing through local sources. A representative list of such firms includes:

- \* Aerocon Ltd. (Richard Lake)
- \* Jam Build (Ted Warmington)
- \* West Indies Home Contractors (Matalon Brothers)
- \* Cedar Construction
- \* Y.P. Seaton Ltd.
- \* Gore Tuca Investment Co.
- \* Ashtrom International

#### Civil Engineering-Contractors

Several civil engineering firms, primarily in the business of infrastructure have ventured into housing construction on a small scale, and may be interested in low-cost housing.

- \* Bryad Engineering/Zel Homes
- \* Cooper & Associates
- \* Chang Engineering

#### Sub-Contractors

Some large developer-contractors use subcontractors extensively or even exclusively, keeping their own staffs to a minimum. Gabay Construction is noted for this. Sub-contractors in several key trades are reputed to be efficient and very competitive. An example is the aluminium industry, installing roofing, windows and doors. There are 3 - 4 fairly large roofing contractors in the

Kingston area, operating on their own behalf, as well as for major producers such as Alcan. Plumbing contractors on the other hand tend to be smaller and more localized.

### General Contractors

Large general contractors such as Gabay Construction are reputed to be well managed. Small contractors frequently are not. In order to effectively manage a large home improvement program it may be better for a lending institution to encourage a good general contractor to manage, order supplies, deliver on-site and coordinate the activities of a number of small sub-contractors operating across a neighborhood. Small contractors in turn may bring a skilled employee into a neighborhood and hire unskilled workers locally.

### Project Management

Lending institutions dealing with a high volume of loans may find it preferable to hire an engineering/consultant to supervise construction and verify progress. Firms such as "Colwit" and "Apec" specialize in project management but tend to operate most effectively on major construction projects.

### General

The Construction and Development Resource Center of Jamaica was organized in 1983 to provide a central source for research and information in the Jamaican Building Industry. Related organizations are:

- \* Incorporated Masterbuilders Association (approximately 50 member-firms)
- \* Jamaica Developers Association (approximately 40 members)

### 5. The National Housing Corporation, Limited

The National Housing Corporation Limited is a housing development company which was incorporated in February 1973, under the Companies Act, 1965. It is wholly owned by the Government of Jamaica and falls within the portfolio of the Minister of Construction (Housing). A Board of Directors appointed by the Minister and a management team are responsible for the overall operations of the Corporation.

The Corporation generates its own finances and does not receive any allocation from the Government's budget. Most of the funding is raised by its own efforts and to date it has received financing primarily from the National Housing Trust and commercial institutions.

The Corporation was established to develop housing schemes primarily in the middle income market. It competes with and complements the private sector and other agencies in increasing the housing stock of the country. Its objective is to make house ownership easier, by providing functional and good quality housing at reasonable prices, thus enhancing and improving the quality of life for Jamaicans. In addition to its role as developers, the Corporation recently decided to utilise its expertise in implementing a Project Management Service. Since its inception, the National Housing Corporation has developed housing schemes in ten parishes throughout the island, providing 3,534 houses. Presently 360 units are under construction, bringing the total to 3,894 houses undertaken to date.

In keeping with the policy of co-operation with private developers, the Corporation entered into Joint Venture Partnership on five projects. So far, two of those schemes have been completed for 116 houses, and 205 are in the planning stages.

Charlton Manor	- St. Andrew	32	- Completed
Olivier Road	- St. Andrew	84	- Completed
Shaw Park	- St. Ann	16	- Final Planning Stage
Munroe Road	- St. Andrew	100 (approx.)	Planning Stage
Merrivale Ave.	- St. Andrew	89	- Planning Stage

The basic method of these partnerships is that the Corporation provides the land and the partner provides the financing, with profit to be split on an agreed basis.

Efforts by the Corporation to reduce the high cost of houses continue and the concept of using system building for the upper range of the middle income market was entered into with the construction of 65 three-bedroom townhouses at Allerdyce in St./Andrew.

Project Management Services are provided by the National Housing Corporation under the following headings:

- Pre-feasibility
- - Feasibility
- - Project Design
- Pre-Construction Contract Management
- - Construction Contract Management
- Sales and Marketing
- - Post Contract and Sales Services

The Corporation has already provided these services to the Ministry of Construction (Housing) for two projects -

Port Royal	50 units
Cooreville Apts.	<u>288</u> units
	438 units

Also in the final planning stage is the first phase of 264 units at Eltham Park in St. Catherine.

Private organizations have also expressed interest in these services and negotiations are in progress with two such organizations to plan and develop approximately 300 units.

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SCHMES UNDERTAKEN BY THE CORPORATION

<u>NAME OF SCHEME</u>	<u>No. of Units</u>	<u>Parish</u>
Garveymeade Phase I	460	St. Catherine
Phase II	200	St. Catherine
Phase III (Westmeade)	370	St. Catherine
Albion Court	28	St. James
Pitfour	80	St. James
Hague	30	Trelawny
Hatfield	24	Westmoreland
Orchard	30	Hanover
Esher	86	Hanover
Cedar Grove	56	Manchester
Red Hills Pen	131	St. Thomas
Seaforth	24	St. Thomas
Mineral Heights	822	Clarendon
Frontier	74	St. Mary
Barbican Terrace	225	St. Andrew
Mona Commons	94	"
Stadium Gardens - Phase I	88	"
Stadium Gardens - Phase II	88	"
Shortwood Road	44	"
Glendale	280	"
Blue Castle Close	66	"
Molynes Court	53	"
Charlton Manor	32	"
Allerdyce Green	65	"
Olivier Mews	<u>85</u>	<u>"</u>
	<u>3534</u>	<u>10</u>

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PROJECTS UNDER CONSTRUCTION

	<u>No. of Units</u>	<u>Parish</u>
Musgrave Mews	40	St. Andrew
Ensom Acres	<u>320</u>	St. Catherine
	360	

FINANCIAL INFORMATION

Operating Results Year Ending March 31, 1985

During the year, 125 units were sold yielding a gross margin of \$640,151.

Other income derived from project management fees and professional services amounted to \$4,716,511 giving a gross profit of \$5,356,662.

Operating expenses was \$2,759,805 resulting in a net profit of \$2,596,857.

BALANCE SHEET

Employment of Capital

Fixed Assets and Investments		\$ 822,118
Net Current Assets	5,844,193	
Other Assets	<u>6,025,387</u>	
		<u>\$12,691,698</u>

Capital Employed

Share Capital		200
Accumulated deficit	<u>( 1,234,553)</u>	( 1,234,353)
Long Term Loan	<u>13,926,051</u>	
		<u>\$12,691,698</u>

## Annex D: Private Sector Initiative

The proposed amended project incorporates an allocation of US\$10 million for private sector initiatives. The goals of this project component are to encourage private developers and mortgage lenders to institutionalize and expand the low cost housing solutions and financing techniques pioneered by the public sector and to improve the efficiency of the public sector by supporting alternatives to traditional government schemes. The private sector projects will tap the experience and expertise of the private sector in land acquisition, construction management, cost control and mortgage finance for the benefit of low income families. By providing profitable business opportunities to participating lenders and developers, the program will also help to lessen the resistance of management and boards of directors to serving the lower income segments of the population.

### A. Project Structure

As the principal government sponsored housing finance agency with the institutional and operational capability to administer a large ongoing housing finance operation, the National Housing Trust will serve as the intermediary between the GOJ and private sector mortgage lenders for the proposed amended project. The National Housing Trust will establish a special department separate and distinct from its contributor financed operations which would be staffed professionals with expertise in mortgage finance, financial management, investments, and operations. Amendments to the National Housing Act adopted in 1984, expanded the NHT's statutory authority to permit it to provide services associated with a mortgage made to any person, whether a contributor or not, and to deal in "approved savings instruments", which can be broadly construed to include any mortgage related instrument.

The NHT will be responsible for compliance with the terms and conditions of the HG loan, but the private sector participants will be responsible for the entire development and financing process. NHT will have to have oversight authority, but sufficient penalties for noncompliance will be incorporated into the program so that its supervision would be limited to initial approval of the projects to be financed, review and approval of applications from borrowers, and periodic reporting by the participating lenders. The NHT would also require that as part of its annual audit, each participating financial institution obtain a written statement from its auditor that it is in compliance with the terms and conditions of the program.

### B. Financial Structure

A "loans-to-lenders" structure will be employed in the private sector initiative project. Under a loans-to-lenders program, the Ministry of Finance (MOF) will be the borrower on the Housing Guaranty loan and will have responsibility to repayment of the debt to the U.S. investor, thereby assuming the foreign exchange risk. The experience of the JMB has demonstrated that in the Jamaican economic environment, the only way to insure the financial viability of the Housing Guaranty program is to remove the foreign exchange risk. The funds available are not adequate to cover both the risks inherent in a housing program and foreign exchange risk.

The NHT will receive the Jamaican dollars from the Ministry of Finance at an interest rate which will enable the MOF to accumulate reserves to partially offset its exposure to currency fluctuations. The loan from the MOF to the NHT will be structured so that the expected cash flows from the NHT's loans to lenders will be sufficient to cover the NHT's obligations to the MOF. The timing and amount of the cash flows generated by the loans to lenders must correspond to the timing and amount of payments to the MOF so that the NHT is not faced with a shortfall. In order to reduce its exposure, the MOF will structure the Housing Guaranty loan so that the cash flows from the NHT will be sufficient to cover Government's obligation, exclusive of exchange rate variations. Such structured long term financings have become common in the U.S. capital markets and should not result in any significant increased interest cost to the GOJ.

C. Implementation and Institutional Responsibility

1. Qualify Mortgage Lenders for Participation

Only qualified mortgage lenders should be eligible to participate in the private initiatives project component. In order to be eligible, a mortgage lender should:

- (1) be a commercial bank, trust company, insurance company, building society, merchant bank, credit union or other similar financial institution authorized to transact business in Jamaica;
- (2) make mortgages in the regular, usual and normal course of business;
- (3) within the last 12 months, have originated and closed at least 10 mortgages on residential property;
- (4) have engaged in the origination and servicing of mortgage loans for at least two years; and
- (5) demonstrate the capacity to service mortgage loans adequately and have maintained a monthly arrearage level which is reasonably satisfactory to the National Housing Trust.

2. Qualify Housing Schemes under USAID/NHT Standards

Once the lending institutions eligible to participate in the NHT loans-to-lenders program have been identified and approved, the NHT will be in a position to solicit proposals from housing developers. Applications will be accepted for funding of permanent mortgages only through combination bridge and permanent mortgage financing. All developers applying for a bridge loan from a qualified financial institution will have to provide documentation that they have secured a commitment from a mortgage lender for funding of the mortgages to finance the purchase of the housing units to be constructed.

A developer may enter into a joint venture or consortium with a bridge lender and a mortgage lender, with such joint venture then borrowing from the NHT. However, in such cases, each member of the joint venture or consortium must make a cash contribution of equity capital to the joint venture or consortium and each participant's percentage share in the profits from the housing scheme financed may

not exceed the participant's percentage share of the equity contributions. In general, the bridge lender's percentage share in the ownership of the joint venture should not exceed 50% unless the bridge lender has contributed the real property from its portfolio of foreclosed properties as part of its equity capital contribution.

USAID and the NHT will establish the development standards to assist the financial institutions in defining and identifying housing schemes eligible for financing. These standards will include the maximum lot size, square footage and density, required access to utilities, Start-A-Home construction standards, maximum selling price and approval requirements before any construction draws can be taken. Restrictions will also be imposed so that no one lender or developer receives a disproportionate share of the total proceeds available through the program. Such diversification will reduce the risk of delinquency and default and will assure a broader distribution of housing units throughout the island. The number of housing units in any one scheme which can be financed with program proceeds should also be limited so that the success of the project is not dependent on a few developers and/or lenders. Financing may be restricted to those schemes which the developer can demonstrate will be completed within one year, or the project criteria could require that different phases of a larger project have to be underwritten independently as they are ready to be built or marketed. Such limitations will prevent funds from being committed to projects which may concentrate too many units in a given market area, which may expose the lenders and/or the NHT to excessive risk, or which may delay the delivery of finished units to the beneficiaries.

Housing developers will apply to a bank or other qualified lender for loan commitments for a specified time period. The application will have to provide documentation to demonstrate that the housing scheme complies with the NHT-USAID standards and the developer will also be required to certify that he will comply with all restrictions which may be imposed under the loans-to-lenders financing program. The lending institutions will review and approve proposals submitted by developers and submit all approved proposals to the NHT for review. The NHT will grant conditional approval to those housing schemes which best meet the NHT-USAID standards, and will require that the developer file an affidavit that the scheme will be developed in accordance with the approved proposal. The bridge lender will be required to certify that it will provide bridge financing for the construction of the scheme and will manage the bridge financing in a manner which will insure compliance with all program restrictions. Prior notice of any material change in the plan for the scheme or the construction schedule must be given to the NHT and the NHT will reserve the right to reject any proposed changes from the conditionally approved proposal, to revoke the bridge financing agreement and to demand immediate repayment of any funds advanced.

Once a housing scheme has been approved, responsibility for the actual development falls on the developer and the lending institution(s) which is financing the scheme. The developer will not be permitted to draw down any funds provided through the loans-to-lenders program until he can provide documentation that he has received all applicable approvals and that he can deliver unencumbered freehold title to the property.

Collateral other than the housing scheme to be financed must be provided to the NHT on all bridge loans. Eligible collateral includes government securities, local registered stock, any other marketable securities, certificates of deposit and seasoned performing loans in the lender's portfolio. Suggested collateral requirements for the different classes of collateral are as follows.

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1. For government securities, local registered stock and certificates of deposit, 105% of the amount advanced.
2. For other marketable securities, 110% of the amount advanced.
3. For seasoned performing loans, 120% of the amount advanced.

Collateral will be revalued periodically by the NHT and must be brought back to the required levels if the NHT determines that deficiency exists. A lender may make free and unlimited substitution of eligible collateral at any time so long as the required collateral levels are maintained. Collateral pledged to the NHT to secure bridge loans will be released upon the funding of qualifying mortgages by the mortgage lender.

Monies held by the NHT to fund bridge loans will be the property of the bridge lender, but subject to disbursement only as the costs of the housing scheme to be financed are incurred. Interest only will be payable on the bridge loan to the lender until construction of the project is completed and thereafter, the loan shall either be paid off by the mortgage lender or, if the bridge lender is also the mortgage lender, shall be payable in quarterly installments with an amortization period of 25 years. The loan to the bridge lender will provide that the entire amount due can be accelerated in the event of any default by the developer and/or the bridge lender which is not cured within a reasonable time. Events of default include the failure of the bridge lender to pay the amounts required when due, the failure of the bridge lender to maintain sufficient collateral, the failure of the lender to perform or observe any of its covenants or agreements, the developer's violation of the qualifying housing scheme guidelines, the bankruptcy of the developer, and the sale or transfer of the property without the prior written approval of the NHT.

### 3. Qualify Eligible Borrowers

It is unlikely that any developer will be able to obtain a mortgage loan commitment from a private mortgage lender, even a lender participating in the loans-to-lenders program, if the lender does not have some assurance that there is a market for the completed units. The market for housing units financed under this project will be households with incomes below the median, currently established at J\$12,000. There is some skepticism among mortgage lenders that affordable housing units can be built for this market. Mortgage lenders will require substantial evidence that there is sufficient effective demand among qualifying homebuyers. The NHT can perform a critical role in providing this evidence by prequalifying households and making lists of eligible borrowers available to participating lenders and developers.

The prequalification of potential borrowers will expedite the loan application and approval process and will greatly reduce the administrative cost and manpower burden on the individual mortgage lenders. An additional benefit is that the NHT will be able to assure compliance with USAID household income requirements without interfering with the operations of the individual financial institutions. The NHT has developed the Priority Entitlement Index (PEI) to qualify eligible beneficiaries within its contributor universe. The NHT staff has experience in processing applications for eligibility through their administration of the PEI

system currently in operation and most of the working population is familiar with the point accumulation method employed. The PEI rating system could be modified for the HG 13 loans-to-lenders program to reflect the underwriting criteria of private sector mortgage lenders and USAID maximum income requirements. Points would be awarded based on income levels and length of time employed, and ability to make a sufficient deposit. A reasonable point allocation for qualification for this program would be that a minimum of 200 points would be required for a household to be eligible to apply to a participating mortgage lender for a loan. Points would be calculated as follows:

A. Income:	\$100 per week or less	80 points
	\$100 to \$200 per week	100 points
	\$200 to \$230 per week	120 points
B. Length of Employment		
	Five years or more	80 points
	Three to five years	70 points
	Less than three years	60 points
C. Deposit Available:		
	\$10,000 or more	80 points
	\$5,000 to \$10,000	70 points
	Less than \$5,000	60 points

Applicants for a loan would also be required to produce the most recent two years' income tax returns, if applicable, to verify their employment and income status. Households which are prequalified by the NHT will receive a certificate of eligibility which will be valid for twelve months, renewable for successive twelve month periods upon presentation of the most recent income tax return(s) to verify household income. Eligible borrowers would then apply to participating mortgage lenders when housing units are available. The certificate of eligibility would only certify that the household meets USAID's maximum income requirements; the applicant would still be required to meet the individual lender's credit underwriting standards.

A participating mortgage lender will evaluate each mortgagor's creditworthiness on a case-by-case basis. All standards for determining effective household income must be applied to each mortgagor in the same manner. The following guidelines are considered to be sound general principles in underwriting credit, and will be applied in reviewing mortgage loans tendered to the NHT for funding:

(a) Monthly mortgage payments should not exceed 30% of the mortgagor's "stable monthly income" as defined in (b) below.

(b) Stable monthly income is the mortgagor's gross monthly income from primary employment base earnings plus recognizable secondary income. Secondary income of any mortgagor such as overtime or part-time employment should only be recognized as "stable monthly income" if such items of secondary income are typical for the occupation and continuation is probable. In cases where the mortgagor is self-employed, the minimum acceptable documentation to verify income would be complete tax returns for the preceding two years.

Under the modified PEI developed for the loans-to-lenders program, NHT contributors could be eligible for a loans-to-lenders loan before they are eligible for an NHT unit or mortgage certificate. The NHT's Mortgage Program should be amended to allow qualifying contributors who have obtained mortgage financing through the loans-to-lenders program to receive a mortgage certificate which can be applied to the outstanding balance on the loans-to-lenders mortgage. If the NHT's Mortgage Program is not modified to permit contributors to receive a mortgage certificate when they are entitled to a benefit, redemptions by eligible contributors could seriously deplete the NHT's liquid reserves.

#### 4. Mortgage Loan Requirements

Qualified mortgage lenders can apply to the NHT for an allocation of funds. A commitment fee of 1% of the total amount committed will be charged when the NHT accepts a lender's application. Any unused funds remaining at the end of the commitment period will be made available to all qualified mortgage lenders without the imposition of an additional fee.

Prior to funding any mortgages on housing units, the mortgage lender will be required to certify to the NHT that the housing scheme complies with all requirements established by the guidelines. The NHT reserves the right to inspect the property and the books and records of the developer and the lender to ascertain the accuracy of representations and warranties made to the NHT.

In order to be funded through the NHT loans-to-lenders program, mortgage loans must meet the following criteria:

- (1) The household income of mortgagors for the 12 month period immediately preceding the date of the application for a mortgage loan and the expected total income of the mortgagor's household immediately following such date of application, from all sources and before taxes of all members of the household living in a residence, after deducting the income of any household member who is under 18 years of age or a full-time student may not exceed the maximum household income as established by USAID in effect at the date of application for a mortgage loan. Household income may be evidenced by a current mortgage eligibility certificate issued by the NHT.
- (2) The deposit paid by the mortgagor is not less than 5% of the acquisition cost of the residence.
- (3) The mortgage loan complies with the credit underwriting guidelines of the mortgage lender and the mortgage lender has determined that the mortgagor under each mortgage loan evidences willingness and financial ability to justify and benefit from a mortgage loan in the amount and on the terms stated. Such determination must be based on a thorough evaluation by the mortgage lender of all available and pertinent credit information, supported by written documentation by the mortgage lender.
- (4) The mortgage must be signed by each owner of the property. The note must be signed by any individual whose income and financial strength are needed in order to meet the mortgage lender's underwriting requirements. The mortgage and/or note must also be signed by each individual whose signature is necessary to create a valid lien, pass clear title, waive inchoate rights to property or assign earnings.

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The legal difficulties and costs involved in pledging the underlying mortgages to secure the lender loan argue against the use of the traditional mortgage secured financing structure. Therefore, it is recommended that the loans made by the NHT to mortgage lenders to fund qualifying mortgages be secured by a pledge of the cash flows from all mortgage loans funded by the lender loan and a general lien on the assets of the lender rather than by the pledge and assignment of the mortgages themselves. The NHT will reserve the right to require additional collateral if the performance of the mortgage loans funded and/or the financial condition of the mortgage lender warrant such additional collateral. The mortgage loans will be originated and serviced by the mortgage lender who, in turn, will make quarterly payments of principal and interest to the NHT. As the monthly payments by the borrower escalate in accordance with the escalating payment mortgage schedule, the mortgage lender will pay through to the NHT 100% of the incremental payment for the first four years of the loan, 50% for the second three years, and 25% for the third three years. Payments to the NHT for the remaining term of the loan will remain constant at the tenth year level and the mortgage lender will retain all subsequent increments in the monthly mortgage payment. The payments to the NHT by the mortgage lender in excess of the regular quarterly payment will be applied to reduce the outstanding balance of the lender loan.

Sharing of the benefits of the increments in monthly payments as the mortgage interest rate is moved up to the market rate has benefits for both the NHT and the mortgage lender. The NHT's loan to the lender will have a much shorter duration than under the original 25 year term, reducing the NHT's exposure. The NHT's cash flow will also be increased, improving its ability to meet its obligations to the GOJ and enabling it to establish a reserve fund to cover contingencies. The NHT is not able to invade contributor reserves if there is a shortfall in the loans-to-lenders program. Therefore, in structuring the program, it is critical to provide for sufficient reserves initially and to structure the lender loan to provide adequate cash flow to the NHT to fund its ongoing expenses. The mortgage lender benefits from participating in the increased cash flows by earning a higher yield over the life of the mortgage and paying off its lender loan from the NHT over a shorter term.

Annex E: Financial Calculations

This annex contains the calculations on which the financial feasibility was determined. They are:

1. NHT Cash Flow Position
2. Payments Schedule and Yield calculation for a 30 year fixed rate mortgage.
3. Payments Schedule and Yield Calculation for a 30 year SPARM.
4. Excess Payments Accumulated under a 30 year SPARM as opposed to a fixed rate 30 year mortgage.

National Housing Trust's Cash Flow Position

Assumptions Underlying This Table: Annual Interest	Period During Which Cash Flow Occurs	Number of Quarters	Loan Disbursements Made to Lending Institutions (Flow)	Cumulative Disbursements To Lenders (Stock)	Letters of Credit Signed With Lenders (Flow)	Cumulative Commitments Made or Credit Letters Signed By Lenders (Stock)	Fees & Interest Earned on Balances in All Funds Accounts (Flow)	Interest Payments Received or Due From Lenders (Flow)
Quarter Beginning:								
Rate Earned on Funds Held by NHT will be: 17.25%	April 1, 1986	1		0	5,000,000	5,000,000	25,000	
	July 1, 1986	2		0		5,000,000	93,578	
	October 1, 1986	3	500,000	500,000		5,000,000	97,398	
	January 1, 1987	4	500,000	1,000,000	2,000,000	7,000,000	89,195	10,000
Quarterly Operating Expenses by NHT of: \$5,000.00	April 1, 1987	5	500,000	1,500,000	1,000,000	7,000,000	67,451	20,200
	July 1, 1987	6	500,000	2,000,000		8,000,000	85,301	30,604
	October 1, 1987	7	750,000	2,750,000		8,000,000	95,170	41,216
	January 1, 1988	8	750,000	3,500,000		8,000,000	98,121	57,040
Interest Rate Paid to Ministry of Finance: 10.00%	April 1, 1988	9	750,000	4,250,000	1,900,000	9,900,000	111,252	72,925
	July 1, 1988	10	750,000	5,000,000		9,900,000	115,345	88,871
	October 1, 1988	11	900,000	5,900,000		9,900,000	128,754	104,880
	January 1, 1989	12	1,000,000	6,900,000		9,900,000	136,637	123,953
Interest Rate Charged to Lenders Will be: 8.00%	April 1, 1989	13	1,000,000	7,900,000		9,900,000	141,252	145,023
	July 1, 1989	14	1,000,000	8,900,000		9,900,000	146,752	166,130
	October 1, 1989	15	1,000,000	9,900,000		9,900,000	109,123	187,275
	January 1, 1990	16		9,900,000		9,900,000	69,632	208,459
Fees Associated with Signing a Letter of Credit Will Be: 0.50%	April 1, 1990	17		9,900,000		9,900,000	72,738	209,605
	July 1, 1990	18		9,900,000		9,900,000	76,013	210,262
	October 1, 1990	19		9,900,000		9,900,000	79,253	210,420
	January 1, 1991	20		9,900,000		9,900,000	82,311	210,068
Signing Fee Plus: 0.50%	April 1, 1991	21		9,900,000		9,900,000	85,181	209,197
	July 1, 1991	22		9,900,000		9,900,000	86,749	208,309
Annual Fee for Any Unused Balances	October 1, 1991	23		9,900,000		9,900,000	86,960	207,403
	January 1, 1992	24		9,900,000		9,900,000	87,180	206,479
	April 1, 1992	25		9,900,000		9,900,000	87,410	205,536
Term of Loans to Lenders Will Be For: 25 Years	July 1, 1992	26		9,900,000		9,900,000	87,649	204,574
	October 1, 1992	27		9,900,000		9,900,000	87,899	203,594
	January 1, 1993	28		9,900,000		9,900,000	88,159	202,593
	April 1, 1993	29		9,900,000		9,900,000	88,431	201,573
	July 1, 1993	30		9,900,000		9,900,000	88,714	200,532
Term of Loans From MOF Will Be For: 25 Years	October 1, 1993	31		9,900,000		9,900,000	89,010	199,470
	January 1, 1994	32		9,900,000		9,900,000	89,318	198,387
	April 1, 1994	33		9,900,000		9,900,000	89,640	197,283
	July 1, 1994	34		9,900,000		9,900,000	89,976	196,156
	October 1, 1994	35		9,900,000		9,900,000	90,326	195,007

Draws Are From Ministry of Finance, Loans Are Made To Building Societies or Trust Cos.

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National Housing Trust's Cash Flow Position

Assumptions Underlying This Table:	Period During Which Cash Flow Occurs	Number of Quarters	Loan Disbursements Made to Lending Institutions (Flow)	Cumulative Disbursements To Lenders (Stock)	Letters of Credit Signed With Lenders (Flow)	Cumulative Commitments Made or Credit Letters Signed By Lenders (Stock)	Fees & Interest Earned on Balances in All Funds Accounts (Flow)	Interest Payments Received or Due From Lenders (Flow)
Annual Interest	January 1, 1995	36		9,900,000		9,900,000	90,691	193,835
	April 1, 1995	37		9,900,000		9,900,000	91,072	192,639
Initial Draw From MOF Will Be:	July 1, 1995	38		9,900,000		9,900,000	91,469	191,420
\$2,000,000.00	October 1, 1995	39		9,900,000		9,900,000	91,884	190,176
	From this point on, data will be annual rather than quarterly.							
Grace Period From MOF Will Be 2 Years	Calendar Yr. 1996	43		9,900,000		9,900,000	369,264	755,627
	Calendar Yr. 1997	47		9,900,000		9,900,000	372,342	735,949
	Calendar Yr. 1998	51		9,900,000		9,900,000	375,951	714,695
	Calendar Yr. 1999	55		9,900,000		9,900,000	380,182	691,742
There Will Be No Grace Period for Lenders	Calendar Yr. 2000	59		9,900,000		9,900,000	385,144	666,952
	Calendar Yr. 2001	63		9,900,000		9,900,000	390,961	640,179
	Calendar Yr. 2002	67		9,900,000		9,900,000	397,782	611,265
	Calendar Yr. 2003	71		9,900,000		9,900,000	405,779	580,037
	Calendar Yr. 2004	75		9,900,000		9,900,000	415,156	546,310
	Calendar Yr. 2005	79		9,900,000		9,900,000	426,151	509,886
	Calendar Yr. 2006	83		9,900,000		9,900,000	439,042	470,548
	Calendar Yr. 2008	87		9,900,000		9,900,000	454,157	428,063
	Calendar Yr. 2009	91		9,900,000		9,900,000	471,879	382,179
	Calendar Yr. 2010	95		9,900,000		9,900,000	492,658	332,624
	Calendar Yr. 2011	99		9,900,000		9,900,000	517,022	279,105
	Calendar Yr. 2012	103		9,900,000		9,900,000	545,588	221,304
	Calendar Yr. 2013	107		9,900,000		9,900,000	579,082	158,879
	Calendar Yr. 2014	111		9,900,000		9,900,000	618,353	91,461
	Calendar Yr. 2015	115		9,900,000		9,900,000	664,399	18,648
	Calendar Yr. 2016	119		9,900,000		9,900,000	718,388	-59,989
	Calendar Yr. 2017	123		9,900,000		9,900,000	598,564	-59,989
	Calendar Yr. 2018	127		9,900,000		9,900,000	458,070	-59,989
	Calendar Yr. 2019	131		9,900,000		9,900,000	523,288	-59,989
	Calendar Yr. 2020	135		9,900,000		9,900,000	599,758	-59,989
	Calendar Yr. 2021	139		9,900,000		9,900,000	689,418	-59,989

Draws Are From Ministry of Finance, Loans Are Made To Building Societies or Trust Cos.

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National Housing Trust's Cash Flow Position

Number of Quarters	Cumulative Interest Receipts From Lenders ***** (Stock) *****	Principal Repayments From Lenders ***** (Flow) *****	Advances Drawn From MOF ***** (Flow) *****	Payments to MOF ***** (Flow) *****	Balance in Mortgage Loan Fund ***** (Stock) *****	Balance in Operating Fund ***** (Stock) *****	Capital Reserve Fund ***** (Stock) *****	Debt Service Fund ***** (Stock) *****	Cumulative Draws From MOF ***** (Stock) *****
1	0		2,000,000		1,900,000	50,000	75,000		2,000,000
2	0		0	0	1,900,000	45,000	168,578		2,000,000
3	0		0	0	1,400,000	40,000	265,976		2,000,000
4	10,000	-10,000	100,000	0	1,000,000	35,000	355,171	-10,000	2,100,000
5	30,200	-20,200	750,000	0	1,250,000	30,000	422,623	-30,200	2,850,000
6	60,804	-30,604	750,000	0	1,500,000	25,000	507,923	-60,804	3,600,000
7	102,020	-41,216	750,000	0	1,500,000	20,000	603,093	-102,020	4,350,000
8	159,060	-44,232	750,000	0	1,500,000	15,000	701,214	-146,252	5,100,000
9	231,986	-47,307	900,000	0	1,650,000	10,000	812,465	-193,559	6,000,000
10	320,857	-50,445	1,000,000	66,095	1,900,000	5,000	861,715	-244,004	7,000,000
11	425,737	-53,645	1,000,000	66,095	2,000,000	0	924,375	-297,648	8,000,000
12	549,690	-53,504	1,000,000	66,095	2,000,000	-5,000	994,917	-351,153	9,000,000
13	694,713	-55,361	1,000,000	69,399	2,000,000	-10,000	1,066,770	-406,514	10,000,000
14	860,843	-57,255	0	94,185	1,000,000	-15,000	1,119,337	-463,769	10,000,000
15	1,048,118	-59,187	0	118,971	0	-20,000	1,109,489	-522,955	10,000,000
16	1,256,578	-57,315	0	143,756	0	-25,000	1,035,365	-580,270	10,000,000
17	1,466,183	-32,843	0	168,542	0	-30,000	939,561	-613,113	10,000,000
18	1,676,445	-7,882	0	198,284	0	-35,000	817,291	-620,996	10,000,000
19	1,886,865	17,578	0	231,332	0	-40,000	665,212	-603,418	10,000,000
20	2,095,933	43,547	0	264,379	0	-45,000	483,144	-559,871	10,000,000
21	2,306,131	44,418	0	297,426	0	-50,000	270,898	-515,453	10,000,000
22	2,514,440	45,306	0	330,474	0	-55,000	27,173	-470,147	10,000,000
23	2,721,843	46,212	0	330,474	0	-60,000	-216,340	-423,935	10,000,000
24	2,928,322	47,137	0	330,474	0	-65,000	-459,634	-376,798	10,000,000
25	3,133,858	48,079	0	330,474	0	-70,000	-702,698	-328,719	10,000,000
26	3,338,432	49,041	0	330,474	0	-75,000	-945,523	-279,678	10,000,000
27	3,542,026	50,022	0	330,474	0	-80,000	-1,188,098	-229,656	10,000,000
28	3,744,619	51,022	0	330,474	0	-85,000	-1,430,412	-178,634	10,000,000
29	3,946,191	52,043	0	330,474	0	-90,000	-1,672,455	-126,592	10,000,000
30	4,146,723	53,083	0	330,474	0	-95,000	-1,914,214	-73,508	10,000,000
31	4,345,193	54,145	0	330,474	0	-100,000	-2,155,678	-19,363	10,000,000
32	4,544,581	55,228	0	330,474	0	-105,000	-2,396,833	35,865	10,000,000
33	4,741,863	56,333	0	330,474	0	-110,000	-2,637,667	92,197	10,000,000
34	4,938,019	57,459	0	330,474	0	-115,000	-2,878,165	149,657	10,000,000
35	5,133,026	58,608	0	330,474	0	-120,000	-3,118,313	208,265	10,000,000

Draws Are From Ministry of Finance, Loans Are Made To Building Societies or Trust Cos.

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National Housing Trust's Cash Flow Position

Number of Quarters	Cumulative Interest Receipts From Lenders ***** (Stock) *****	Principal Repayments From Lenders ***** (Flow) *****	Advances Drawn From MOF ***** (Flow) *****	Payments to MOF ***** (Flow) *****	Balance in Mortgage Loan Fund ***** (Stock) *****	Balance in Operating Fund ***** (Stock) *****	Capital Reserve Fund ***** (Stock) *****	Debt Service Fund ***** (Stock) *****	Cumulative Draws From MOF ***** (Stock) *****
36	5,326,861	59,781	0	330,474	0	-125,000	-3,358,096	268,046	10,000,000
37	5,519,500	60,976	0	330,474	0	-130,000	-3,597,498	329,022	10,000,000
38	5,710,920	62,196	0	330,474	0	-135,000	-3,836,502	391,217	10,000,000
39	5,901,095	63,440	0	330,474	0	-140,000	-4,075,092	454,657	10,000,000
43	6,656,723	245,986	0	1,333,034	0	-160,000	-5,038,862	700,643	10,000,000
47	7,392,671	265,665	0	1,333,034	0	-180,000	-5,999,554	966,308	10,000,000
51	8,107,367	286,918	0	1,333,034	0	-200,000	-6,956,637	1,253,226	10,000,000
55	8,799,108	309,872	0	1,333,034	0	-220,000	-7,909,488	1,563,098	10,000,000
59	9,466,061	334,661	0	1,333,034	0	-240,000	-8,857,378	1,897,759	10,000,000
63	10,106,240	361,434	0	1,333,034	0	-260,000	-9,799,450	2,259,193	10,000,000
67	10,717,504	390,349	0	1,333,034	0	-280,000	-10,734,702	2,649,542	10,000,000
71	11,297,541	421,577	0	1,333,034	0	-300,000	-11,661,956	3,071,119	10,000,000
75	11,843,852	455,303	0	1,333,034	0	-320,000	-12,579,833	3,526,422	10,000,000
79	12,353,738	491,727	0	1,333,034	0	-340,000	-13,486,716	4,018,150	10,000,000
83	12,824,286	531,065	0	1,333,034	0	-360,000	-14,380,708	4,549,215	10,000,000
87	13,252,349	573,551	0	1,333,034	0	-380,000	-15,259,585	5,122,766	10,000,000
91	13,634,527	619,435	0	1,333,034	0	-400,000	-16,120,740	5,742,201	10,000,000
95	13,967,151	668,990	0	1,333,034	0	-420,000	-16,961,115	6,411,190	10,000,000
99	14,246,256	722,509	0	1,333,034	0	-440,000	-17,777,127	7,133,699	10,000,000
103	14,467,560	780,309	0	1,333,034	0	-460,000	-18,564,573	7,914,008	10,000,000
107	14,626,439	842,734	0	1,333,034	0	-480,000	-19,318,525	8,756,742	10,000,000
111	14,717,900	910,153	0	1,333,034	0	-500,000	-20,033,206	9,666,895	10,000,000
115	14,736,548	982,965	0	1,333,034	0	-520,000	-20,701,840	10,649,860	10,000,000
119	14,676,560	0	0	1,333,034	0	-540,000	-21,316,486	10,649,860	10,000,000
123	14,616,571	0	0	1,333,034	0	-560,000	-22,050,956	10,649,860	10,000,000
127	14,556,582	0	0	0	0	-580,000	-21,592,886	10,649,860	10,000,000
131	14,496,593	0	0	0	0	-600,000	-21,069,598	10,649,860	10,000,000
135	14,436,604	0	0	0	0	-620,000	-20,469,840	10,649,860	10,000,000
139	14,376,615	0	0	0	0	-640,000	-19,780,423	10,649,860	10,000,000

Draws Are From Ministry of Finance, Loans Are Made To Building Societies or Trust Cos.

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National Housing Trust's Cash Flow Position

Number of Quarters	Cumulative Principal Repayment to MOF ***** (Stock) *****	Balance Owed To MOF Including Interest and Less Principal Paid ***** (Stock) *****	Total Net Cash Position ***** (Stock) *****
1	0	2,000,000	2,025,000
2	-50,000	2,050,000	2,113,578
3	-101,250	2,101,250	1,705,976
4	-153,781	2,253,781	1,390,171
5	-210,126	3,060,126	1,702,623
6	-286,629	3,886,629	2,032,923
7	-383,795	4,733,795	2,123,093
8	-502,140	5,602,140	2,229,023
9	-642,193	6,642,193	2,510,892
10	-742,153	7,742,153	2,843,569
11	-869,612	8,869,612	3,052,463
12	-1,025,258	10,025,258	3,188,454
13	-1,206,490	11,206,490	3,344,969
14	-1,392,467	11,392,467	2,501,411
15	-1,558,308	11,558,308	1,614,652
16	-1,703,510	11,703,510	1,686,673
17	-1,827,556	11,827,556	1,762,631
18	-1,924,960	11,924,960	1,837,740
19	-1,991,753	11,991,753	1,908,659
20	-2,027,168	12,027,168	1,975,206
21	-2,030,421	12,030,421	2,011,575
22	-2,000,707	12,000,707	2,016,466
23	-1,970,251	11,970,251	2,021,568
24	-1,939,034	11,939,034	2,026,889
25	-1,907,036	11,907,036	2,032,441
26	-1,874,238	11,874,238	2,038,231
27	-1,840,620	11,840,620	2,044,271
28	-1,806,162	11,806,162	2,050,572
29	-1,770,842	11,770,842	2,057,145
30	-1,734,640	11,734,640	2,064,000
31	-1,697,532	11,697,532	2,071,152
32	-1,659,497	11,659,497	2,078,612
33	-1,620,510	11,620,510	2,086,394
34	-1,580,549	11,580,549	2,094,511
35	-1,539,589	11,539,589	2,102,978

Draws Are From Ministry of Finance, Loans Are Made To Building Societies or Trust Cos.

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National Housing Trust's Cash Flow Position

Number of Quarters	Cumulative Principal Repayment to MOF (Stock)	Balance Owed To MOF Including Interest and Less Principal Paid (Stock)	Total Net Cash Position (Stock)
36	-1,497,605	11,497,605	2,111,811
37	-1,454,572	11,454,572	2,121,024
38	-1,410,462	11,410,462	2,130,635
39	-1,365,250	11,365,250	2,140,660
43	-1,168,741	11,168,741	2,158,504
47	-952,582	10,952,582	2,179,425
51	-714,806	10,714,806	2,203,956
55	-453,253	10,453,253	2,232,718
59	-165,545	10,165,545	2,266,442
63	150,934	9,849,066	2,305,983
67	499,061	9,500,939	2,352,345
71	882,001	9,117,999	2,406,704
75	1,303,235	8,696,765	2,470,440
79	1,766,592	8,233,408	2,545,171
83	2,276,285	7,723,715	2,632,793
87	2,836,947	7,163,053	2,735,530
91	3,453,675	6,546,325	2,855,988
95	4,132,077	5,867,923	2,997,226
99	4,878,318	5,121,682	3,162,827
103	5,699,183	4,300,817	3,356,995
107	6,602,135	3,397,865	3,584,657
111	7,595,383	2,404,617	3,851,590
115	8,687,955	1,312,045	4,164,569
119	9,889,784	110,216	3,469,934
123	11,211,796	-1,211,796	2,655,475
127	11,332,975	-1,332,975	3,033,556
131	11,466,273	-1,466,273	3,476,856
135	11,612,900	-1,612,900	3,996,624
139	11,774,190	-1,774,190	4,606,053

Mortgage Rate Begins @ 10.00%	Cash Flows Occur After	Principal Outstanding	Accelerating Monthly Payment	Interest Due at Time of Payment	Effective Current Rate	Principal Paid:
Maximum Payment Is: \$298.37	This Number of Months:	Before Payment				
With Term (in Yrs.) of:	*****	*****	*****	*****	*****	*****
30	0	\$34,000.00				
Maximum Interest of:	1	\$34,000.00	\$298.37	\$203.33	10.00%	\$15.04
10.00%	2	\$33,984.96	\$298.37	\$283.21		\$15.17
Beginning Payment	3	\$33,969.79	\$298.37	\$283.08		\$15.29
With 25 yr. Term is:	4	\$33,954.50	\$298.37	\$282.95		\$15.42
\$298.37	5	\$33,939.08	\$298.37	\$282.83		\$15.55
Per Month	6	\$33,923.53	\$298.37	\$282.70		\$15.68
	7	\$33,907.85	\$298.37	\$282.57		\$15.81
Mortgage Amount Is	8	\$33,892.04	\$298.37	\$282.43		\$15.94
\$34,000.00	9	\$33,876.10	\$298.37	\$282.30		\$16.07
Rate of Growth	10	\$33,860.03	\$298.37	\$282.17		\$16.21
of Income	11	\$33,843.82	\$298.37	\$282.03		\$16.34
Assumed to be	12	\$33,827.48	\$298.37	\$281.90		\$16.48
0.00%	13	\$33,811.00	\$298.37	\$281.76	10.00%	\$16.62
Per Two Year Period	14	\$33,794.39	\$298.37	\$281.62		\$16.75
	15	\$33,777.63	\$298.37	\$281.48		\$16.89
Effective Yield is:	16	\$33,760.74	\$298.37	\$281.34		\$17.03
0.83%	17	\$33,743.70	\$298.37	\$281.20		\$17.18
Per Month, or	18	\$33,726.53	\$298.37	\$281.05		\$17.32
10.00%	19	\$33,709.21	\$298.37	\$280.91		\$17.46
Per Year	20	\$33,691.74	\$298.37	\$280.76		\$17.61
	21	\$33,674.13	\$298.37	\$280.62		\$17.76
Months to	22	\$33,656.37	\$298.37	\$280.47		\$17.90
Payout:	23	\$33,638.47	\$298.37	\$280.32		\$18.05
More Than 249 Months	24	\$33,620.42	\$298.37	\$280.17		\$18.20
30 Years	25	\$33,602.21	\$298.37	\$280.02	10.00%	\$18.36
	26	\$33,583.86	\$298.37	\$279.87		\$18.51
Payment Is Adjusted	27	\$33,565.35	\$298.37	\$279.71		\$18.66
Once Every	28	\$33,546.68	\$298.37	\$279.56		\$18.82
24	29	\$33,527.87	\$298.37	\$279.40		\$18.98
Months	30	\$33,508.89	\$298.37	\$279.24		\$19.13
	31	\$33,489.76	\$298.37	\$279.08		\$19.29
	32	\$33,470.46	\$298.37	\$278.92		\$19.45
	33	\$33,451.01	\$298.37	\$278.76		\$19.62
	34	\$33,431.39	\$298.37	\$278.59		\$19.78
	35	\$33,411.61	\$298.37	\$278.43		\$19.94
	36	\$33,391.67	\$298.37	\$278.26		\$20.11
	37	\$33,371.56	\$298.37	\$278.10	10.00%	\$20.28
	38	\$33,351.28	\$298.37	\$277.93		\$20.45
	39	\$33,330.83	\$298.37	\$277.76		\$20.62
	40	\$33,310.22	\$298.37	\$277.59		\$20.79
	41	\$33,289.43	\$298.37	\$277.41		\$20.96
	42	\$33,268.47	\$298.37	\$277.24		\$21.14
	43	\$33,247.33	\$298.37	\$277.06		\$21.31
	44	\$33,226.02	\$298.37	\$276.88		\$21.49
	45	\$33,204.52	\$298.37	\$276.70		\$21.67
	46	\$33,182.85	\$298.37	\$276.52		\$21.85
	47	\$33,161.00	\$298.37	\$276.34		\$22.03
	48	\$33,138.97	\$298.37	\$276.16		\$22.22

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49	\$33,116.75	\$298.37	\$275.97	10.00%	\$22.40
50	\$33,094.35	\$298.37	\$275.79		\$22.59
51	\$33,071.77	\$298.37	\$275.60		\$22.78
52	\$33,048.99	\$298.37	\$275.41		\$22.97
53	\$33,026.02	\$298.37	\$275.22		\$23.16
54	\$33,002.87	\$298.37	\$275.02		\$23.35
55	\$32,979.52	\$298.37	\$274.83		\$23.55
56	\$32,955.97	\$298.37	\$274.63		\$23.74
57	\$32,932.23	\$298.37	\$274.44		\$23.94
58	\$32,908.29	\$298.37	\$274.24		\$24.14
59	\$32,884.15	\$298.37	\$274.03		\$24.34
60	\$32,859.81	\$298.37	\$273.83		\$24.54
61	\$32,835.27	\$298.37	\$273.63	10.00%	\$24.75
62	\$32,810.52	\$298.37	\$273.42		\$24.95
63	\$32,785.57	\$298.37	\$273.21		\$25.16
64	\$32,760.41	\$298.37	\$273.00		\$25.37
65	\$32,735.04	\$298.37	\$272.79		\$25.58
66	\$32,709.45	\$298.37	\$272.58		\$25.80
67	\$32,683.66	\$298.37	\$272.36		\$26.01
68	\$32,657.65	\$298.37	\$272.15		\$26.23
69	\$32,631.42	\$298.37	\$271.93		\$26.45
70	\$32,604.97	\$298.37	\$271.71		\$26.67
71	\$32,578.31	\$298.37	\$271.49		\$26.89
72	\$32,551.42	\$298.37	\$271.26		\$27.11
73	\$32,524.31	\$298.37	\$271.04	10.00%	\$27.34
74	\$32,496.97	\$298.37	\$270.81		\$27.57
75	\$32,469.40	\$298.37	\$270.58		\$27.80
76	\$32,441.61	\$298.37	\$270.35		\$28.03
77	\$32,413.58	\$298.37	\$270.11		\$28.26
78	\$32,385.32	\$298.37	\$269.88		\$28.50
79	\$32,356.82	\$298.37	\$269.64		\$28.73
80	\$32,328.09	\$298.37	\$269.40		\$28.97
81	\$32,299.11	\$298.37	\$269.16		\$29.22
82	\$32,269.90	\$298.37	\$268.92		\$29.46
83	\$32,240.44	\$298.37	\$268.67		\$29.70
84	\$32,210.74	\$298.37	\$268.42		\$29.95
85	\$32,180.78	\$298.37	\$268.17	10.00%	\$30.20
86	\$32,150.58	\$298.37	\$267.92		\$30.45
87	\$32,120.13	\$298.37	\$267.67		\$30.71
88	\$32,089.42	\$298.37	\$267.41		\$30.96
89	\$32,058.46	\$298.37	\$267.15		\$31.22
90	\$32,027.24	\$298.37	\$266.89		\$31.48
91	\$31,995.76	\$298.37	\$266.63		\$31.74
92	\$31,964.02	\$298.37	\$266.37		\$32.01
93	\$31,932.01	\$298.37	\$266.10		\$32.27
94	\$31,899.74	\$298.37	\$265.83		\$32.54
95	\$31,867.19	\$298.37	\$265.56		\$32.81
96	\$31,834.38	\$298.37	\$265.29		\$33.09
97	\$31,801.29	\$298.37	\$265.01	10.00%	\$33.36
98	\$31,767.93	\$298.37	\$264.73		\$33.64
99	\$31,734.29	\$298.37	\$264.45		\$33.92
100	\$31,700.36	\$298.37	\$264.17		\$34.20
101	\$31,666.16	\$298.37	\$263.88		\$34.49
102	\$31,631.67	\$298.37	\$263.60		\$34.78

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103	\$31,596.89	\$298.37	\$263.31		\$35.07
104	\$31,561.82	\$298.37	\$263.02		\$35.36
105	\$31,526.47	\$298.37	\$262.72		\$35.65
106	\$31,490.81	\$298.37	\$262.42		\$35.95
107	\$31,454.86	\$298.37	\$262.12		\$36.25
108	\$31,418.61	\$298.37	\$261.82		\$36.55
109	\$31,382.06	\$298.37	\$261.52	10.00%	\$36.86
110	\$31,345.20	\$298.37	\$261.21		\$37.16
111	\$31,308.04	\$298.37	\$260.90		\$37.47
112	\$31,270.56	\$298.37	\$260.59		\$37.79
113	\$31,232.76	\$298.37	\$260.27		\$38.10
114	\$31,194.67	\$298.37	\$259.96		\$38.42
115	\$31,156.26	\$298.37	\$259.64		\$38.74
116	\$31,117.52	\$298.37	\$259.31		\$39.06
117	\$31,078.46	\$298.37	\$258.99		\$39.39
118	\$31,039.07	\$298.37	\$258.66		\$39.72
119	\$30,999.35	\$298.37	\$258.33		\$40.05
120	\$30,959.31	\$298.37	\$257.99		\$40.38
121	\$30,918.93	\$298.37	\$257.66	10.00%	\$40.72
122	\$30,878.21	\$298.37	\$257.32		\$41.06
123	\$30,837.15	\$298.37	\$256.98		\$41.40
124	\$30,795.76	\$298.37	\$256.63		\$41.74
125	\$30,754.01	\$298.37	\$256.28		\$42.09
126	\$30,711.92	\$298.37	\$255.93		\$42.44
127	\$30,669.48	\$298.37	\$255.58		\$42.80
128	\$30,626.69	\$298.37	\$255.22		\$43.15
129	\$30,583.53	\$298.37	\$254.86		\$43.51
130	\$30,540.02	\$298.37	\$254.50		\$43.87
131	\$30,496.15	\$298.37	\$254.13		\$44.24
132	\$30,451.91	\$298.37	\$253.77		\$44.61
133	\$30,407.30	\$298.37	\$253.39	10.00%	\$44.98
134	\$30,362.32	\$298.37	\$253.02		\$45.36
135	\$30,316.96	\$298.37	\$252.64		\$45.73
136	\$30,271.23	\$298.37	\$252.26		\$46.11
137	\$30,225.12	\$298.37	\$251.88		\$46.50
138	\$30,178.62	\$298.37	\$251.49		\$46.89
139	\$30,131.73	\$298.37	\$251.10		\$47.28
140	\$30,084.46	\$298.37	\$250.70		\$47.67
141	\$30,036.79	\$298.37	\$250.31		\$48.07
142	\$29,988.72	\$298.37	\$249.91		\$48.47
143	\$29,940.25	\$298.37	\$249.50		\$48.87
144	\$29,891.38	\$298.37	\$249.09		\$49.28
145	\$29,842.10	\$298.37	\$248.68	10.00%	\$49.69
146	\$29,792.41	\$298.37	\$248.27		\$50.10
147	\$29,742.30	\$298.37	\$247.85		\$50.52
148	\$29,691.78	\$298.37	\$247.43		\$50.94
149	\$29,640.84	\$298.37	\$247.01		\$51.37
150	\$29,589.47	\$298.37	\$246.58		\$51.80
151	\$29,537.68	\$298.37	\$246.15		\$52.23
152	\$29,485.45	\$298.37	\$245.71		\$52.66
153	\$29,432.79	\$298.37	\$245.27		\$53.10
154	\$29,379.69	\$298.37	\$244.83		\$53.54
155	\$29,326.14	\$298.37	\$244.38		\$53.99
156	\$29,272.15	\$298.37	\$243.93		\$54.44

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157	\$29,217.71	\$298.37	\$243.48	10.00%	\$54.89
158	\$29,162.82	\$298.37	\$243.02		\$55.35
159	\$29,107.47	\$298.37	\$242.56		\$55.81
160	\$29,051.66	\$298.37	\$242.10		\$56.28
161	\$28,995.38	\$298.37	\$241.63		\$56.75
162	\$28,938.63	\$298.37	\$241.16		\$57.22
163	\$28,881.41	\$298.37	\$240.68		\$57.70
164	\$28,823.72	\$298.37	\$240.20		\$58.18
165	\$28,765.54	\$298.37	\$239.71		\$58.66
166	\$28,706.88	\$298.37	\$239.22		\$59.15
167	\$28,647.73	\$298.37	\$238.73		\$59.64
168	\$28,588.09	\$298.37	\$238.23		\$60.14
169	\$28,527.95	\$298.37	\$237.73	10.00%	\$60.64
170	\$28,467.30	\$298.37	\$237.23		\$61.15
171	\$28,406.16	\$298.37	\$236.72		\$61.66
172	\$28,344.50	\$298.37	\$236.20		\$62.17
173	\$28,282.33	\$298.37	\$235.69		\$62.69
174	\$28,219.64	\$298.37	\$235.16		\$63.21
175	\$28,156.43	\$298.37	\$234.64		\$63.74
176	\$28,092.69	\$298.37	\$234.11		\$64.27
177	\$28,028.43	\$298.37	\$233.57		\$64.80
178	\$27,963.62	\$298.37	\$233.03		\$65.34
179	\$27,898.28	\$298.37	\$232.49		\$65.89
180	\$27,832.39	\$298.37	\$231.94		\$66.44
181	\$27,765.95	\$298.37	\$231.38	10.00%	\$66.99
182	\$27,698.96	\$298.37	\$230.82		\$67.55
183	\$27,631.41	\$298.37	\$230.26		\$68.11
184	\$27,563.30	\$298.37	\$229.69		\$68.68
185	\$27,494.62	\$298.37	\$229.12		\$69.25
186	\$27,425.36	\$298.37	\$228.54		\$69.83
187	\$27,355.54	\$298.37	\$227.96		\$70.41
188	\$27,285.12	\$298.37	\$227.38		\$71.00
189	\$27,214.13	\$298.37	\$226.78		\$71.59
190	\$27,142.54	\$298.37	\$226.19		\$72.19
191	\$27,070.35	\$298.37	\$225.59		\$72.79
192	\$26,997.56	\$298.37	\$224.98		\$73.39
193	\$26,924.17	\$298.37	\$224.37	10.00%	\$74.01
194	\$26,850.16	\$298.37	\$223.75		\$74.62
195	\$26,775.54	\$298.37	\$223.13		\$75.24
196	\$26,700.29	\$298.37	\$222.50		\$75.87
197	\$26,624.42	\$298.37	\$221.87		\$76.50
198	\$26,547.92	\$298.37	\$221.23		\$77.14
199	\$26,470.77	\$298.37	\$220.59		\$77.78
200	\$26,392.99	\$298.37	\$219.94		\$78.43
201	\$26,314.56	\$298.37	\$219.29		\$79.09
202	\$26,235.47	\$298.37	\$218.63		\$79.75
203	\$26,155.73	\$298.37	\$217.96		\$80.41
204	\$26,075.32	\$298.37	\$217.29		\$81.08
205	\$25,994.24	\$298.37	\$216.62	10.00%	\$81.76
206	\$25,912.48	\$298.37	\$215.94		\$82.44
207	\$25,830.04	\$298.37	\$215.25		\$83.12
208	\$25,746.92	\$298.37	\$214.56		\$83.82
209	\$25,663.10	\$298.37	\$213.86		\$84.52
210	\$25,578.59	\$298.37	\$213.15		\$85.22

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211	\$25,493.37	\$298.37	\$212.44		\$85.93
212	\$25,407.44	\$298.37	\$211.73		\$86.65
213	\$25,320.79	\$298.37	\$211.01		\$87.37
214	\$25,233.42	\$298.37	\$210.28		\$88.10
215	\$25,145.33	\$298.37	\$209.54		\$88.83
216	\$25,056.50	\$298.37	\$208.80		\$89.57
217	\$24,966.93	\$298.37	\$208.06	10.00%	\$90.32
218	\$24,876.61	\$298.37	\$207.31		\$91.07
219	\$24,785.54	\$298.37	\$206.55		\$91.83
220	\$24,693.71	\$298.37	\$205.78		\$92.59
221	\$24,601.12	\$298.37	\$205.01		\$93.36
222	\$24,507.76	\$298.37	\$204.23		\$94.14
223	\$24,413.61	\$298.37	\$203.45		\$94.93
224	\$24,318.69	\$298.37	\$202.66		\$95.72
225	\$24,222.97	\$298.37	\$201.86		\$96.52
226	\$24,126.45	\$298.37	\$201.05		\$97.32
227	\$24,029.13	\$298.37	\$200.24		\$98.13
228	\$23,931.00	\$298.37	\$199.42		\$98.95
229	\$23,832.05	\$298.37	\$198.60	10.00%	\$99.77
230	\$23,732.28	\$298.37	\$197.77		\$100.61
231	\$23,631.67	\$298.37	\$196.93		\$101.44
232	\$23,530.23	\$298.37	\$196.09		\$102.29
233	\$23,427.94	\$298.37	\$195.23		\$103.14
234	\$23,324.80	\$298.37	\$194.37		\$104.00
235	\$23,220.79	\$298.37	\$193.51		\$104.87
236	\$23,115.93	\$298.37	\$192.63		\$105.74
237	\$23,010.18	\$298.37	\$191.75		\$106.62
238	\$22,903.56	\$298.37	\$190.86		\$107.51
239	\$22,796.05	\$298.37	\$189.97		\$108.41
240	\$22,687.64	\$298.37	\$189.06		\$109.31
241	\$22,578.33	\$298.37	\$188.15	10.00%	\$110.22
242	\$22,468.11	\$298.37	\$187.23		\$111.14
243	\$22,356.97	\$298.37	\$186.31		\$112.07
244	\$22,244.91	\$298.37	\$185.37		\$113.00
245	\$22,131.90	\$298.37	\$184.43		\$113.94
246	\$22,017.96	\$298.37	\$183.48		\$114.89
247	\$21,903.07	\$298.37	\$182.53		\$115.85
248	\$21,787.22	\$298.37	\$181.56		\$116.81
249	\$21,670.41	\$21,851.00	\$180.59		\$21,670.41

Mortgage Rate Begins @ 10.00%	Cash Flows Occur After	Principal Outstanding Before Payment	Accelerating Monthly Payment	Interest Due at Time of Payment	Effective Current Rate	Principal Paid:
Maximum Payment Is: \$570.67	This Number of Months:	*****				
With Term (in Yrs.) of: 25	0	\$34,000.00				
Maximum Interest of: 20.00%	1	\$34,000.00	\$298.37	\$283.33	10.00%	\$15.04
Beginning Payment	2	\$33,984.96	\$298.37	\$283.21		\$15.17
With 30 yr. Term is: \$298.37	3	\$33,969.79	\$298.37	\$283.08		\$15.29
Per Month	4	\$33,954.50	\$298.37	\$282.95		\$15.42
	5	\$33,939.08	\$298.37	\$282.83		\$15.55
	6	\$33,923.53	\$298.37	\$282.70		\$15.68
	7	\$33,907.85	\$298.37	\$282.57		\$15.81
Mortgage Amount Is \$34,000.00	8	\$33,892.04	\$298.37	\$282.43		\$15.94
Rate of Growth of Income	9	\$33,876.10	\$298.37	\$282.30		\$16.07
Assumed to be 10.00%	10	\$33,860.03	\$298.37	\$282.17		\$16.21
Per Two Year Period	11	\$33,843.82	\$298.37	\$282.03		\$16.34
	12	\$33,827.48	\$298.37	\$281.90		\$16.48
	13	\$33,811.00	\$298.37	\$281.76	10.00%	\$16.62
	14	\$33,794.39	\$298.37	\$281.62		\$16.75
	15	\$33,777.63	\$298.37	\$281.48		\$16.89
Effective Yield is: 1.08%	16	\$33,760.74	\$298.37	\$281.34		\$17.03
Per Month, or 12.98%	17	\$33,743.70	\$298.37	\$281.20		\$17.18
Per Year	18	\$33,726.53	\$298.37	\$281.05		\$17.32
	19	\$33,709.21	\$298.37	\$280.91		\$17.46
	20	\$33,691.74	\$298.37	\$280.76		\$17.61
	21	\$33,674.13	\$298.37	\$280.62		\$17.76
Months to Payout:	22	\$33,656.37	\$298.37	\$280.47		\$17.90
More Than 249 Months	23	\$33,638.47	\$298.37	\$280.32		\$18.05
22 Years & 1 Month	24	\$33,620.42	\$298.37	\$280.17		\$18.20
	25	\$33,602.21	\$328.21	\$310.01	11.07%	\$18.20
	26	\$33,584.01	\$328.21	\$309.84		\$18.37
Payment is Adjusted Once Every 24 Months	27	\$33,565.64	\$328.21	\$309.67		\$18.54
	28	\$33,547.09	\$328.21	\$309.50		\$18.71
	29	\$33,528.38	\$328.21	\$309.33		\$18.89
	30	\$33,509.50	\$328.21	\$309.15		\$19.06
	31	\$33,490.44	\$328.21	\$308.98		\$19.24
	32	\$33,471.20	\$328.21	\$308.80		\$19.41
	33	\$33,451.79	\$328.21	\$308.62		\$19.59
	34	\$33,432.20	\$328.21	\$308.44		\$19.77
	35	\$33,412.42	\$328.21	\$308.26		\$19.96
	36	\$33,392.47	\$328.21	\$308.07		\$20.14
	37	\$33,372.33	\$328.21	\$307.89	11.07%	\$20.33
	38	\$33,352.00	\$328.21	\$307.70		\$20.51
	39	\$33,331.49	\$328.21	\$307.51		\$20.70
	40	\$33,310.79	\$328.21	\$307.32		\$20.89
	41	\$33,289.90	\$328.21	\$307.13		\$21.09
	42	\$33,268.81	\$328.21	\$306.93		\$21.28
	43	\$33,247.53	\$328.21	\$306.74		\$21.48
	44	\$33,226.05	\$328.21	\$306.54		\$21.67
	45	\$33,204.38	\$328.21	\$306.34		\$21.87
	46	\$33,182.51	\$328.21	\$306.14		\$22.08
	47	\$33,160.43	\$328.21	\$305.93		\$22.28
	48	\$33,138.15	\$328.21	\$305.73		\$22.49

49	\$33,115.66	\$361.03	\$338.55	12.27%	\$22.49
50	\$33,093.18	\$361.03	\$338.32		\$22.72
51	\$33,070.46	\$361.03	\$338.09		\$22.95
52	\$33,047.51	\$361.03	\$337.85		\$23.18
53	\$33,024.33	\$361.03	\$337.61		\$23.42
54	\$33,000.91	\$361.03	\$337.37		\$23.66
55	\$32,977.25	\$361.03	\$337.13		\$23.90
56	\$32,953.35	\$361.03	\$336.89		\$24.14
57	\$32,929.21	\$361.03	\$336.64		\$24.39
58	\$32,904.82	\$361.03	\$336.39		\$24.64
59	\$32,880.18	\$361.03	\$336.14		\$24.89
60	\$32,855.28	\$361.03	\$335.89		\$25.15
61	\$32,830.14	\$361.03	\$335.63	12.27%	\$25.40
62	\$32,804.73	\$361.03	\$335.37		\$25.66
63	\$32,779.07	\$361.03	\$335.11		\$25.93
64	\$32,753.14	\$361.03	\$334.84		\$26.19
65	\$32,726.95	\$361.03	\$334.57		\$26.46
66	\$32,700.49	\$361.03	\$334.30		\$26.73
67	\$32,673.76	\$361.03	\$334.03		\$27.00
68	\$32,646.76	\$361.03	\$333.75		\$27.28
69	\$32,619.48	\$361.03	\$333.47		\$27.56
70	\$32,591.92	\$361.03	\$333.19		\$27.84
71	\$32,564.08	\$361.03	\$332.91		\$28.12
72	\$32,535.95	\$361.03	\$332.62		\$28.41
73	\$32,507.54	\$397.14	\$368.72	13.61%	\$28.41
74	\$32,479.13	\$397.14	\$368.40		\$28.73
75	\$32,450.40	\$397.14	\$368.08		\$29.06
76	\$32,421.34	\$397.14	\$367.75		\$29.39
77	\$32,391.95	\$397.14	\$367.41		\$29.72
78	\$32,362.22	\$397.14	\$367.08		\$30.06
79	\$32,332.16	\$397.14	\$366.73		\$30.40
80	\$32,301.76	\$397.14	\$366.39		\$30.75
81	\$32,271.02	\$397.14	\$366.04		\$31.09
82	\$32,239.92	\$397.14	\$365.69		\$31.45
83	\$32,208.47	\$397.14	\$365.33		\$31.80
84	\$32,176.67	\$397.14	\$364.97		\$32.17
85	\$32,144.50	\$397.14	\$364.61	13.61%	\$32.53
86	\$32,111.97	\$397.14	\$364.24		\$32.90
87	\$32,079.07	\$397.14	\$363.86		\$33.27
88	\$32,045.80	\$397.14	\$363.49		\$33.65
89	\$32,012.15	\$397.14	\$363.11		\$34.03
90	\$31,978.12	\$397.14	\$362.72		\$34.42
91	\$31,943.71	\$397.14	\$362.33		\$34.81
92	\$31,908.90	\$397.14	\$361.93		\$35.20
93	\$31,873.70	\$397.14	\$361.53		\$35.60
94	\$31,838.09	\$397.14	\$361.13		\$36.01
95	\$31,802.09	\$397.14	\$360.72		\$36.41
96	\$31,765.67	\$397.14	\$360.31		\$36.83
97	\$31,728.85	\$436.85	\$400.02	15.13%	\$36.83
98	\$31,692.02	\$436.85	\$399.56		\$37.29
99	\$31,654.73	\$436.85	\$399.09		\$37.76
100	\$31,616.97	\$436.85	\$398.61		\$38.24
101	\$31,578.73	\$436.85	\$398.13		\$38.72
102	\$31,540.01	\$436.85	\$397.64		\$39.21

Maximum Rate of 20%, Beginning Rate of 10%, and 10% Growth in Income Over Each Two Year Adjustment Period

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103	\$31,500.80	\$436.85	\$397.15		\$39.70
104	\$31,461.10	\$436.85	\$396.65		\$40.20
105	\$31,420.90	\$436.85	\$396.14		\$40.71
106	\$31,380.19	\$436.85	\$395.63		\$41.22
107	\$31,338.97	\$436.85	\$395.11		\$41.74
108	\$31,297.23	\$436.85	\$394.58		\$42.27
109	\$31,254.96	\$436.85	\$394.05	15.13%	\$42.80
110	\$31,212.16	\$436.85	\$393.51		\$43.34
111	\$31,168.81	\$436.85	\$392.96		\$43.89
112	\$31,124.93	\$436.85	\$392.41		\$44.44
113	\$31,080.49	\$436.85	\$391.85		\$45.00
114	\$31,035.49	\$436.85	\$391.28		\$45.57
115	\$30,989.92	\$436.85	\$390.71		\$46.14
116	\$30,943.77	\$436.85	\$390.13		\$46.72
117	\$30,897.05	\$436.85	\$389.54		\$47.31
118	\$30,849.74	\$436.85	\$388.94		\$47.91
119	\$30,801.83	\$436.85	\$388.34		\$48.51
120	\$30,753.31	\$436.85	\$387.72		\$49.13
121	\$30,704.18	\$480.53	\$431.41	16.86%	\$49.13
122	\$30,655.06	\$480.53	\$430.72		\$49.82
123	\$30,605.24	\$480.53	\$430.02		\$50.52
124	\$30,554.73	\$480.53	\$429.31		\$51.23
125	\$30,503.50	\$480.53	\$428.59		\$51.95
126	\$30,451.55	\$480.53	\$427.86		\$52.68
127	\$30,398.88	\$480.53	\$427.12		\$53.42
128	\$30,345.46	\$480.53	\$426.37		\$54.17
129	\$30,291.30	\$480.53	\$425.61		\$54.93
130	\$30,236.37	\$480.53	\$424.84		\$55.70
131	\$30,180.67	\$480.53	\$424.05		\$56.48
132	\$30,124.19	\$480.53	\$423.26		\$57.28
133	\$30,066.91	\$480.53	\$422.45	16.86%	\$58.08
134	\$30,008.83	\$480.53	\$421.64		\$58.90
135	\$29,949.94	\$480.53	\$420.81		\$59.72
136	\$29,890.22	\$480.53	\$419.97		\$60.56
137	\$29,829.65	\$480.53	\$419.12		\$61.41
138	\$29,768.24	\$480.53	\$418.26		\$62.28
139	\$29,705.96	\$480.53	\$417.38		\$63.15
140	\$29,642.81	\$480.53	\$416.50		\$64.04
141	\$29,578.77	\$480.53	\$415.60		\$64.94
142	\$29,513.83	\$480.53	\$414.68		\$65.85
143	\$29,447.98	\$480.53	\$413.76		\$66.78
144	\$29,381.21	\$480.53	\$412.82		\$67.71
145	\$29,313.49	\$528.59	\$460.87	18.87%	\$67.71
146	\$29,245.78	\$528.59	\$459.81		\$68.78
147	\$29,177.00	\$528.59	\$458.73		\$69.86
148	\$29,107.14	\$528.59	\$457.63		\$70.96
149	\$29,036.18	\$528.59	\$456.51		\$72.07
150	\$28,964.10	\$528.59	\$455.38		\$73.21
151	\$28,890.90	\$528.59	\$454.23		\$74.36
152	\$28,816.54	\$528.59	\$453.06		\$75.53
153	\$28,741.01	\$528.59	\$451.87		\$76.72
154	\$28,664.30	\$528.59	\$450.67		\$77.92
155	\$28,586.37	\$528.59	\$449.44		\$79.15
156	\$28,507.23	\$528.59	\$448.20		\$80.39

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157	\$28,426.84	\$528.59	\$446.93	18.87%	\$81.65
158	\$28,345.18	\$528.59	\$445.65		\$82.94
159	\$28,262.24	\$528.59	\$444.35		\$84.24
160	\$28,178.00	\$528.59	\$443.02		\$85.57
161	\$28,092.43	\$528.59	\$441.68		\$86.91
162	\$28,005.52	\$528.59	\$440.31		\$88.28
163	\$27,917.24	\$528.59	\$438.92		\$89.67
164	\$27,827.58	\$528.59	\$437.51		\$91.08
165	\$27,736.50	\$528.59	\$436.08		\$92.51
166	\$27,643.99	\$528.59	\$434.63		\$93.96
167	\$27,550.03	\$528.59	\$433.15		\$95.44
168	\$27,454.59	\$528.59	\$431.65		\$96.94
169	\$27,357.65	\$570.67	\$455.96	20.00%	\$114.71
170	\$27,242.94	\$570.67	\$454.05		\$116.62
171	\$27,126.31	\$570.67	\$452.11		\$118.57
172	\$27,007.74	\$570.67	\$450.13		\$120.54
173	\$26,887.20	\$570.67	\$448.12		\$122.55
174	\$26,764.65	\$570.67	\$446.08		\$124.60
175	\$26,640.05	\$570.67	\$444.00		\$126.67
176	\$26,513.38	\$570.67	\$441.89		\$128.78
177	\$26,384.59	\$570.67	\$439.74		\$130.93
178	\$26,253.66	\$570.67	\$437.56		\$133.11
179	\$26,120.55	\$570.67	\$435.34		\$135.33
180	\$25,985.22	\$570.67	\$433.09		\$137.59
181	\$25,847.63	\$570.67	\$430.79	20.00%	\$139.88
182	\$25,707.75	\$570.67	\$428.46		\$142.21
183	\$25,565.54	\$570.67	\$426.09		\$144.58
184	\$25,420.96	\$570.67	\$423.68		\$146.99
185	\$25,273.97	\$570.67	\$421.23		\$149.44
186	\$25,124.53	\$570.67	\$418.74		\$151.93
187	\$24,972.60	\$570.67	\$416.21		\$154.46
188	\$24,818.13	\$570.67	\$413.64		\$157.04
189	\$24,661.09	\$570.67	\$411.02		\$159.66
190	\$24,501.44	\$570.67	\$408.36		\$162.32
191	\$24,339.12	\$570.67	\$405.65		\$165.02
192	\$24,174.10	\$570.67	\$402.90		\$167.77
193	\$24,006.33	\$570.67	\$400.11	20.00%	\$170.57
194	\$23,835.76	\$570.67	\$397.26		\$173.41
195	\$23,662.35	\$570.67	\$394.37		\$176.30
196	\$23,486.05	\$570.67	\$391.43		\$179.24
197	\$23,306.81	\$570.67	\$388.45		\$182.23
198	\$23,124.58	\$570.67	\$385.41		\$185.26
199	\$22,939.32	\$570.67	\$382.32		\$188.35
200	\$22,750.97	\$570.67	\$379.18		\$191.49
201	\$22,559.48	\$570.67	\$375.99		\$194.68
202	\$22,364.79	\$570.67	\$372.75		\$197.93
203	\$22,166.87	\$570.67	\$369.45		\$201.23
204	\$21,965.64	\$570.67	\$366.09		\$204.58
205	\$21,761.06	\$570.67	\$362.68	20.00%	\$207.99
206	\$21,553.07	\$570.67	\$359.22		\$211.46
207	\$21,341.62	\$570.67	\$355.69		\$214.98
208	\$21,126.64	\$570.67	\$352.11		\$218.56
209	\$20,908.07	\$570.67	\$348.47		\$222.21
210	\$20,685.87	\$570.67	\$344.76		\$225.91

211	\$20,459.96	\$570.67	\$341.00		\$229.67
212	\$20,230.29	\$570.67	\$337.17		\$233.50
213	\$19,996.78	\$570.67	\$333.28		\$237.39
214	\$19,759.39	\$570.67	\$329.32		\$241.35
215	\$19,518.04	\$570.67	\$325.30		\$245.37
216	\$19,272.67	\$570.67	\$321.21		\$249.46
217	\$19,023.20	\$570.67	\$317.05	20.00%	\$253.62
218	\$18,769.58	\$570.67	\$312.83		\$257.85
219	\$18,511.74	\$570.67	\$308.53		\$262.14
220	\$18,249.59	\$570.67	\$304.16		\$266.51
221	\$17,983.08	\$570.67	\$299.72		\$270.96
222	\$17,712.12	\$570.67	\$295.20		\$275.47
223	\$17,436.65	\$570.67	\$290.61		\$280.06
224	\$17,156.59	\$570.67	\$285.94		\$284.73
225	\$16,871.86	\$570.67	\$281.20		\$289.48
226	\$16,582.38	\$570.67	\$276.37		\$294.30
227	\$16,288.08	\$570.67	\$271.47		\$299.21
228	\$15,988.88	\$570.67	\$266.48		\$304.19
229	\$15,684.68	\$570.67	\$261.41	20.00%	\$309.26
230	\$15,375.42	\$570.67	\$256.26		\$314.42
231	\$15,061.00	\$570.67	\$251.02		\$319.66
232	\$14,741.35	\$570.67	\$245.69		\$324.98
233	\$14,416.36	\$570.67	\$240.27		\$330.40
234	\$14,085.96	\$570.67	\$234.77		\$335.91
235	\$13,750.05	\$570.67	\$229.17		\$341.51
236	\$13,408.55	\$570.67	\$223.48		\$347.20
237	\$13,061.35	\$570.67	\$217.69		\$352.98
238	\$12,708.37	\$570.67	\$211.81		\$358.87
239	\$12,349.50	\$570.67	\$205.82		\$364.85
240	\$11,984.65	\$570.67	\$199.74		\$370.93
241	\$11,613.72	\$570.67	\$193.56	20.00%	\$377.11
242	\$11,236.61	\$570.67	\$187.28		\$383.40
243	\$10,853.21	\$570.67	\$180.89		\$389.79
244	\$10,463.43	\$570.67	\$174.39		\$396.28
245	\$10,067.14	\$570.67	\$167.79		\$402.89
246	\$9,664.25	\$570.67	\$161.07		\$409.60
247	\$9,254.65	\$570.67	\$154.24		\$416.43
248	\$8,838.22	\$570.67	\$147.30		\$423.37
249	\$8,414.85	\$8,555.10	\$140.25		\$8,414.85

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Payments Are Received After This Number of Months:	Beginning Rate= Maximum Rate= Income Growth Rate= Maximum Term= Payments	10.00% 10.00% 0.00% 30 Years Payments	10.00% 20.00% 5.00% 25 Years Payments	Excess Payments Received Under Terms of SPARM	Cumulative Sum of Excess Payments	Cumulative Sum of Excess Payments Plus Interest Earned on Funds 12.00%
1	Reinvestment Rate	\$298.37	\$298.37	\$0.00	\$0.00	\$0.00
2	Assumed to be	\$298.37	\$298.37	\$0.00	\$0.00	\$0.00
3	12.00%	\$298.37	\$298.37	\$0.00	\$0.00	\$0.00
4		\$298.37	\$298.37	\$0.00	\$0.00	\$0.00
5	Mortgage Amount is:	\$298.37	\$298.37	\$0.00	\$0.00	\$0.00
6	\$34,000.00	\$298.37	\$298.37	\$0.00	\$0.00	\$0.00
7		\$298.37	\$298.37	\$0.00	\$0.00	\$0.00
8		\$298.37	\$298.37	\$0.00	\$0.00	\$0.00
9		\$298.37	\$298.37	\$0.00	\$0.00	\$0.00
10		\$298.37	\$298.37	\$0.00	\$0.00	\$0.00
11		\$298.37	\$298.37	\$0.00	\$0.00	\$0.00
12		\$298.37	\$298.37	\$0.00	\$0.00	\$0.00
13		\$298.37	\$298.37	\$0.00	\$0.00	\$0.00
14		\$298.37	\$298.37	\$0.00	\$0.00	\$0.00
15		\$298.37	\$298.37	\$0.00	\$0.00	\$0.00
16		\$298.37	\$298.37	\$0.00	\$0.00	\$0.00
17		\$298.37	\$298.37	\$0.00	\$0.00	\$0.00
18		\$298.37	\$298.37	\$0.00	\$0.00	\$0.00
19		\$298.37	\$298.37	\$0.00	\$0.00	\$0.00
20		\$298.37	\$298.37	\$0.00	\$0.00	\$0.00
21		\$298.37	\$298.37	\$0.00	\$0.00	\$0.00
22		\$298.37	\$298.37	\$0.00	\$0.00	\$0.00
23		\$298.37	\$298.37	\$0.00	\$0.00	\$0.00
24		\$298.37	\$298.37	\$0.00	\$0.00	\$0.00
25		\$298.37	\$328.21	\$29.84	\$29.84	\$29.84
26		\$298.37	\$328.21	\$29.84	\$59.67	\$59.97
27		\$298.37	\$328.21	\$29.84	\$89.51	\$90.41
28		\$298.37	\$328.21	\$29.84	\$119.35	\$121.15
29		\$298.37	\$328.21	\$29.84	\$149.19	\$152.20
30		\$298.37	\$328.21	\$29.84	\$179.02	\$183.56
31		\$298.37	\$328.21	\$29.84	\$208.86	\$215.23
32		\$298.37	\$328.21	\$29.84	\$238.70	\$247.22
33		\$298.37	\$328.21	\$29.84	\$268.54	\$279.53
34		\$298.37	\$328.21	\$29.84	\$298.37	\$312.17
35		\$298.37	\$328.21	\$29.84	\$328.21	\$345.12
36		\$298.37	\$328.21	\$29.84	\$358.05	\$378.41
37		\$298.37	\$328.21	\$29.84	\$387.89	\$412.03
38		\$298.37	\$328.21	\$29.84	\$417.72	\$445.99
39		\$298.37	\$328.21	\$29.84	\$447.56	\$480.29
40		\$298.37	\$328.21	\$29.84	\$477.40	\$514.93
41		\$298.37	\$328.21	\$29.84	\$507.24	\$549.92
42		\$298.37	\$328.21	\$29.84	\$537.07	\$585.25
43		\$298.37	\$328.21	\$29.84	\$566.91	\$620.94
44		\$298.37	\$328.21	\$29.84	\$596.75	\$656.99
45		\$298.37	\$328.21	\$29.84	\$626.59	\$693.40
46		\$298.37	\$328.21	\$29.84	\$656.42	\$730.17
47		\$298.37	\$328.21	\$29.84	\$686.26	\$767.31
48		\$298.37	\$328.21	\$29.84	\$716.10	\$804.82

SPARM Made at 10% Initial Rate, Accelerating to 20%, Income Growing at 10% Per Two Year Adjustment Period 9/10/85

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49	\$298.37	\$361.03	\$62.66	\$778.76	\$875.53
50	\$298.37	\$361.03	\$62.66	\$841.42	\$946.94
51	\$298.37	\$361.03	\$62.66	\$904.07	\$1,019.07
52	\$298.37	\$361.03	\$62.66	\$966.73	\$1,091.92
53	\$298.37	\$361.03	\$62.66	\$1,029.39	\$1,165.49
54	\$298.37	\$361.03	\$62.66	\$1,092.05	\$1,239.81
55	\$298.37	\$361.03	\$62.66	\$1,154.71	\$1,314.86
56	\$298.37	\$361.03	\$62.66	\$1,217.37	\$1,390.67
57	\$298.37	\$361.03	\$62.66	\$1,280.03	\$1,467.24
58	\$298.37	\$361.03	\$62.66	\$1,342.68	\$1,544.57
59	\$298.37	\$361.03	\$62.66	\$1,405.34	\$1,622.67
60	\$298.37	\$361.03	\$62.66	\$1,468.00	\$1,701.56
61	\$298.37	\$361.03	\$62.66	\$1,530.66	\$1,781.23
62	\$298.37	\$361.03	\$62.66	\$1,593.32	\$1,861.70
63	\$298.37	\$361.03	\$62.66	\$1,655.98	\$1,942.98
64	\$298.37	\$361.03	\$62.66	\$1,718.64	\$2,025.07
65	\$298.37	\$361.03	\$62.66	\$1,781.29	\$2,107.98
66	\$298.37	\$361.03	\$62.66	\$1,843.95	\$2,191.71
67	\$298.37	\$361.03	\$62.66	\$1,906.61	\$2,276.29
68	\$298.37	\$361.03	\$62.66	\$1,969.27	\$2,361.71
69	\$298.37	\$361.03	\$62.66	\$2,031.93	\$2,447.99
70	\$298.37	\$361.03	\$62.66	\$2,094.59	\$2,535.13
71	\$298.37	\$361.03	\$62.66	\$2,157.25	\$2,623.14
72	\$298.37	\$361.03	\$62.66	\$2,219.91	\$2,712.03
73	\$298.37	\$397.14	\$98.76	\$2,318.67	\$2,837.91
74	\$298.37	\$397.14	\$98.76	\$2,417.43	\$2,965.05
75	\$298.37	\$397.14	\$98.76	\$2,516.19	\$3,093.46
76	\$298.37	\$397.14	\$98.76	\$2,614.95	\$3,223.16
77	\$298.37	\$397.14	\$98.76	\$2,713.71	\$3,354.15
78	\$298.37	\$397.14	\$98.76	\$2,812.48	\$3,486.46
79	\$298.37	\$397.14	\$98.76	\$2,911.24	\$3,620.08
80	\$298.37	\$397.14	\$98.76	\$3,010.00	\$3,755.04
81	\$298.37	\$397.14	\$98.76	\$3,108.76	\$3,891.36
82	\$298.37	\$397.14	\$98.76	\$3,207.52	\$4,029.03
83	\$298.37	\$397.14	\$98.76	\$3,306.29	\$4,168.08
84	\$298.37	\$397.14	\$98.76	\$3,405.05	\$4,308.53
85	\$298.37	\$397.14	\$98.76	\$3,503.81	\$4,450.37
86	\$298.37	\$397.14	\$98.76	\$3,602.57	\$4,593.64
87	\$298.37	\$397.14	\$98.76	\$3,701.33	\$4,738.34
88	\$298.37	\$397.14	\$98.76	\$3,800.10	\$4,884.48
89	\$298.37	\$397.14	\$98.76	\$3,898.86	\$5,032.09
90	\$298.37	\$397.14	\$98.76	\$3,997.62	\$5,181.17
91	\$298.37	\$397.14	\$98.76	\$4,096.38	\$5,331.75
92	\$298.37	\$397.14	\$98.76	\$4,195.14	\$5,483.83
93	\$298.37	\$397.14	\$98.76	\$4,293.91	\$5,637.43
94	\$298.37	\$397.14	\$98.76	\$4,392.67	\$5,792.56
95	\$298.37	\$397.14	\$98.76	\$4,491.43	\$5,949.25
96	\$298.37	\$397.14	\$98.76	\$4,590.19	\$6,107.50
97	\$298.37	\$436.85	\$138.48	\$4,728.67	\$6,307.06
98	\$298.37	\$436.85	\$138.48	\$4,867.14	\$6,508.60
99	\$298.37	\$436.85	\$138.48	\$5,005.62	\$6,712.16
100	\$298.37	\$436.85	\$138.48	\$5,144.09	\$6,917.76
101	\$298.37	\$436.85	\$138.48	\$5,282.57	\$7,125.41
102	\$298.37	\$436.85	\$138.48	\$5,421.04	\$7,335.14

SPARM Made at 10% Initial Rate, Accelerating to 20%, Income Growing at 10% Per Two Year Adjustment Period 9/10/85

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103	\$298.37	\$436.85	\$138.48	\$5,559.52	\$7,546.97
104	\$298.37	\$436.85	\$138.48	\$5,697.99	\$7,760.91
105	\$298.37	\$436.85	\$138.48	\$5,836.47	\$7,977.00
106	\$298.37	\$436.85	\$138.48	\$5,974.95	\$8,195.25
107	\$298.37	\$436.85	\$138.48	\$6,113.42	\$8,415.67
108	\$298.37	\$436.85	\$138.48	\$6,251.90	\$8,638.31
109	\$298.37	\$436.85	\$138.48	\$6,390.37	\$8,863.16
110	\$298.37	\$436.85	\$138.48	\$6,528.85	\$9,090.27
111	\$298.37	\$436.85	\$138.48	\$6,667.32	\$9,319.65
112	\$298.37	\$436.85	\$138.48	\$6,805.80	\$9,551.32
113	\$298.37	\$436.85	\$138.48	\$6,944.27	\$9,785.31
114	\$298.37	\$436.85	\$138.48	\$7,082.75	\$10,021.64
115	\$298.37	\$436.85	\$138.48	\$7,221.23	\$10,260.33
116	\$298.37	\$436.85	\$138.48	\$7,359.70	\$10,501.41
117	\$298.37	\$436.85	\$138.48	\$7,498.18	\$10,744.90
118	\$298.37	\$436.85	\$138.48	\$7,636.65	\$10,990.82
119	\$298.37	\$436.85	\$138.48	\$7,775.13	\$11,239.21
120	\$298.37	\$436.85	\$138.48	\$7,913.60	\$11,490.07
121	\$298.37	\$480.53	\$182.16	\$8,095.76	\$11,787.14
122	\$298.37	\$480.53	\$182.16	\$8,277.92	\$12,087.17
123	\$298.37	\$480.53	\$182.16	\$8,460.08	\$12,390.20
124	\$298.37	\$480.53	\$182.16	\$8,642.25	\$12,696.26
125	\$298.37	\$480.53	\$182.16	\$8,824.41	\$13,005.39
126	\$298.37	\$480.53	\$182.16	\$9,006.57	\$13,317.60
127	\$298.37	\$480.53	\$182.16	\$9,188.73	\$13,632.94
128	\$298.37	\$480.53	\$182.16	\$9,370.89	\$13,951.43
129	\$298.37	\$480.53	\$182.16	\$9,553.05	\$14,273.10
130	\$298.37	\$480.53	\$182.16	\$9,735.21	\$14,597.99
131	\$298.37	\$480.53	\$182.16	\$9,917.37	\$14,926.13
132	\$298.37	\$480.53	\$182.16	\$10,099.53	\$15,257.56
133	\$298.37	\$480.53	\$182.16	\$10,281.69	\$15,592.29
134	\$298.37	\$480.53	\$182.16	\$10,463.85	\$15,930.37
135	\$298.37	\$480.53	\$182.16	\$10,646.01	\$16,271.84
136	\$298.37	\$480.53	\$182.16	\$10,828.17	\$16,616.72
137	\$298.37	\$480.53	\$182.16	\$11,010.33	\$16,965.05
138	\$298.37	\$480.53	\$182.16	\$11,192.49	\$17,316.86
139	\$298.37	\$480.53	\$182.16	\$11,374.65	\$17,672.19
140	\$298.37	\$480.53	\$182.16	\$11,556.81	\$18,031.07
141	\$298.37	\$480.53	\$182.16	\$11,738.97	\$18,393.54
142	\$298.37	\$480.53	\$182.16	\$11,921.13	\$18,759.64
143	\$298.37	\$480.53	\$182.16	\$12,103.30	\$19,129.39
144	\$298.37	\$480.53	\$182.16	\$12,285.46	\$19,502.85
145	\$298.37	\$528.59	\$230.21	\$12,515.67	\$19,928.09
146	\$298.37	\$528.59	\$230.21	\$12,745.88	\$20,357.58
147	\$298.37	\$528.59	\$230.21	\$12,976.10	\$20,791.37
148	\$298.37	\$528.59	\$230.21	\$13,206.31	\$21,229.50
149	\$298.37	\$528.59	\$230.21	\$13,436.53	\$21,672.01
150	\$298.37	\$528.59	\$230.21	\$13,666.74	\$22,118.94
151	\$298.37	\$528.59	\$230.21	\$13,896.95	\$22,570.35
152	\$298.37	\$528.59	\$230.21	\$14,127.17	\$23,026.27
153	\$298.37	\$528.59	\$230.21	\$14,357.38	\$23,486.74
154	\$298.37	\$528.59	\$230.21	\$14,587.60	\$23,951.82
155	\$298.37	\$528.59	\$230.21	\$14,817.81	\$24,421.56
156	\$298.37	\$528.59	\$230.21	\$15,048.02	\$24,895.99

SPARM Made at 10% Initial Rate, Accelerating to 20%, Income Growing at 10% Per Two Year Adjustment Period 9/10/85

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157	\$298.37	\$528.59	\$230.21	\$15,278.24	\$25,375.16
158	\$298.37	\$528.59	\$230.21	\$15,508.45	\$25,859.12
159	\$298.37	\$528.59	\$230.21	\$15,738.67	\$26,347.93
160	\$298.37	\$528.59	\$230.21	\$15,968.88	\$26,841.62
161	\$298.37	\$528.59	\$230.21	\$16,199.09	\$27,340.25
162	\$298.37	\$528.59	\$230.21	\$16,429.31	\$27,843.87
163	\$298.37	\$528.59	\$230.21	\$16,659.52	\$28,352.52
164	\$298.37	\$528.59	\$230.21	\$16,889.74	\$28,866.26
165	\$298.37	\$528.59	\$230.21	\$17,119.95	\$29,385.14
166	\$298.37	\$528.59	\$230.21	\$17,350.16	\$29,909.20
167	\$298.37	\$528.59	\$230.21	\$17,580.38	\$30,438.51
168	\$298.37	\$528.59	\$230.21	\$17,810.59	\$30,973.11
169	\$298.37	\$570.67	\$272.30	\$18,082.89	\$31,555.14
170	\$298.37	\$570.67	\$272.30	\$18,355.19	\$32,142.99
171	\$298.37	\$570.67	\$272.30	\$18,627.49	\$32,736.72
172	\$298.37	\$570.67	\$272.30	\$18,899.79	\$33,336.39
173	\$298.37	\$570.67	\$272.30	\$19,172.09	\$33,942.05
174	\$298.37	\$570.67	\$272.30	\$19,444.39	\$34,553.77
175	\$298.37	\$570.67	\$272.30	\$19,716.69	\$35,171.61
176	\$298.37	\$570.67	\$272.30	\$19,988.99	\$35,795.62
177	\$298.37	\$570.67	\$272.30	\$20,261.29	\$36,425.88
178	\$298.37	\$570.67	\$272.30	\$20,533.58	\$37,062.43
179	\$298.37	\$570.67	\$272.30	\$20,805.88	\$37,705.36
180	\$298.37	\$570.67	\$272.30	\$21,078.18	\$38,354.71
181	\$298.37	\$570.67	\$272.30	\$21,350.48	\$39,010.56
182	\$298.37	\$570.67	\$272.30	\$21,622.78	\$39,672.96
183	\$298.37	\$570.67	\$272.30	\$21,895.08	\$40,341.99
184	\$298.37	\$570.67	\$272.30	\$22,167.38	\$41,017.71
185	\$298.37	\$570.67	\$272.30	\$22,439.68	\$41,700.19
186	\$298.37	\$570.67	\$272.30	\$22,711.98	\$42,389.49
187	\$298.37	\$570.67	\$272.30	\$22,984.28	\$43,085.68
188	\$298.37	\$570.67	\$272.30	\$23,256.58	\$43,788.84
189	\$298.37	\$570.67	\$272.30	\$23,528.88	\$44,499.03
190	\$298.37	\$570.67	\$272.30	\$23,801.18	\$45,216.32
191	\$298.37	\$570.67	\$272.30	\$24,073.47	\$45,940.78
192	\$298.37	\$570.67	\$272.30	\$24,345.77	\$46,672.48
193	\$298.37	\$570.67	\$272.30	\$24,618.07	\$47,411.51
194	\$298.37	\$570.67	\$272.30	\$24,890.37	\$48,157.92
195	\$298.37	\$570.67	\$272.30	\$25,162.67	\$48,911.80
196	\$298.37	\$570.67	\$272.30	\$25,434.97	\$49,673.22
197	\$298.37	\$570.67	\$272.30	\$25,707.27	\$50,442.25
198	\$298.37	\$570.67	\$272.30	\$25,979.57	\$51,218.97
199	\$298.37	\$570.67	\$272.30	\$26,251.87	\$52,003.46
200	\$298.37	\$570.67	\$272.30	\$26,524.17	\$52,795.80
201	\$298.37	\$570.67	\$272.30	\$26,796.47	\$53,596.05
202	\$298.37	\$570.67	\$272.30	\$27,068.77	\$54,404.31
203	\$298.37	\$570.67	\$272.30	\$27,341.07	\$55,220.65
204	\$298.37	\$570.67	\$272.30	\$27,613.37	\$56,045.16
205	\$298.37	\$570.67	\$272.30	\$27,885.66	\$56,877.91
206	\$298.37	\$570.67	\$272.30	\$28,157.96	\$57,718.99
207	\$298.37	\$570.67	\$272.30	\$28,430.26	\$58,568.48
208	\$298.37	\$570.67	\$272.30	\$28,702.56	\$59,426.46
209	\$298.37	\$570.67	\$272.30	\$28,974.86	\$60,293.03
210	\$298.37	\$570.67	\$272.30	\$29,247.16	\$61,168.26

SPARM Made at 10% Initial Rate, Accelerating to 20%, Income Growing at 10% Per Two Year Adjustment Period 9/10/85

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211	\$298.37	\$570.67	\$272.30	\$29,519.46	\$62,052.24
212	\$298.37	\$570.67	\$272.30	\$29,791.76	\$62,945.06
213	\$298.37	\$570.67	\$272.30	\$30,064.06	\$63,846.81
214	\$298.37	\$570.67	\$272.30	\$30,336.36	\$64,757.58
215	\$298.37	\$570.67	\$272.30	\$30,608.66	\$65,677.45
216	\$298.37	\$570.67	\$272.30	\$30,880.96	\$66,606.53
217	\$298.37	\$570.67	\$272.30	\$31,153.26	\$67,544.89
218	\$298.37	\$570.67	\$272.30	\$31,425.56	\$68,492.64
219	\$298.37	\$570.67	\$272.30	\$31,697.85	\$69,449.86
220	\$298.37	\$570.67	\$272.30	\$31,970.15	\$70,416.66
221	\$298.37	\$570.67	\$272.30	\$32,242.45	\$71,393.13
222	\$298.37	\$570.67	\$272.30	\$32,514.75	\$72,379.36
223	\$298.37	\$570.67	\$272.30	\$32,787.05	\$73,375.45
224	\$298.37	\$570.67	\$272.30	\$33,059.35	\$74,381.51
225	\$298.37	\$570.67	\$272.30	\$33,331.65	\$75,397.62
226	\$298.37	\$570.67	\$272.30	\$33,603.95	\$76,423.89
227	\$298.37	\$570.67	\$272.30	\$33,876.25	\$77,460.43
228	\$298.37	\$570.67	\$272.30	\$34,148.55	\$78,507.34
229	\$298.37	\$570.67	\$272.30	\$34,420.85	\$79,564.71
230	\$298.37	\$570.67	\$272.30	\$34,693.15	\$80,632.66
231	\$298.37	\$570.67	\$272.30	\$34,965.45	\$81,711.28
232	\$298.37	\$570.67	\$272.30	\$35,237.74	\$82,800.69
233	\$298.37	\$570.67	\$272.30	\$35,510.04	\$83,901.00
234	\$298.37	\$570.67	\$272.30	\$35,782.34	\$85,012.31
235	\$298.37	\$570.67	\$272.30	\$36,054.64	\$86,134.73
236	\$298.37	\$570.67	\$272.30	\$36,326.94	\$87,268.38
237	\$298.37	\$570.67	\$272.30	\$36,599.24	\$88,415.36
238	\$298.37	\$570.67	\$272.30	\$36,871.54	\$89,569.79
239	\$298.37	\$570.67	\$272.30	\$37,143.84	\$90,737.79
240	\$298.37	\$570.67	\$272.30	\$37,416.14	\$91,917.47
241	\$298.37	\$570.67	\$272.30	\$37,688.44	\$93,108.94
242	\$298.37	\$570.67	\$272.30	\$37,960.74	\$94,312.33
243	\$298.37	\$570.67	\$272.30	\$38,233.04	\$95,527.75
244	\$298.37	\$570.67	\$272.30	\$38,505.34	\$96,755.33
245	\$298.37	\$570.67	\$272.30	\$38,777.64	\$97,995.18
246	\$298.37	\$570.67	\$272.30	\$39,049.93	\$99,247.43
247	\$298.37	\$570.67	\$272.30	\$39,322.23	\$100,512.21
248	\$298.37	\$570.67	\$272.30	\$39,594.53	\$101,789.63
249	\$21,851.00	\$8,555.10	(\$13,295.90)	\$26,298.64	\$89,511.63

SPARM Made at 10% Initial Rate, Accelerating to 20%, Income Growing at 10% Per Two Year Adjustment Period 9/10/85

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THE HOUSING GUARANTY PROGRAM

STATUTORY CHECKLIST

JAMAICA

PROJECT NO. 532-HG-012

ANSWER YES/NO PUT PP PAGE  
REFERENCES AND/OR EXPLANATIONS  
WHERE APPROPRIATE

A. General Criteria Under HG Statutory Authority.

Section 221(a)

Will the proposed project meet the following criteria.

- (1) is intended to increase the availability of domestic financing by demonstrating to local entrepreneurs and institutions that providing low-cost housing is financially viable; Yes, pg.22 demonstrate viability
- (2) is intended to assist in marshalling resources for low-cost housing; Yes, pg.22 demonstrate viability of private sector program
- (3) supports a pilot project for low-cost shelter, or is intended to have a maximum demonstration impact on local institutions and national policy; and, Yes, pg.6, pg.22
- (4) is intended to have a long run goal to develop domestic construction capabilities and stimulate local credit institutions to make available domestic capital and other management and technological resources required for effective low cost shelter programs and policies. Yes, pg.22

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Section 222(a)

Will the issuance of this guaranty cause the total face amount of guarantees issued and outstanding at this time to be in excess of \$1,718,000,000?

No \_\_\_\_\_

Will the guaranty be issued prior to September 30, 1984?

No \_\_\_\_\_

Section 222(b)

Will the proposed guaranty result in activities which emphasize:

(1) projects providing improved home sites to poor families on which to build shelter and related services; or

Yes, pg.18 \_\_\_\_\_

(2) projects comprised of expandable core shelter units on serviced sites; or

Yes, pg.15 \_\_\_\_\_

(3) slum upgrading projects designed to conserve and improve existing shelter; or

Yes, pg.17 \_\_\_\_\_

4) shelter projects for low-income people designed for demonstration or institution building; or

Yes, pg.19 \_\_\_\_\_

Section 222(c)

If the project requires the use or conservation of energy, was consideration given to the use of solar energy technologies, where economically or technically feasible?

N/A \_\_\_\_\_

Section 223(a)

Will the AID guaranty fee be in an amount authorized by AID in accordance with its delegated powers?

Yes \_\_\_\_\_

Section 223(f)

Is the maximum rate of interest allowable to the eligible U.S. Investor, as prescribed by the Administrator, not more than one percent (1%) above the current rate of interest applicable to housing mortgages insured by the Department of Housing and Urban Development?

Yes

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Section 223(j)

(1) Will the proposed Housing Guaranty be coordinated with and complementary to other development assistance in the host country?

Yes, pg.4, pg.5

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(2) Will the proposed Housing Guaranty demonstrate the feasibility of particular kinds of housing and other institutional arrangements?

Yes, section beginning pg.12

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(3) Is the project designed and planned by AID so that at least ninety percent (90%) of the face value of the proposed guaranty will be for housing suitable for families below the median urban income for housing in urban areas, in the host country?

Yes, pg.20

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(4) Will the issuance of this guaranty cause the face value of guaranties issued with respect to the host country to exceed \$25 million in any fiscal year?

No

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(5) Will the issuance of this guaranty cause the average face value of all housing guaranties issued in this fiscal year to exceed \$15 million?

No

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Section 238(c)

Will the guaranty agreement provide that will cover only lenders who are "eligible investors" within the meaning of this section of the statute at the time the guaranty is issued?

Yes

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B. Criteria Under General Foreign Assistance Act Authority.

Section 620/620A

(1) Does the host country meet the general criteria for country eligibility under the Foreign Assistance Act as set forth in the country eligibility checklist prepared at the beginning of each year?

Yes \_\_\_\_\_

(2) Is there any reason to believe that circumstances have changed in the host country so that it would now be ineligible under the country statutory checklist?

No \_\_\_\_\_

GUARANTY AUTHORIZATIONPROJECT NO. 532-HG-012

PROVIDED FROM: Housing Guaranty Authority

FOR: The Government of Jamaica

Pursuant to the authority vested in the Assistant Administrator, Bureau for Latin America and the Caribbean, by the Foreign Assistance Act of 1961, as amended (FAA), and the delegations of authority issued thereunder, I hereby authorize the issuance to eligible U.S. investors (Investors) acceptable to A.I.D. of guaranties pursuant to Section 222 of the FAA of not to exceed Fifteen Million U.S. Dollars (\$U.S.15,000,000) in face amount. The guaranties shall assure against losses (of not to exceed one hundred percent (100%) of loan investment and interest) with respect to loans, including any refinancings thereof, made to finance housing projects in Jamaica.

These guaranties shall be subject to the following terms and conditions:

1. Term of Guaranty: The loans may extend for a period of up to thirty years (30) from the date of disbursement and may include such terms and conditions as shall be acceptable to A.I.D. The guaranties of the loans shall extend for a period beginning with the disbursements of the loans and shall continue until such time as the loans have been paid in full.
2. Interest Rate: The rate or rates of interest payable to the Investor pursuant to the loans shall not exceed that prescribed pursuant to Section 223(f) of the FAA and shall be consistent with rates of interest generally available for similar types of loans made in the long term U.S. capital markets.
3. Government of Jamaica Guaranty: The Government of Jamaica shall provide for a full faith and credit guaranty to indemnify A.I.D. against all losses arising by virtue of A.I.D.'s guaranties to the Investor or from non-payment of the guaranty fee.

- 4. Fee: The fee of the United States shall be payable in dollars and shall be one-half percent (1/2%) per annum of the outstanding guarantied amount of the loans plus a fixed amount equal to one percent (1%) of the amount of the loans authorized or any part thereof, to be paid as A.I.D. may determine upon disbursement of the loans.
- 5. Other Terms and Conditions: The guaranties shall be subject to such other terms and conditions as A.I.D. may deem necessary.

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Malcolm Butler  
Acting Assistant Administrator  
Bureau for Latin America and the Caribbean

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(DATE)

Clearances:

AA/PRE:NPeden	_____	Date	_____
PRE/H:PMKimm	_____	Date	_____
LAC/DR:DJohanson	_____	Date	_____
LAC/CAR:MDagata	_____	Date	_____
GC/LAC:RMeighan	_____	Date	_____
GC/PRE:MKitay	_____	Date	_____
FM/LMD:TCully	_____	Date	_____
PPC/PDPR:ARosenberg	_____	Date	_____

GC/H:BVeret:9/20/85 #0059P

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