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A STUDY OF ALASKA'S HOUSING PROGRAMS



**INSTITUTE OF SOCIAL AND ECONOMIC RESEARCH
UNIVERSITY OF ALASKA
Fairbanks • Anchorage • Juneau**

A STUDY OF ALASKA'S HOUSING PROGRAMS

Prepared for

**LEGISLATIVE BUDGET AND AUDIT COMMITTEE
ALASKA STATE LEGISLATURE**

Prepared by

**INSTITUTE OF SOCIAL AND ECONOMIC RESEARCH
UNIVERSITY OF ALASKA**

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March 1982

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March 26, 1982

Senator Arliss Sturgulewski
Alaska State Legislature
Pouch V
Juneau, AK 99811

Dear Senator Sturgulewski:

We are pleased to transmit with this letter a copy of our report, "A Study of Alaska's Housing Programs". This study was conducted under contract to the Legislative Budget and Audit Committee. The study examines the present and future effects of the state's current housing programs. These programs are operated by three separate agencies of the state: the Alaska Housing Finance Corporation, the Alaska State Housing Authority, and the Department of Community and Regional Affairs.

The study examines the direct and indirect effects of each program. The direct effects of the programs describe what the programs did; the number, value, and distribution of loans made are examples of direct effects. The indirect effects, or market impacts, describe the changes that occurred in Alaska's housing markets as a result of the programs; the additional units constructed and the changes in housing prices exemplify market impacts.

Our analysis of the direct effects of the programs is complete and comprehensive. We describe the cost to the state of each program, who was served by each program, and the outputs of each program. Our analysis benefited greatly from the access to program data and cooperation of the staff of each agency involved.

UNIVERSITY OF ALASKA

Senator Arliss Sturgulewski

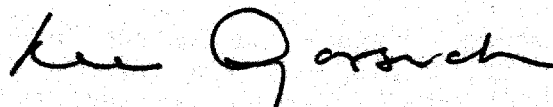
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March 26, 1982

Although we are confident of the reliability of our analysis and findings, our analysis of the market impacts was constrained by limited information on Alaska's housing stock and housing transactions, and certain caveats to our report are appropriate. First, the lack of data and information on the various segments of the housing markets - for example, the conversion of single family rental units to sale units - confined our analysis of program impacts to impacts on the overall housing market. Second, many of the programs' impacts may not have surfaced within the relatively short history of the programs' operations. For example, the subsidy to home ownership may have permanently adjusted financial incentives to invest in rental housing. And finally, during the period of our study, July 1980 to August 1981, Alaska experienced a surge in population, causing housing vacancy rates to fall and housing prices and rents to rise. Thus the task of segregating the program effects from the overall demand effects was particularly challenging.

Our report does not examine alternative housing policies but rather documents and analyzes the costs and outcomes of the present programs. We did not attempt to measure housing needs in Alaska nor to assess the relative merits or effects of owner housing subsidies versus renter subsidies. Nonetheless, the information we provide herein should prove useful in the public debate over housing policies and priorities, even though it cannot be appropriately viewed as a substitute for that debate.

Sincerely,

A handwritten signature in dark ink, appearing to read "Lee Gorsuch", written in a cursive style.

Lee Gorsuch
Director

ELG:ec

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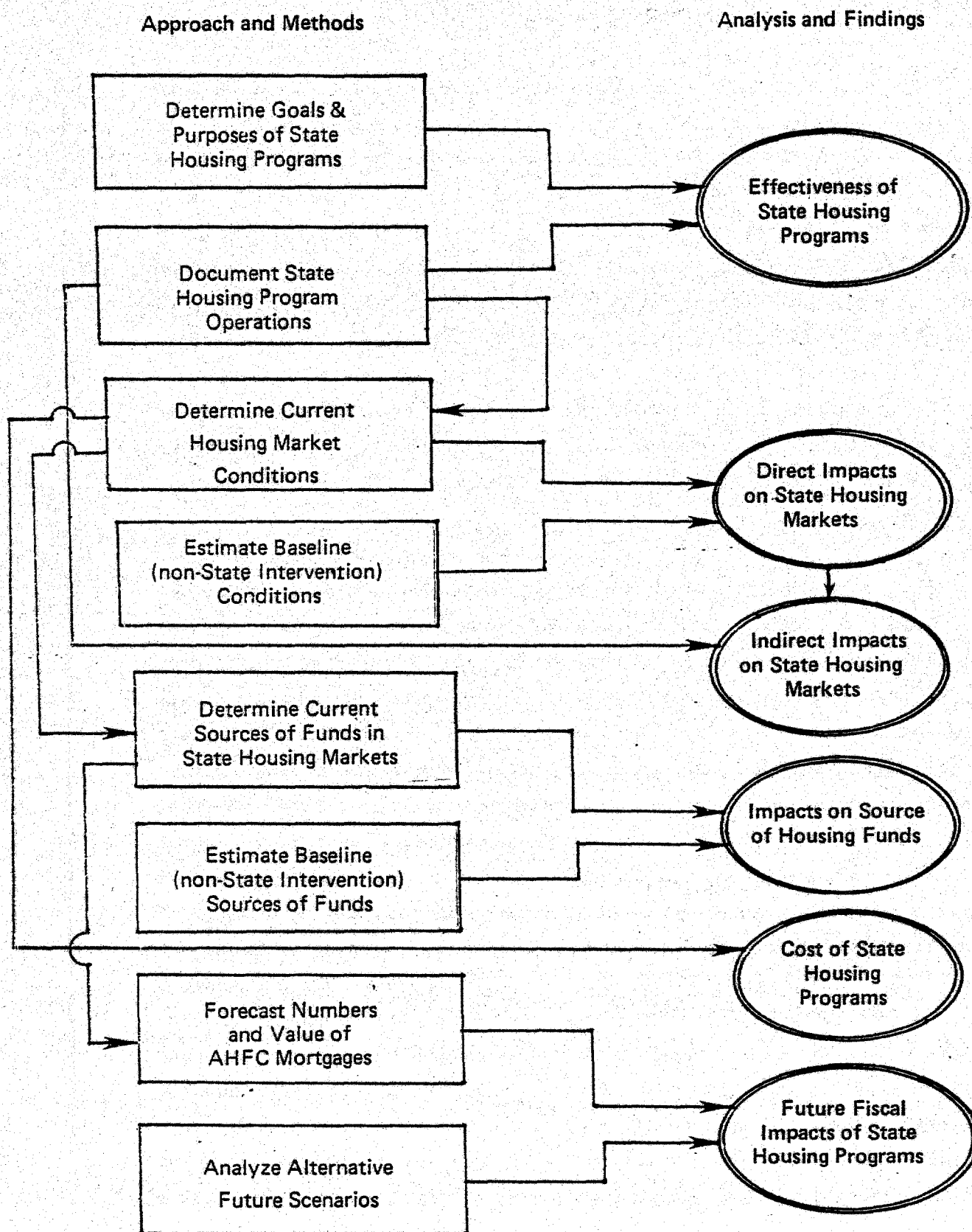
INTRODUCTION AND OVERVIEW

The State of Alaska's Legislative Budget and Audit Committee requested the Institute of Social and Economic Research (ISER) to perform a study of the State of Alaska's housing investment and lending activities. The purpose of the study was to (a) assess housing programs with respect to their economic, social, fiscal, and financial impacts and (b) evaluate housing program agencies by such criteria as their consistency with legislative intent, cost effectiveness, procedural consistency, and effects on the quality of the housing stock.

To accomplish this purpose, ISER developed a study design involving five separate, but interrelated, research efforts. The approaches and methods of these various study parts are illustrated in Figure 1, Study Design.

Part 1 of the study, Existing Program Analysis, involves the top two boxes in Figure 1. The goals and purposes of Alaska's housing programs were determined by a review of state and appropriate federal legislation, program guidelines, and state agency documents. These were supplemented by interviews with directors and staffs of state program agencies, the Federal Department of Housing and Urban Development, and the state's regional housing agencies. At the same time, state housing program operations were documented from computer tapes and printouts obtained from state agencies. This information was supplemented by samples from the file records of the Department of Community and Regional Affairs' (DCRA) Nonconforming Loan Program, the Alaska Housing Finance Corporation, and the Anchorage Multiple Listing Service for information not contained in any of the computerized data bases. Each program's operations were compared to its goals and objectives to obtain findings on the effectiveness of state housing programs. The findings and analyses from this part of the study were organized into separate chapters, each dealing with the group of housing programs the agency administers. Chapter One covers the

Figure 1. STUDY DESIGN



Alaska Housing Finance Corporation (AHFC); Chapter Two, the Alaska State Housing Agency (ASHA); and Chapter Three, the Department of Community and Regional Affairs (DCRA).

Part 2 of the study, Housing Market Impacts, addresses the impact of state interventions in Alaska's housing market. It is illustrated by the third and fourth boxes from the top of Figure 1. Current housing market conditions were determined from economic and population trends, new construction cost trends, and trends in the price, quality, and mix of the housing stock. The demand and supply conditions indicated by these trends were compared with those actually observed in Alaska housing markets during 1980 and 1981, and the differences were attributed to the state housing program interventions identified in Part 1. The direct housing market impacts were then used to assess such indirect impacts as program-induced purchases of construction labor and materials, real estate commissions earned, and fees paid to financial institutions. Direct Housing Market Impacts are discussed (and findings presented) in Chapter Four; Indirect Impacts, in Chapter Five.

Part 3 of the study, Financial Impacts, is concerned with the financial impacts of Alaska's housing programs. This involves both changes in the sources of funds flowing into Alaska's housing markets and an estimate of the budgetary costs of housing programs to the state. These are illustrated in the fifth and sixth boxes from the top in Figure 1. The budgetary costs were estimated from the value of state appropriations and loans to housing programs and the costs of meeting federal matching requirements for housing programs. In addition, a special analysis was conducted of the costs to the state of operating the below-market interest loan program. The assessment of changes in the sources of funds to Alaska housing markets involved analyzing portfolio trends among both primary and secondary lenders. This analysis included a discussion of both in-state and out-of-state secondary lender activity in Alaska. These analyses and findings are

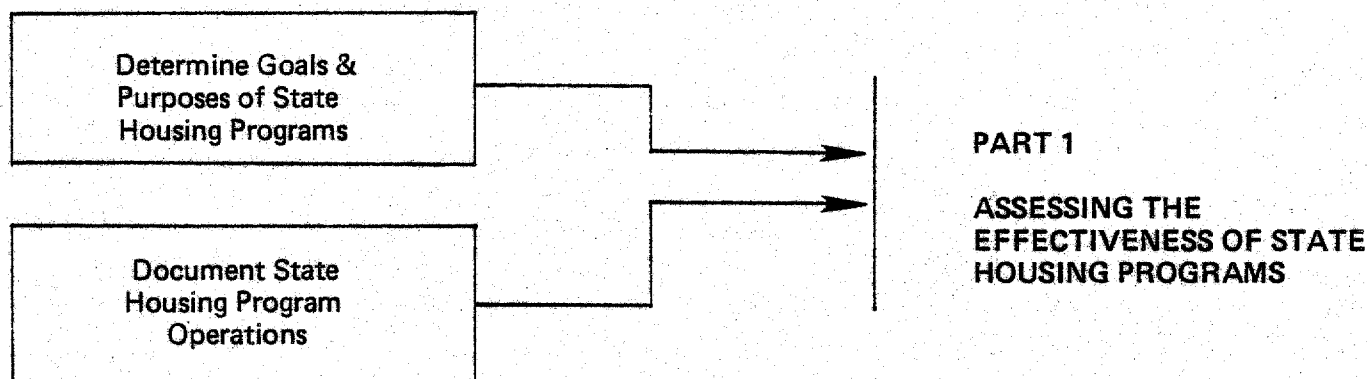
presented in Chapters Six and Seven, which discuss source of funds impacts and cost impacts, respectively.

Part 4 of the study uses the research finding of the other parts to forecast the future fiscal impacts of housing programs on state budgets. This is illustrated by the bottom two boxes in Figure 1. Using the population, income, and interest trends from Part 2, Chapter Four, projections of housing sales in Alaska through 1990 are developed. This is done for both a high development and a low development scenario. Using the findings from Part 3, Financial Analysis, the state government's share of Alaska's primary and secondary mortgage markets are estimated, and future fiscal impacts are assessed. These analyses and findings are contained in Chapter Eight.

Finally, Part 5 completes the report with an Executive Summary of our findings and conclusions.

Housing studies are both difficult and complex. Complexity comes from the fact that virtually all of our economic, demographic, social, and community institutions either impact or are impacted by housing. A comprehensive approach to housing would involve a study of almost every aspect of how Alaskans live, work, and interact in their communities. Within this "global" view, this study's purpose was (a) an assessment of impacts produced by state housing programs on housing markets, financial markets, and future state government fiscal requirements and (b) an evaluation of the effectiveness of state housing programs. Even with this narrower focus, analytical complexity abounds. The definition of program costs for an interest subsidy program which sells bonds at varying market rates is not a simple task. Neither is the identification of the relationship between land values, construction costs, and changing house prices. The methods and approaches used to address complex issues such as these are presented and discussed in the subsequent chapters of this report.

A major difficulty in performing this study was the lack of reliable housing market or financial market data. The state does not have a housing information data base, and important information was only partially available from a variety of private and public sources. In addressing this problem, we received the full cooperation of ASHA, AHFA, DCRA, and all other involved state agencies. We also benefited from the cooperation of the two major secondary mortgage institutions in the country: the Federal National Mortgage Association (FNMAE) and the Federal Home Loan Mortgage Corporation (FHLMC). Access to unpublished data and other information was provided by Alaska Valuation Service, Multiple Listing Service, Inc., and United Builders Supply. Finally, Al Robinson (Housing and Urban Development), Rod Gamel (Gamel Homes, Inc.), Bob Bannon (PMI), Lucille Stietz (National Bank of Alaska), and Jim Rhodes (Alaska Permanent Fund) deserve special mention for their generous assistance. A full list of organizations and individuals contacted as part of this study is contained in the references to this report. To all of them, we express our appreciation.



The purpose of Part 1 is to assess the effectiveness of Alaska's housing programs in meeting their economic, social, and financial goals and objectives. Goals and objectives were derived from appropriate federal and state legislation, guidelines, and other official documents, supplemented by interviews with state agency directors and their staffs. Program operations data came from computer tables and printouts provided by the program agencies and several special surveys of noncomputer records. The assessment attempted to provide an objective comparison between goals and objectives on one hand and operating performance on the other. Normative judgments were avoided to the maximum extent possible. The analysis and findings are organized by agency into the following chapters:

- Chapter 1: Alaska Housing Finance Corporation
- Chapter 2: Alaska State Housing Authority
- Chapter 3: Department of Community and Regional Affairs

CHAPTER ONE

ALASKA HOUSING FINANCE CORPORATION

Since the passage of Senate Bill 1 in June 1980, the Alaska Housing Finance Corporation (AHFC) has emerged as the primary source of mortgage funds for owner-occupied housing in Alaska. This dominant role is the result of historically high mortgage interest rates from the traditional sources of mortgage funds and the implementation of a housing program which provides below-market interest rates. Between July 1980 and November 1981, AHFC received 17,656 applications requesting approval of approximately \$1.45 billion in mortgage funds. In response to these applications, AHFC approved the property and credit for \$1.21 billion in loans. AHFC projects that volume for fiscal year 1982 will be close to and could exceed \$1.0 billion (Goldbar, January 8, 1982).

AHFC currently administers four major programs. These include the Special Mortgage Loan Purchase, the Mobile Home Purchase, the Rural Housing Mortgage, and the Rural Nonowner-occupied programs. These current programs are designed to make housing in Alaska more affordable by providing mortgage funds at below-market interest rates. For the largest program, the Special Mortgage Loan Purchase Program, AHFC uses state appropriations to supplement funds raised in the bond market. The State of Alaska appropriates all the funds used in the mobile home and rural programs.

AHFC is a secondary purchaser of mortgages, not a direct lender. A secondary purchaser buys the mortgage loan after it has been originated and closed by the direct lender, usually a financial institution or mortgage company. This distinction is often not clear to the public since AHFC plays an active role in application approval before it commits to purchase each loan.

In this chapter, we examine the current status of AHFC, its programs and operations. This discussion includes a brief program history to place our discussion of current programs in perspective; a description of AHFC's current programs and operations, including the terms of AHFC loans, the eligibility requirements for borrowers, and the role of financial institutions in AHFC's operations; an analysis of program outputs and the characteristics of borrowers using AHFC financing; and an analysis of AHFC's source of funds and cost of programs.

History

AHFC was established by the Alaska Legislature in 1971 as a public corporation and government instrumentality of the State of Alaska. The corporation was created to assist in alleviating a shortage of affordable housing for low-income residents. The Alaska Legislature determined that private enterprise and federal government programs had proved inadequate in providing affordable housing to low-income residents (Chapter 107 SLA 1971).

The enabling legislation allowed AHFC to make or participate in the making of construction loans, to make or participate in the making of mortgage loans, to purchase mortgage loans on the secondary market, to make partial rental or mortgage interest payments, to provide technical and advisory services, and to promote research and development in scientific methods of constructing low-cost residential housing (Chapter 107, SLA 1971). The responsibility for selecting the actual scope of activities was left to the Corporation.

Two factors influenced the initial design of programs. First, AHFC was established to complement, not compete with, the private sector. In formulating its original programs, AHFC officials limited activity to secondary mortgage market purchases. Construction and direct mortgage lending were viewed as being in direct competition

with the private sector. Similarly, AHFC did not consider providing rental subsidies since the Alaska State Housing Authority (ASHA) provided rental subsidy programs (Kennedy, October 30, 1981).

The second factor which affected the scope of operations is financing. There were two major sources of funds available to AHFC: the bond markets and state appropriations. The enabling legislation authorized AHFC to issue bonds as a means of financing programs. The use of bond funds, however, places restrictions on the types of programs which can be offered since repayment of bonds is required. While the enabling legislation made provision for the State of Alaska's participation in AHFC through the purchase of corporate bonds, it did not provide specific funds to finance programs.

The original program established by AHFC was the secondary purchase of federally insured mortgage loans for qualified low-income buyers. AHFC financed this program through the sale of tax-exempt bonds. The interest rate on these mortgages was set at AHFC's borrowing cost (including an administrative charge). The AHFC interest rates were below market interest rates, however, because of the advantageous interest rate obtained through tax-exempt financing. AHFC issued its first \$13.5 million of bonds in October 1972.

Program Changes, 1972-1979 .

Since 1971, there have been several changes in AHFC programs and administrative structure. A review of program changes shows, however, that AHFC has not changed the type of activities in which it participates, but rather has expanded the segment of the market it serves. First, in 1972, prior to the first bond sale, legislation authorized AHFC to expand its programs to include moderate-income persons as well as persons living in remote, underdeveloped, or blighted areas (Chapter 81 SLA 1972). The determination of what constituted low and moderate income and remote, underdeveloped, or blighted areas was left to AHFC.

In 1975, the program was expanded to include a higher percentage of conventional loans. In the early years (1972-1975), most of the loans AHFC purchased were federally insured loans: loans with FHA insurance or Veterans Administration guarantee. The reason for purchase of insured loans was to provide security to AHFC's bond investors. The expansion into the conventional loan market allowed AHFC to provide mortgage funds to borrowers who did not participate in FHA or VA programs--the majority of buyers. In order to lessen the risk to investors and aid in the marketability of the bonds used to fund the program, an insurance fund was established (Chapter 151, SLA 1975). The insurance fund was financed by contributions from AHFC and the State of Alaska. The insurance fund further expanded the segment of the market served by AHFC. As of November 30, 1975, AHFC held \$100.3 million in mortgages under the original Mortgage Program (AHFC, 1976 Annual Report). Under the Insured Mortgage Program, the \$22.9 million invested in the insurance fund as of June 30, 1981, acted as security for \$957 million in mortgage loans made between 1975 and 1981 (AHFC). Of this total, approximately \$550 million loans were made for the low and moderate income program. The remainder was used to fund the Special Mortgage Loan Purchase Program, which was started in 1980.

During 1978 and 1979, AHFC developed a rural housing program. Although AHFC's insured mortgage program authorized loan purchases in rural areas with no upper income limitations on borrowers, the legislature requested special consideration of rural housing problems (AHFC, February 1980). Initially, AHFC structured the financing of the program in a manner similar to its insured mortgage program. A rural insurance fund was established as well as hazard and title insurance funds when private insurance was not available (Chapter 167, SLA 1978; Chapter 72, SLA 1979). Rural housing bonds, totaling \$10 million, were sold to the Alaska Department of Revenue. Currently, the rural housing program is funded by state appropriations.

In 1979 and 1980, AHFC developed a mobile home program at the request of the state legislature. Mobile homes were viewed as a less expensive housing alternative, sorely needed in a time of population growth and general housing price inflation. Financing options for mobile homes, however, were limited. Financial institutions generally classified mobile homes as personal, not real, property. The terms on mobile home loans, where available, closely resembled consumer loans; they were much shorter than real estate loans. This provided problems for the low- and moderate-income buyers, a potentially large segment of the market. This program is funded through state appropriations.

Program Changes, 1980-1981

In 1980, the Alaska Legislature made major changes in both AHFC's administrative structure and programs. The major administrative changes included placement of the AHFC budget under the Executive Budget Act, placement of a ceiling on AHFC bonding authority, and a reshuffling of the AHFC board of directors to include a majority of state departmental commissioners. The budgetary provisions brought AHFC under direct state financial controls. Under the Executive Budget Act, AHFC's budget must be approved by the legislature and governor. The state can affect AHFC's level of operations more directly by specifying the maximum levels of AHFC activity.

On the program side, the major change was the creation of several related programs collectively known as the Special Mortgage Loan Purchase Program (SMLPP). Under these programs, the state became an active partner with AHFC in providing funds for mortgage loans by providing a subsidy which enables AHFC to purchase mortgage loans at a rate less than AHFC's borrowing costs. Furthermore, the SMLPP differed from the previous Insured Mortgage Program in that it was open to all owner-occupying purchasers, regardless of income, and it established maximum allowable loan limits above the existing limits.

The purpose of the Special Mortgage Loan Purchase Program was to provide mortgage financing at interest rates deemed affordable to persons of most income limits. This rationale is an extension of the rationales expressed in prior program expansions; that private sector and the federal government had failed to provide for the housing needs of a segment of the housing market. The failure of private markets and federal government programs, coupled with the importance of housing to state economic development, has been the justification for AHFC programs.

After establishment of the SMLPP, AHFC's volume of mortgage purchases increased dramatically. In November 1979, AHFC purchased \$23.5 million in mortgage loans through its insured mortgage program. In November 1980, AHFC volume more than doubled to \$61.9 million in loans; in November 1981, AHFC purchases reached \$96.4 million, a one-month record.

Since creation of the SMLPP in June 1980, two factors have affected AHFC's operations and led to the most recent legislative changes in 1981. First, the federal government limited AHFC's ability to issue tax-exempt bonds to finance single-family residences through passage of the Mortgage Subsidy Bond Tax Act of 1980, the "Ullman Bill." This change in federal law forced AHFC to issue taxable bonds for the majority of new bond funds. This raised AHFC's borrowing costs. The difference between taxable and tax-exempt interest rates for bonds sold by AHFC in November 1981 was 5.625 percent.¹ Second, interest rates on national bond markets soared to record levels during 1981. AHFC's borrowing cost for taxable bonds during 1981 reached 19.4 percent (State Assisted Mortgage Bonds, Series D and E).

¹This figure is based on the difference in interest rates for the twenty-year term bonds of State Assisted Mortgage Bond Series E and the tax-exempt twenty-year term bonds of home mortgage bonds, 1981 First Series.

As a result of these two factors, the state appropriation required to provide the below-market interest rates dramatically increased. To limit the state appropriation required, legislation in 1981 authorized a mechanism to tie mortgage interest rates on the subsidized portion of mortgage loans to AHFC's cost of funds (Chapter 115, SLA 1981). The mechanism, referred to as the "Rogers Ratchet," is designed to bring the mortgage loan rate to three percentage points less than AHFC's borrowing costs. Since its passage, the interest rate on the first \$90,000 of loan balance has increased from 10 percent to 12.375 percent.

Summary

In reviewing the AHFC program history, we find four themes consistent throughout AHFC's history. First, AHFC operates as a secondary purchaser of mortgage loans. It has concentrated on the purchase of loans made for owner occupied housing.

Second, AHFC program expansions have responded to perceived problems or failures in the housing market. Market failure is defined to include the issue of home ownership affordability. The availability of reasonably priced housing is considered essential to the stable economic growth of Alaska.

Third, the major tool used by AHFC is the below-market interest rate mortgage. Prior to 1981, these mortgages were financed with tax-exempt bonds. Since 1980, the State of Alaska has supplemented bond funds with state appropriations to provide below-market rate mortgages.

Fourth, AHFC has used the national bond markets, where possible, to import the capital funds required by AHFC. This method of financing reduces the level of state appropriation required to operate a program at a specified level.

AHFC Programs

Since the 1980 legislative changes, AHFC has administered four programs: the Special Mortgage Purchase Program, the Mobile Home Loan Purchase Program, the Rural Housing Purchase Program, and the Rural Nonowner-occupied Program. The term "Special Mortgage Loan Purchase Program" as used in this chapter is actually a broad term used to describe four related programs: the State Assisted Mortgage Program (SAM), the Homeownership Assistance Program (HOF), the Pledged Account Mortgage Program (PAM), and the Mortgage Bond Subsidy Tax Act Loan Program.^{2,3} Since these program titles are cited extensively within the chapter, a brief description of each program is provided:

- o The State-Assisted Mortgage (SAM) program uses bond proceeds and state appropriations to purchase owner-occupied residential mortgage loans on the secondary market at below-market interest rates.
- o The Home Ownership Assistance (HOF) program provides monthly subsidy payments to qualified low- and moderate-income borrowers who purchase properties under the SAM program.
- o The Pledged Account Mortgage (PAM) program provides SAM borrowers with a mechanism to structure a graduated payment mortgage.
- o The Mortgage Bond Subsidy Tax Act Loan Program uses bond proceeds from tax exempt bond sales to purchase mortgage loans which qualify under the Mortgage Bond Subsidy Tax Act of 1980.
- o The Mobile Home Loan Purchase (MHLPP) Program uses state funds appropriated to the Homeownership Fund for the purchase of mobile home loans.

²The 1980 legislation authorized a Rehabilitation and Home Improvement Program. This authority was eliminated in 1981.

³The abbreviations used in this report are those used by AHFC. The abbreviation for the Home Ownership Assistance Program--HOF--stands for the Home Ownership Fund, which was established to finance the Home Ownership Assistance Program.

- o The Rural Housing Purchase (RHPP) Program uses state funds appropriated to the Homeownership Fund for the purchase of mortgage loans for owner occupied residences in rural Alaska.

- o The Rural Nonowner-Occupied Mortgage Purchase program purchases mortgage loans for multifamily structures in rural Alaska with state appropriated funds appropriated to the Homeownership Fund.

Loan Terms

The major advantage of AHFC financing to the borrower is presently the lower-than-market interest rate. In this section, a discussion of interest rates as well as the general terms of AHFC loans is presented. Table 1 presents a summary of loan terms for AHFC's current programs.

Interest Rates. Borrowers are attracted to AHFC loan programs due to their below-market interest rates. When the State Assisted Mortgage (SAM) program was first created in 1980, the interest rates of 9 percent for veterans and 10 percent for other borrowers on the first \$90,000 of the mortgage loans were specified in the legislation. The interest rate on the balance of the loan was to be set according to AHFC's cost of funds.

In 1981, these statutory interest rates were reevaluated in light of the federal government's limiting of AHFC's authority to issue tax-exempt bonds and increasing national interest rates. The fixed mortgage interest rates were replaced with a formula which allowed interest rates on the first \$90,000 of loan balance to rise by the same number of percentage points as AHFC's borrowing cost. Ultimately, the goal of this formula, referred to as the Roger's Ratchet, is to establish mortgage interest rates on the first \$90,000 of a mortgage loan at a point three percentage points below AHFC's borrowing cost. Once this goal is achieved, mortgage rates will move in tandem with AHFC's borrowing costs. The Roger's Ratchet was implemented at a time when bond interest rates were skyrocketing. Between

TABLE 1. LOAN CHARACTERISTICS
OCTOBER 1981

	Special Mortgage Loan Purchase Program					Mobile Home Loan Purchase	Rural Housing Mortgage Purchase	Rural Nonowner- Occupied
	State Assisted Mortgage		Homeownership Assistance	Pledged Account	Mortgage Bond Subsidy			
	Conventional	Veterans						
Maximum Loan Amount								
Single Family	147,750	110,000	76,000	147,750	84,474 ^a	72,500	147,750	90,000
Duplex	189,000	110,000	NA	189,000	96,646	NA	189,000	130,000
Maximum Term (in years)	30	30	30	30	30	20	30	30
Minimum Down Payment								
Single Family	5%	VA Guarantee		Net Loan-to-	5%	5%	5%	5% up to 65,000
Duplex	5%	+ Down Pmt.		Value Ratio	5%		10%	10% up to 90,000
Multifamily	NA	Must be 25% or More of Value		not to Exceed 95%	NA		NA	20%
Interest Rate (as of October 31, 1981)								
First 90,000	12.375 ^b	12.375 ^b	Note Rate	12.375 ^b	10.00	12.375	8.75	9.50
Balance	19.411	19.411	Same as SAM	19.411	13.19			
Special Conditions			c		d			

SOURCE: AHFC Seller/Services Guide, June 1981

^aFor existing structure; 101,370 for new structure

^cIncome and asset limits

^b11.375 for State Certified Veteran

^dBorrower cannot have owned or had a financial interest in property for prior three years.

June and November 1981, AHFC's borrowing costs increased from 17.05 percent to 19.41 percent. The effect on AHFC's mortgage interest rates was to increase the rate on the first \$90,000 from 10 percent to 12.375 percent.

There were many complaints about these interest rate increases. As is always the case when interest rates increase dramatically, some borrowers with loan applications pending or builders with units under construction were negatively affected. Monthly payments on a \$90,000 loan increase from \$790 at 10 percent interest to \$952 at 12.375 percent, a 21 percent increase.

The uproar over the interest rate increases raises a very basic question regarding the State Assisted Mortgage Program. To what extent is the State of Alaska going to insulate the Alaska housing markets from market conditions? The State of Alaska has two options: (1) to provide a constant subsidy and allow the mortgage interest rate to fluctuate or (2) to provide a constant interest rate and allow the subsidy to fluctuate. The latter option was rejected by the State of Alaska when the Roger's Ratchet was approved. The effect of a constant rate policy would put great demand on the state's budgetary resources during periods of high interest rates and distort the market through artificial rates. While tying the AHFC mortgage rate to market rates was inevitable, the timing of implementation during a period of rapid interest rate increases raised the mortgage interest rate to borrowers faster and higher than had been anticipated.

The interest rate for the Homeownership Assistance and Pledged Account Programs are the same as the SAM rate. Interest rates for the Mobile Home Loan Purchase Program and Community and Regional Affairs' Nonconforming Loan Program are tied to the interest rates in the SAM program. The interest rates for the rural programs were established by AHFC: 8.75 percent for the Rural Housing Mortgage Purchase Program and 9.5 percent for the Rural Nonowner-occupied Program.

Table 2 summarizes the current interest rates by AHFC program.

TABLE 2. AHFC INTEREST RATES AND SOURCE
OF FUNDS, OCTOBER 31, 1981

<u>Program</u>	<u>Interest Rate</u>		<u>Sources of Funds</u>
State-Assisted Mortgage Program	12.375/1st \$90,000 19.411/Balance	Formula based on AHFC borrowing cost	Bond Proceeds State Approp.
Mobile Home	12.375	Formula based on AHFC borrowing cost	State Approp.
Rural Owner-Occupied	8.75	AHFC	State Approp.
Rural Non-Owner-Occupied	9.50	AHFC	State Approp.

Maximum Loan Amounts. In compliance with statute, AHFC established maximum loan limits based upon the limits established by the Federal National Mortgage Association (FNMA). As of October 1981, the maximum loan limit for conventional loans in both the SAM and Rural Housing Purchase programs is \$147,750 for single-family residences and \$189,000 for duplexes. Veteran Administration guaranteed loans are limited to \$110,000. Mobile home loans are limited to a maximum of \$72,500. Rural non-owner-occupied loans cannot exceed \$90,000 for single-family residences and \$130,000 for duplexes; for triplexes through eight-plexes, AHFC has established a formula for determining maximum loan amount based on the number of bedrooms in each unit. The maximum loan amount for the program is \$500,000. Participants in the Homeownership Assistance Program are limited to loans of \$76,000.

While AHFC won't lend more than \$147,750 on a single-family residence, it will purchase first mortgage loans which are subject to second mortgages. This allows borrowers to seek supplemental financing. AHFC requires that the sum of the first and all second mortgage balances not exceed 80 percent of the property value. Additionally, the second mortgage usually must be structured as a level payment fully amortizing loan (AHFC Seller/Service Guide, page 11). AHFC data indicate that ninety percent of all properties purchased

under the special mortgage purchase program as of October 31, 1981, had sales prices less than \$140,000.

Insurance. AHFC requires that mortgages with loan to value ratios exceeding 80 percent have mortgage insurance. The mortgage insurance "indemnifies mortgage lending institutions for the direct and consequential losses that these institutions incur because of nonpayment of first-mortgage loans" (Rapkin, page 730). This requirement can be satisfied through use of FHA insurance, Veterans Administration guarantees, or through private mortgage insurance. If private mortgage insurance is used, AHFC requires insurance coverage of 20 percent on loans with a loan-to-value ratio between 80 percent and 90 percent, and 25 percent for loans with a loan-to-value ratio greater than 90 percent. Private mortgage insurance may be cancelled when the unpaid principal balance is reduced to 80 percent or less of the original value (appraised or sale, whichever is less). This requirement is consistent with industry practice.

Length of Loan. AHFC loans generally have a maximum term of 30 years and a minimum allowable life of 20 years. The exception is the mobile home program which has a maximum term of 20 years or the remaining economic life of the property, whichever is less.

Down Payment. Down payment requirements vary by program. For conventional loans, a 5 percent minimum down payment is required with a 10 percent down for rural duplex buyers. A VA guaranteed loan does not require a down payment if the VA guarantee is 25 percent or more of the property value. For the pledged account program, the peak loan-to-value ratio may never exceed 95 percent.

Eligibility

With the exception of the Non-owner Occupied Program, the AHFC programs are available to persons who can afford to purchase owner-occupied housing. There are no maximum income limits for borrowers

except in The Homeownership Assistance Program. The Special Mortgage Loan Purchase Program (SMLPP) and its component programs--Homeownership Assistance and Pledged Account--are available statewide as is the mobile home program. The two rural programs are limited to communities "which do not have access to Anchorage or Fairbanks by road or rail and that have a population of 4,500 or less" (Alaska Statute 18.55).

A borrower is allowed to have only one AHFC loan outstanding at a time. This prevents the use of AHFC funds strictly for investment purposes. Furthermore, the potential borrower, in all but the rural non-owner-occupied program, must demonstrate that the property to be financed is intended for use as the primary residence (AHFC Seller/Servicer Guide, page 11).

Credit Underwriting

AHFC operates as a business. As a business, AHFC must use underwriting standards sufficiently strict to meet its financial obligations. The underwriting standards are intended to ensure that borrowers have the financial ability to meet the proposed obligation and that the property is of sufficient quality to adequately secure the loan.

Borrowers. AHFC income guidelines are that a borrower's monthly mortgage payment (including secondary mortgage insurance, property taxes, secondary financing, and Owners Association Charges, if applicable) should not exceed 28 percent of allowable gross income. Additionally, the borrower's total monthly obligation (defined to mean total monthly first mortgage payment plus any monthly installment obligations which extend beyond nine months) should not exceed 36 percent of allowable gross income.

The AHFC Seller/Servicers Guide states that allowable gross income includes current base income plus any secondary sources such as

overtime, commissions, bonuses, income from part-time jobs, investments, trust funds, child support, etc. Verification of all income sources is required. When calculating gross income, AHFC underwriters take into account the stability of the income source. Therefore, some income sources listed above may not be used if they do not show stability over time. In cases where there are two or more applicants who plan to take joint title, the effective incomes of the applicants are summed.

AHFC states that its underwriting standards are flexible for persons who have higher debt-to-income ratios than allowed by the standards but who have demonstrated a past ability to make the higher level of payments. A review of loans purchased by AHFC through the State Assisted Mortgage Program as of October 31, 1981, shows that 3.7 percent of loans have principal and interest payments which exceed the 28 percent of gross income standard (AHFC data base). Since the standard requires inclusion of taxes and insurance, a higher portion of borrowers exceeded the standard. The data show that 10 percent of the loans had principal and interest payments between 25 and 28 percent of gross income.

In addition to the income requirements, borrowers must show they have sufficient funds to meet down payment, closing costs, and prepayment requirements for taxes and insurance.

Property. AHFC requires that a structure purchased with AHFC financing meet the minimum construction standard acceptable in the community in which the structure is located. Deviations from the minimum construction standards may be acceptable if an engineer will certify that the deviation will not impair the health or safety of occupants and that they will not reduce the useful life of the residence below the term of the proposed mortgage loan. The property must be connected to public utilities if the utilities are available in the community in which the property is located. Use of the community standard rule is of major importance in rural communities where many

properties could not meet absolute construction standards established for urban areas.

Before units in condominium or planned unit developments can be purchased, AHFC must approve the development. In the approval process, AHFC examines the characteristics and quality of the structure and the financial ability of the condominium association to meet its responsibilities.

Special Program Eligibility

In addition to the general program requirements, the Home Ownership Assistance (HOF), Pledged Account Mortgage (PAM), and the Mortgage Bond Subsidy Tax Act loan programs have additional program and/or eligibility requirements.⁴

Home Ownership Assistance. The Home Ownership Assistance Program (HOF) provides monthly subsidies to aid qualified low- and moderate-income SAM borrowers meet their monthly housing payments.

In addition to guidelines required by the SAM program, the HOF program has income, asset, and property value limits. The limits defining low and moderate income in the HOF program are more restrictive than the income limits which existed in the Insured Mortgage Program, the program for low- and moderate-income buyers which preceded the Special Mortgage Loan Purchase program. According to AHFC, the HOF income limits were extrapolated from income data obtained from the U.S. Department of Housing and Urban Development. Table I.3 lists the current statewide HOF income limits as well as the last set of

⁴AHFC is currently developing a rehabilitation second mortgage program which will allow existing homeowners to keep their current first mortgage loan and borrow the funds required for rehabilitation from AHFC in the form of a second mortgage.

income limits from the insured mortgage program for Anchorage and Fairbanks.

TABLE 3. INCOME LIMITS FOR HOMEOWNERSHIP PROGRAM

<u>Family Size</u>	<u>Statewide HOF</u>	<u>Insured Program</u>	
		<u>Anchorage</u>	<u>Fairbanks</u>
1	25,650	28,800	33,300
2	26,650	32,900	38,100
3	27,650	37,100	42,800
4	28,650	41,100	47,700
5	29,650	43,700	50,600
6	30,650	46,300	53,600
7	31,650	48,800	56,600
8 or more	32,650		

In addition to the income limits, a borrower's assets at the time of application cannot exceed two times the maximum income limits. A borrower over 65 years of age is allowed assets up to three times maximum income. Neither the sales price nor appraised value of the subject property may exceed \$80,000, and the maximum loan balance is \$76,000.

Under current AHFC regulations, eligibility of borrowers under the HOF program is reviewed annually. Subsidy payment levels are adjusted on the basis of updated income information. Participation in the HOF program is limited to once per mortgage. Once a borrower is eliminated from the program due to loss of eligibility, he may not reapply, even if subsequent income meets eligibility requirements.

The subsidy payment is determined by one of two formulas; the formula is selected on the basis of the lesser amount:

1. The sum necessary to reduce the borrower's payment of principal and interest on the loan to 20 percent of gross monthly income, provided the subsidy does not reduce the total monthly mortgage payment to less than 25 percent of gross monthly income; or
2. The sum necessary to reduce monthly payments of principal and interest on the loan to the amount payable as if the mortgage were bearing an interest rate of 6 percent per annum (Seller/Service's Guide, p. 100).

Table 4 illustrates a subsidy calculation. This calculation is based on a \$65,000 loan and the current 12.375 percent interest rate.⁵ The monthly principal and interest payments at the current interest rates for this loan are \$687.42. Both formulas are used to determine the ultimate subsidy available. Under formula 1, the potential subsidy depends upon the income of the applicant. The subsidies available if formula 1 was used range from \$520 for a household with \$10,000 per year annual income to \$270 for a household with a \$25,000 income. Under formula 2, the subsidy is fixed at \$297.71. Table I.5 shows that formula 2 is selected for all applicants except those with annual incomes of \$25,000. Further analysis shows the households with \$10,000 and \$15,000 annual incomes would not qualify for loans due to excessive payment-to-income ratios. Table I.4 shows that even with the subsidy provided by the HOF program, very low income households cannot qualify for AHFC loans.

As with any subsidy program which has maximum income limits, the HOF program excludes borrowers on the upper side of the income limits but who may have very similar characteristics to the HOF borrowers. For example, a two-person household with an income of \$25,000 annually qualifies for HOF participation. Using the \$65,000 loan value at current AHFC SAM interest rates, this HOF participant is required to make a monthly payment of \$417.42, with AHFC subsidizing the remaining

⁵The mean loan balance for HOF borrowers between the start of the program and October 31, 1981, was \$63,363.

TABLE 4. EXAMPLE OF HOMEOWNERSHIP ASSISTANCE PROGRAM SUBSIDY CALCULATION

ASSUMPTIONS:

Loan	\$65,000
Market Interest Rate	12.375%
Monthly Principal and Interest Payment at Market Interest Rate	\$687.42

SUBSIDY OPTIONS:

		Annual Income			
		<u>\$10,000</u>	<u>\$15,000</u>	<u>\$20,000</u>	<u>\$25,000</u>
FORMULA 1: Principal and Interest Payment Reduced to 20% of Income					
Payment at 20% of Monthly Income		\$167	\$250	\$333	\$417
Monthly Subsidy Required if Formula 1 Used		\$520	\$437	\$354	\$270
FORMULA 2: Principal and Interest Payment Calculated at 6% Interest Rate					
Payment at 6% Interest Rate	\$389.71				
Monthly Subsidy Required if Formula 2 Used	\$297.71				
<u>SUBSIDY CALCULATION:</u>					
Monthly Payment at Market Rate		\$687.42	\$687.42	\$687.42	\$687.42
Subsidy (Lesser of Formula 1 or Formula 2)		<u>297.71</u>	<u>297.71</u>	<u>297.71</u>	<u>270.00</u>
Monthly Payment After Subsidy		\$389.71	\$389.71	\$389.71	\$417.42
<u>STATUS OF LOAN:</u>					
Payment to Income Ratio		46.7%	31.1%	23.3%	20.0%
Loan Status		Rejected	Rejected	Approved	Approved

\$270.00. A two-person household with an annual income of \$27,000, however, does not qualify for a HOF. If they attempted to obtain the same \$65,000 loan, their payments would be \$687.42. This loan would not be approved, however, since the mortgage payment-to-income ratio would be 30.5 percent. Based on the 28 percent mortgage payment-to-income rule, the maximum loan this household could receive is \$59,570.

The two analyses regarding income presented above are based on an assumed \$65,000 loan. This points to a third area of concern involving the homeownership assistance program, the supply of acceptably priced housing. Through October 31, 1981, 33 percent of properties purchased through the Special Mortgage Purchase Program had prices less than the \$80,000 HOF limit; 19 percent had sales prices less than \$70,000. The analysis shows that lower-priced properties are required if HOF is to aid the lower-income buyer (less than \$20,000 annual income) and the buyer who doesn't qualify for HOF due to income only slightly over the income maximums. As inflation takes its toll on the lower-priced units, the HOF program will be less able to serve the intended borrowers. Any expansion of the program, however, will require an increase in funding levels.

Pledged Account Mortgage Program. The Pledged Account Mortgage (PAM) provides a mechanism for a graduated payment mortgage. A graduated payment mortgage allows the monthly payment to increase over the life of the mortgage. This allows a borrower to qualify for a more valuable property than would be possible under an even-payment mortgage and meet the increasing payments over time with expected increases in income.

The AHFC graduated mortgage program utilizes the even-payment mortgage as its base. Payments are reduced in early years of the mortgage by utilizing funds deposited by the borrower at the time of purchase in a pledged account. Under this program, increases in

payments cannot exceed 7.5 percent per year, and the full payments must be reached no later than the fifth year of the mortgage (AHFC Seller/Service Guide, pages 84-85).

The Mortgage Bond Subsidy Tax Act Program. Under the Mortgage Bond Subsidy Tax Act of 1980, tax-exempt bonds may be used to finance residential mortgages if certain conditions are met. These conditions are that the borrower may not have owned or had interest in a home for three years, that the property be the principal residence of the buyer, and that the sales price may not exceed 90 percent of the average area sales price (AHFC, Select Corporation and Program Information, November 1981). AHFC has established maximum purchase prices of \$82,474 for existing single-family structures, \$101,370 for new single-family, and \$96,646 for existing duplexes.

Summary

AHFC offers several loan programs. Each program is designed to serve different segments of the Alaska housing market. All potential home buyers in the state are eligible to apply to the Special Mortgage Purchase program. Low- and moderate-income home buyers may apply for additional subsidies through the Home Ownership Assistance program. Mobile home and rural purchasers are served through separate programs. The interest rates on AHFC loan programs vary according to the source of funds and statutory requirements. The other terms of the loans are designed to match the market segment served. Many of the loan terms such as requiring mortgage insurance or federal insurance, maximum value of loan, and maximum life of loan are based on industry practices. Because AHFC operates as a business, the credit and property underwriting standards are designed to limit the risk of purchasing problem loans.

AHFC Operations

Since AHFC operates as a secondary purchaser of mortgages, not as a direct lender, the financial institutions retain a role as the originators and servicers of loans. As of November 1981, twenty-nine financial institutions and six regional housing authorities were authorized to originate loans for AHFC programs.

Seller/Servicers

Loan Origination. The role of the direct lender (seller) is illustrated by reviewing the loan origination process as practiced by AHFC. AHFC does not deal directly with the potential borrower. The borrower applies for the mortgage loan from a financial institution participating in the AHFC program as a seller. The seller's duties, as stated in AHFC's Seller/Servicer Guide, include:

- o Helping the borrower complete a loan application.
- o Acquainting the borrower with terms of mortgage and rights and responsibilities.
- o Inspecting the property offered as security.
- o Selecting an appraiser.
- o Ordering and receiving the necessary borrowers' credit documentation directly from the original source.
- o Making an underwriter's determination of the entire credit and property package prior to recommending the mortgage to AHFC for purchase.

The AHFC secondary purchase process requires that AHFC personnel underwrite each loan. Completed applications and accompanying documentation are forwarded to AHFC for prior approval of the borrower and property. Prior approval by AHFC is required before the mortgage loan can be made by the seller.

This step in the origination process has been a point of criticism by some members of the financial community. Comments about the prior approval system include that it transforms the sellers into paper processors and that it causes undue delay in the loan origination process. During July 1981, the average prior approval turnaround time at AHFC was approximately 15 days. In January 1982, the turnaround time was one day (AHFC).

A suggested alternative to the total use of prior approval is delegated underwriting. In delegated underwriting, the secondary purchaser authorizes certified underwriters who work for sellers to decide whether or not a loan is acceptable to the secondary purchaser. If the delegated underwriter approves the loan, the secondary purchaser is committed to purchase the loan. If subsequently the loan does not meet the secondary purchaser's standards or the loan becomes delinquent, the seller is required to buy the loan back from the secondary purchaser.

The major benefit of delegated underwriting is that it reduces loan processing time by reducing underwriting duplication. Delegated underwriting, therefore, can reduce the underwriting costs of the secondary purchaser. The secondary purchaser then audits loans purchased under delegated underwriting.

The use of delegated underwriting does not preclude the use of prior approval. The Federal National Mortgage Association (FNMA), a major secondary market purchaser, utilizes both systems in its operations. Not all sellers employ certified delegated underwriters, and on questionable loans, the seller may want to receive a prior approval to limit the risk of making the loan.

AHFC considered using a delegated underwriting system in 1981 in order to reduce loan processing time (Goldbar, January 8, 1982). The system was not put into place, however, due to possible conflicts with

the bond resolutions under which available funds were obtained. Bond offerings made through 1981 specify that AHFC underwrite each loan it purchases. While this precludes the use of delegated underwriting under current bond issues, AHFC has no plans to implement delegated underwriting in the future when procedures could be changed. The principal reason is that AHFC does not want to risk a potentially adverse reaction by the bond rating agencies to such a procedure. A reduction in bond rating would increase AHFC's cost of borrowing.

When the completed loan application is forwarded to AHFC for prior approval of the borrower and property, AHFC underwriters can approve the loan as is, approve the loan with conditions, or deny the application. When AHFC underwriters approve a loan application, AHFC is committed to purchase the mortgage loan after it closes. Once AHFC grants prior approval, the seller proceeds with the loan process. After the loan is closed (the sales transaction completed and funds dispersed), the seller packages the loan for sale to AHFC. AHFC purchases loans from sellers twice monthly, on the 10th and the 25th of each month.

AHFC disperses funds at the time of closing for rural loans made through the regional housing authorities. This is necessary because the regional housing authorities are not financial institutions with the ability to make and warehouse loans. The transfer of funds is made to a title company operating as a trustee.

For their role in the loan origination process, sellers are allowed to charge the borrower an origination fee, commonly one percent of the loan amount.

Loan Servicing. After AHFC purchases the loan, the seller retains the function of the loan servicer. The primary responsibilities of the servicer are to:

- o Collect principal and interest payments.
- o Forward payments, minus servicing fee, to AHFC.
- o Complete monthly reporting requirements as required by AHFC.
- o Report delinquent accounts to AHFC.
- o Initiate foreclosure proceedings as necessary.

The servicer receives a fee for servicing the loan. This fee, which varies by AHFC program, is deducted from the payments the servicers collect for AHFC. These collection fees are one component of the interest rate AHFC charges the borrower. The servicing fees are based on the unpaid balance of the mortgage loan. The servicing fees are 3/8 of one percent for the SMPP, one percent for the mobile home program, and 1/2 of one percent for the rural owner-occupied program.

Fund Allocation to Sellers. AHFC operates under a fund reservation system that allows sellers to request AHFC to set aside funds for the loans originated by the seller. The reservation holds funds for a three-month period at a specific interest rate. AHFC requires that sellers pay a half-of-one-percent fee at the time the funds are reserved, a fee ultimately charged to the borrower.

Under the special mortgage purchase program, AHFC has maintained sufficient cash flow to meet the request for funds by the sellers. In the event that sufficient funds were not available to meet all sellers' requests for funds, AHFC has established a fund allocation policy. In the case of a shortage of funds to meet reservations, funds will be allocated on the "basis of recent and future anticipated lending activities of the financial institution (seller/servicers) as well as upon the potential need for mortgage loans in each judicial district of the state as it determines is required based on the most current research reasonably available to it" (AHFC regulations, 15 AAC

118.315(6)). The Seller/Servicers Guide further states that AHFC may reduce the amount of reservation based on seller/servicer performance (AHFC Seller/Servicer Guide, p. 12).

Under the fund reservation system, sellers lose their fund reservation fee if the reservation period expires before the funds are committed. Sellers can, with AHFC approval, however, assign reserved funds to another seller (AHFC Seller/Servicers Guide, p. 13).

Summary

As a secondary purchaser of mortgages, AHFC does not deal directly with the borrowers. Participating financial institutions and regional housing authorities act as the seller/servicer of AHFC loans. For most types of financial institutions, AHFC has replaced other secondary purchasers. Savings and loan institutions are more directly affected since they have traditionally made some loans for their own portfolios.

Seller/servicers' responsibilities range from taking applications from borrowers, disbursing funds, and collecting monthly payments to determining whether foreclosure proceedings are in order. For their services, seller/servicers are allowed to charge the borrower a loan origination fee of one percent and deduct a service fee, which varies by AHFC program, from payment collections.

AHFC Program Activity

By all measures of program activity, AHFC has operated at record levels since July 1980. The reasons for this activity are the attractive terms provided by the Special Mortgage Loan Purchase Program and the record-high mortgage interest rates available from the alternative mortgage sources.

The increase in activity is illustrated by examining the historical levels of mortgage commitments and purchases between 1974 and 1981 (Table 5). The data for both AHFC commitments (loans which have been approved but not yet purchased from seller) and purchases skyrocketed as a result of implementation of the Special Mortgage Loan Purchase program. In calendar year 1979, the last full year before the SMLPP, AHFC committed to purchase \$185.5 million in loans and purchased \$189.4 million in loans. The 1979 monthly average was approximately \$15.5 million of mortgage activity. In the last six months of 1980, after the SMLPP began, AHFC committed to purchase \$329.9 million in loans and purchased \$242.1 million. Activity in the first nine months of 1981 was \$696.4 million in commitments and \$582.2 million in purchases. AHFC monthly average purchases rose from \$15.8 million in 1979 to \$64.9 million in the first nine months of 1981, a quadrupling of the 1979 level.

AHFC Applications and Denials

During the period July 1, 1980, to June 30, 1981, AHFC received 11,348 applications for all of its programs, a monthly average of 945. Table 6 shows the number of applications by month and program for 1981. In June 1981, the receipt of applications peaked at 1,540; these applications requested \$127.8 million in mortgage funds. The volume of applications declined slightly in August, September, and October 1981 before falling sharply in November. There are two reasons for this drop. First, there is usually a seasonal drop in mortgage activity during winter. Second, the rise in AHFC interest rates reached their current peak in November.

The Special Mortgage Loan Purchase program is the dominant AHFC program receiving 90 percent of applications representing 96 percent of mortgage funds requested for the period July 1, 1980, through November 30, 1981.

TABLE 5. AHFC MORTGAGE COMMITMENTS AND PURCHASES
BY CALENDAR YEAR

<u>Year</u>	<u>Commitments</u>		<u>Purchases</u>	
	<u>Annual</u>	<u>Monthly Average</u>	<u>Annual</u>	<u>Monthly Average</u>
1974			\$36,118,202	\$3,009,850
1975	35,237,435	2,936,453	35,177,076	2,931,423
1976	71,171,942	5,930,995	53,985,643	4,498,803
1977	139,891,225	11,657,602	126,007,384	10,500,615
1978	140,254,330	11,687,860	126,814,826	10,567,902
1979	185,484,600	15,457,050	189,356,994	15,779,749
1980 ^a	72,685,550	12,114,258	74,427,975	12,404,663
1980 ^b	329,943,850	54,990,642	242,105,044	40,350,840
1981 ^c	696,393,150	77,377,016	582,191,710	64,687,968

^a January-June 1980

^b July-December 1980

^c January-September 1981

SOURCE: AHFC, Selected Corporation and Program Information, November 1981

TABLE 6. AHFC APPLICATIONS BY PROGRAM

Period	Special Mortgage Loan Purchase		Mobile Home Loan Purchase		Rural Housing Mortgage Purchase		Rural Nonowner-Occupied	
	Number	Volume	Number	Volume	Number	Volume	Number	Volume
July-December 1980 (monthly avg.)	4,582 764	381,566,625 63,594,438	396 66	9,570,650 1,595,108	NA		NA	
January 1981	610	52,024,400	61	1,375,400	9	607,850		
February 1981	682	57,504,100	56	1,439,900	9	678,700		
March 1981	915	78,285,200	29	730,200	18	1,360,750		
April 1981	1,073	94,650,800	52	1,129,650	15	1,192,950		
May 1981	1,198	111,978,200	89	2,090,300	11	846,050	2	585,000
June 1981	1,354	121,331,800	160	4,134,350	22	1,859,650	4	507,200
July 1981	1,344	119,810,150	146	3,831,150	25	1,761,200	2	872,400
August 1981	1,103	101,056,100	129	3,416,900	15	1,326,400	2	108,300
September 1981	1,129	103,031,870	122	3,208,650	21	1,738,200	1	82,500
October 1981	1,137	103,080,550	139	3,842,750	20	1,759,100	4	320,750
November 1981	<u>807</u>	<u>73,720,050</u>	<u>138</u>	<u>3,675,700</u>	<u>21</u>	<u>1,873,500</u>	<u>3</u>	<u>493,600</u>
TOTAL	15,934	1,395,978,015	1,517	38,445,600	186	15,004,500	18	2,969,750

SOURCE: AHFC Selected Corporation and Program Information, November 1981.

Of the 11,348 applications received between July 1, 1980, and June 30, 1981, 2,211, or 19.5 percent, were denied. AHFC defines as a denial any application which is not ultimately purchased by the Corporation, regardless of reason. The 19.5 percent rate, therefore, is not actually denials, but rather applications which for some reason did not complete the full cycle of processing. These figures also do not take into account loans which are denied and then subsequently approved. Table 7 lists the reasons for denials.

Income- and wealth-related factors were responsible for approximately 43 percent of AHFC denials during this period. The reasons include insufficient income for mortgage payments (17.6 percent), insufficient income for total obligation (6.1 percent), insufficient income stability (6.9 percent), unacceptable credit (3.2 percent), insufficient equity (2.1 percent), and income too high for participation in the Homeownership Assistance program. Also during this period, 10 percent of applications were denied for insufficient data.

While some denials are expected, the level of denials for income-related reasons and insufficient data--53 percent of all denials and 5.7 percent of all applications--raises questions as to why the denial rate is as high as it is. There are several reasons, often conflicting, cited for the level of income related denials. First, AHFC and the seller/servicers were dealing with a new and greatly expanded program. It takes time for all participants to become familiar with the program's guidelines and operations. Second, while seller/servicers are supposed to forward only those loans which they recommend for purchase, there is no penalty for submitting loans which don't qualify. This may lead some financial institutions to submit loans which should not be submitted. Third, some seller/servicers contacted during this study expressed disagreement with AHFC underwriting criteria; especially definition of income, and asserted that the criteria are often inconsistently applied. Finally, underwriting decisions are often complex with judgments required on a case-by-case

TABLE 7. AHFC DENIALS, JULY 1, 1980,
TO JUNE 30, 1981
(All Programs)

<u>Reason for Denial</u>	<u>Number Denied</u>	<u>Percent of Denials</u>
Insufficient Income for Mortgage Payments	390	17.63%
Insufficient Income for Total Obligations	134	6.06
Insufficient Stability	153	6.92
Unacceptable Credit	70	3.16
Lack of Required Equity	46	2.08
Unacceptable Property	159	7.19
Insufficient Data Presented	222	10.04
Unacceptable Terms and Conditions	14	.63
Return on Request of Lender	206	9.31
Applicant Over Income for Homeownership Assistance	155	7.01
Lack of Funds Reserved	2	.09
Other	192	8.68
Change in Program	56	2.53
Cancellation of Commitment	<u>412</u>	<u>18.63</u>
Total Denials	2,211	100.0%
Total Applications	17,656	
Denial Rate	19.5%	

SOURCE: AHFC Data Base

basis. It is often possible for there to be different judgments made by the seller/servicer and AHFC. AHFC recognizes the problem with denial rates and meets regularly with seller/servicers to work on the problems which are identified.

Another major class of denials involved the cancellation of commitments (18.6 percent) and the return of applications at the request of the lender (9.3 percent). Commitments may be cancelled by AHFC if the loan is not returned to AHFC for purchase within 120 days of approval for existing properties and 180 days for new structures under construction, owner/builders and refinance improvements (AHFC Seller/Service Guide, page 14). Sellers may request the cancellation of commitment if the sale falls through for any reason.

Unacceptable properties were responsible for 7 percent of denials. The remaining 12 percent of denials were based on reasons including unacceptable terms and conditions, lack of funds reserved, changes in program, and other miscellaneous reasons.

For the period July 1, 1981, through October 31, 1981, AHFC's denial rate for the Special Mortgage Loan Purchase Program was 17.4 percent. For this same period, denials in the Mobile Home Loan Purchase ran at 14 percent and the Rural Housing Mortgage Purchase Program at 6 percent.

Program Results

The Special Mortgage Loan Purchase Program is responsible for the increase in AHFC activity. The statistics which follow are for the period July 1, 1980, through October 31, 1981. During that period, the program purchased 9,792 mortgage loans with an original mortgage value of \$853.1 million. These figures include loans made under the HOF, PAM, and refinance programs. During this period, 733 borrowers qualified for participation in the homeownership assistance program.

These loans had an original loan balance of \$46.4 million. In December 1981, AHFC provided \$153,636 in HOF subsidy payments to 891 recipients, a mean subsidy of \$172. As of October 31, 1981, there were 356 PAM loans with an original mortgage balance of \$36.6 million. The refinance and home improvement program funded only 23 loans, with an original mortgage balance of \$1.8 million.

From its creation in 1980 through October 31, 1981, the mobile home program has financed 891 mobile home purchases. These loans had an original loan balance of \$20.9 million.

The rural owner-occupied program has funded 213 mortgage loan purchases in rural Alaska through October 31, 1981. These loans had an original loan balance of \$14.5 million. Between July 1, 1980, and October 31, 1981, the rural nonowner-occupied program financed seventeen loans, representing an original balance of \$2.7 million.

Future Levels of Activity

Given these high levels of activity in the first program year, the question arises as to whether the level of activity experienced is a norm which can be expected to continue into the future or a special case. In this section, we identify the factors which influenced the 1980-1981 activity.

First, by eliminating the income requirements for homeowners and expanding the value limits of property eligibility for purchase, the Special Mortgage Purchase Program made AHFC funds an option for the majority of the residential housing market. Of the 9,792 borrowers who received SMLPP loans between July 1980 and October 31, 1981, 6,311 (64 percent) could not have qualified for AHFC funds under the old Insured Mortgage Program (the pre-June 1980 low and moderate income program). The Insured Mortgage Program placed maximum income limits on borrowers and limited the price of eligible housing. An analysis of SMLPP buyers shows that 6,275 of the borrowers had incomes exceeding the last set of income limits under the Insured Mortgage

Program. Of these buyers, 2,967 purchased houses which exceeded the price limits.

Second, the choice of using AHFC funds instead of alternative funds such as from the financial institutions or federal credit agencies depends on the interest rate, maximum loan amount, and loan terms available from each source. A review of interest rates for the period June 1977 to June 1981 (Table 8) shows that the original base interest rate of 10 percent in the Special Mortgage Loan Purchase program was not only below the prevailing rates for other lenders at the time the program started but also the lowest rates since December 1978. This lower interest rate opened up the market to borrowers who may not have been able to afford the higher market interest rates. For example, monthly principal and interest payments on a \$90,000 mortgage increase from \$790 at 10 percent to \$925 at 12 percent. In the 10-to-16 percent interest rate range, a one percent increase in the mortgage interest rates raises the monthly payment from \$67 to \$72 on a \$90,000 loan. Additionally, buyers who could afford to purchase a house at market rates can afford to purchase more expensive housing at the lower rates.

TABLE 8. INTEREST RATES

	<u>FNMA</u>	<u>FHLMC</u>	<u>AHFC</u> ^a
6/30/77	9.106	9.008	
12/31/77	9.213	9.435	
6/30/78	10.125	9.971	
12/31/78	10.920	10.797	
6/30/79	11.438	11.595	
12/31/79	12.985	12.898	
6/30/80	12.807	12.204	10.0
12/31/80	15.430	14.735	10.0
6/30/81	16.337	16.564	10.0
12/31/81		16.845	12.375

^aInterest rate for non-veteran on first \$90,000 balance.

SOURCE: Real Estate Research Report, Fall 1981.
Alaska Housing Finance Corporation

Contrary to expectations, the threat of higher interest rates did not greatly dampen application activity. One explanation forwarded to explain this behavior is that borrowers expect future interest rates to increase even further. Future interest rates could increase either as a result of further increases in market interest rates or due to changes in AHFC programs.

Not surprisingly, AHFC has captured most of the eligible markets due to its lower interest costs. As long as AHFC interest rates are lower than the alternative sources, AHFC will maintain its dominant role as the primary source of owner-occupied residential mortgage funds.

Characteristics of Borrowers

In examining any public program, a common question is "Who was served by the program?" While AHFC housing programs have effects that go beyond the borrower (see Chapter Five), the borrower is viewed as the major beneficiary. In this section, we examine three characteristics of borrowers who received AHFC financing. These characteristics are income, previous ownership history, and residency. By comparing the variations across programs, we can begin to determine whether the various programs actually serve the intended groups.

Income. With the exception of the rural nonowner-occupied program, AHFC loan programs are designed to serve home buyers. Since homeownership by its very nature has minimum income requirements, AHFC programs serve those persons who have sufficient income to purchase rather than rent housing. Since AHFC operates as a business enterprise, with underwriting standards acceptable to their investors, some borrowers face the possibility that they have insufficient income to qualify for AHFC programs. The subsidy elements of the AHFC programs do, however, allow borrowers to qualify for mortgage loans that they might not qualify for at market interest rates. The homeownership assistance program further reduces the income required for low- and moderate-income buyers in Alaska.

Table 9 shows the income distributions of households receiving AHFC financing under the State Assisted Mortgage, Home Ownership Assistance, Pledged Account Mortgage, Mobile Home, and Rural Owner-Occupied programs. The distribution shows that over all programs in the Special Mortgage Loan Purchase Program, 61 percent of borrowers had household incomes greater than \$40,000 per year, and 39 percent had incomes greater than \$50,000. Only 2 percent of SMLPP recipients had incomes less than \$20,000 per year with a total of 16.1 percent having incomes less than \$30,000. For the rural owner-occupied program, 54 percent of borrowers had annual household incomes greater than \$40,000, and 19.7 percent had incomes less than \$30,000. Two AHFC programs provide the majority of assistance to households in the \$10,000-\$20,000 income range. The HOF program provided 20 percent of its loans to this income group, and the mobile home program provided 16 percent. None of the AHFC programs provide assistance to the very low income households (households with incomes less than \$10,000).

In order to compare the income distributions of AHFC recipients with the income distribution for the general population, we used an income distribution of Anchorage obtained from a 1978 survey and the income distribution of Anchorage recipients of the AHFC Special Mortgage purchase and mobile home programs (Ender, 1977).⁵ The survey showed that in 1976, 28.7 percent of Anchorage households had incomes less than \$20,000 (see Table 10). In 1976 dollars, only 8.9 percent of Special Mortgage Loan Purchase program recipients had incomes less than \$20,000. While the Anchorage income distribution may not be fully representative of the state, it does provide a measure upon which to compare the income of AHFC recipients to the general population. Evidence from a statewide survey shows that there is a higher

⁵Since the survey measured household income in 1976, we adjusted the AHFC recipient incomes downward to account for growth in income. The adjustment factor of .25 was based on the change in per capita personal income between 1976 and 1981 as measured by the Bureau of Economic Analysis.

TABLE 9. DISTRIBUTION OF HOUSEHOLD INCOMES
FOR BORROWERS USING AHFC PROGRAMS

(percent of borrowers)

Annual Income	Special Mortgage Loan Purchase Program				Mobile Home	Rural Owner-Occupied
	Total	State-Assisted Mortgage	Home Ownership Assistance	Pledged Account		
< \$10,000	0	0	0	0	0	0
\$10,000 - \$20,000	2.0	.6	19.8	.6	16.0	3.3
\$20,000 - \$30,000	14.1	8.4	80.1	15.7	43.7	16.4
\$30,000 - \$40,000	23.1	24.5	.1	38.5	27.3	26.3
\$40,000 - \$50,000	25.2	27.3	0	26.1	6.7	22.5
\$50,000 - \$60,000	17.5	19.2	0	12.9	4.0	16.0
\$60,000 - \$70,000	9.5	10.5	0	4.8	1.7	5.2
> \$70,000	8.6	9.5	0	1.4	.6	10.3
	100.0	100.0	100.0	100.0	100.0	100.0
Number of Loans	9,792	8,680	733	356	891	213

SOURCE: AHFC Data Base

TABLE 10. DISTRIBUTION OF HOUSEHOLD INCOME IN ANCHORAGE

Distribution of Household Income (adjusted to 1976 dollars) for:

<u>Household Income</u>	<u>Distribution of Household Income, 1976</u>	<u>Special Mortgage Purchase Program</u>		
		<u>Total Recipients</u>	<u>HOF Recipients</u>	<u>Mobile Home Program</u>
< \$10,000	10.0	0	0	.8
\$10,000 - \$20,000	18.7	8.9	74.3	45.8
\$20,000 - \$30,000	20.9	22.4	25.7	42.6
\$30,000 - \$40,000	20.0	30.4	0	7.4
\$40,000 - \$50,000	12.9	21.6	0	2.1
\$50,000 - \$60,000	9.0	10.2	0	1.3
\$60,000 - \$70,000	2.9	3.9	0	0
> \$70,000	3.5	<u>2.6</u>	0	<u>0</u>
Don't Know	2.1			
Total	100.0	100.0	100.0	100.0

SOURCE: AHFC Data Base

Ender, Richard L. The Opinions of the Anchorage Citizen on Local Public Policy Issues,
Anchorage Urban Observatory, December 1977.

proportion of households in the lower income categories statewide than in Anchorage (ISER, 1978, 1979, 1981).

Previous Ownership History. First-time home buyers purchased 38 percent of the properties financed under the Special Mortgage Loan Purchase program. This compares to a national average in 1978 of 36 percent (U.S. Department of Housing and Urban Development). There is, however, variation among AHFC programs.

First-time home buyers who participated only in the SAM program matched the national average exactly at 36 percent. The HOF and the Mobile Home programs both showed a high rate of participation by first-time home buyers--75 and 65 percent, respectively. These participation rates are likely tied to the price of property allowed under each program. First-time home buyers are most likely to enter the housing market at the lower end of the price range. The rural owner-occupied program also showed a high rate of first-time home buyers--56 percent.

The PAM program had the lowest participation rate by first-time home buyers--21 percent. Just as the HOF is well-suited for first-time home buyers, the PAM program's equity requirements do not suit the average first-time home buyer.

Residency. A sample of AHFC loan application files shows that 18 percent of recipients in the Special Purchase program and the mobile home program had been residents of the State of Alaska less than one year. Only 6 percent of rural owner-occupied loans went to residents of less than one year. New residents are more likely to be in the housing market due to their recent moves.

Geographic Distribution of AHFC Loans

In order to analyze the geographic distribution of AHFC loan funds, we created ten geographic categories. There are separate categories for Anchorage, Fairbanks, Juneau, Ketchikan, Kodiak, and Sitka. The Anchorage, Fairbanks, and Juneau categories include surrounding communities which are part of their housing market areas. Palmer, Wasilla, and Willow are combined. The final three categories are road-connected communities in southcentral and interior Alaska; communities in southeast Alaska which qualify under the AHFC rural definition; and communities in southcentral, western, interior, and arctic Alaska which qualify under the AHFC rural definition.

Table 11 shows the distribution of loans according to the number of loans made for the Special Mortgage Loan Purchase Program, the Mobile Home Loan Purchase Program, and the Rural Housing Mortgage Purchase Program. As a point of reference, the distribution of loans for AHFC's entire portfolio and a population distribution of the state are also presented.

Loan activity in the Special Mortgage Loan Purchase Program is concentrated in the larger cities. The majority of Special Mortgage Loan Purchase Program activity took place in Anchorage: 68 percent of overall SMLPP loans, 84 percent of HOF loans, and 89 percent of PAM loans. Fairbanks received 10.9 percent of SMLPP loans but only 4.3 percent of HOF and 3.9 percent of PAM loans. Juneau received 5.7 percent of SMLPP activity with 1.9 percent of HOF and 3.2 percent of PAM. An additional 10 percent of Special Mortgage Loan Purchase Program loans went to the road-connected Southcentral and Interior places including Palmer, Wasilla, and Willow. The remainder of SMLPP activity went to Ketchikan (2.3 percent), Kodiak (1.1 percent), Sitka (1.2 percent), and rural areas (.7 percent). Palmer and Wasilla received most of the remaining HOF (5.3 percent) and PAM (2.5 percent) loans. Participation in HOF and PAM was limited in Ketchikan, Kodiak, and Sitka and almost non-existent in rural areas of the state.

TABLE 11. GEOGRAPHIC DISTRIBUTION OF AHFC LOANS
(percent of loans)

Special Mortgage Loan Purchase Program

Place	Entire Portfolio	Total	SAM ^a	HOF ^b	PAM ^c	Mobile Home	Rural Owner-Occupied	Population (1981)
Anchorage	59.6	67.9	65.7	83.9	89.0	42.6	0	43.1
Fairbanks	11.9	10.9	11.8	4.3	3.9	11.7	0	13.9
Juneau	6.1	5.7	6.1	1.9	3.2	17.2	.5	5.0
Ketchikan	2.5	2.3	2.5	.5	0	4.3	0	2.7
Kodiak	1.7	1.1	1.2	.7	.3	3.6	18.3	1.1
Sitka	1.6	1.2	1.3	.3	0	4.8		1.9
Palmer/Wasilla/ Willow	5.6	4.3	4.3	5.3	2.5	1.3	0	1.0
Road-Connected Southcentral Interior	7.8	5.9	6.3	3.0	.8	9.4	1.4	13.4
Rural Southeast	1.0	.3	.3	0	.2	1.8	15.5	3.7
Rural	2.1	.4	.5	.1	0	3.3	64.3	14.2
Total	100.0	100.0		100.0	100.0	100.0	100.0	100.0
No. of Loans	19,463	9,792		733	356	891	213	

^a State Assisted Mortgage

^b Homeownership Assistance

^c Pledge Account Mortgage

SOURCES: AHFC Data Base

AHFC-Selected Corporation and Program Information, October 1981, Alaska.

Department of Community and Regional Affairs, July 1, 1981, Population, Municipalities, and Census Areas. December 15, 1981.

Several factors provide possible explanations to the overall level of SMLPP activity in Anchorage. First, we expect real estate markets to be more active in larger places. Anchorage provides buyers with more opportunities to buy both new and existing housing. A review of the distribution of real estate employment in the state shows that 64 percent of all persons employed in real estate related jobs worked in Anchorage in August 1980 (Alaska Department of Labor, 1980). Second, the Anchorage economy is expanding rapidly. The Alaska Department of Labor estimates that between August 1980 and August 1981, employment in Anchorage grew by 6,000 jobs, 78 percent of the statewide increase of 7,700 jobs (Alaska Department of Labor, October 1981). Third, SMLPP activity measures only part, although the major portion, of AHFC activity. Rural areas, constituting approximately 18 percent of the state's population, have alternate AHFC and other state programs available.

Finally, the knowledge of and participation in AHFC programs by seller/servicers are important to the geographic distribution. First, seller/servicers and the real estate industry are the major sources of information for the borrowing public regarding AHFC programs. AHFC underwriters respond to completed applications; they do not evaluate whether the applicant should be applying for a loan in another AHFC program. Second, seller/servicers can choose the AHFC programs in which they participate. The lopsided geographic distribution of HOF and PAM loans in the Anchorage area is likely the result of these factors.

Mobile home loans are distributed more proportionately across the state. The majority of loans, 79.4 percent, were made in urban areas. When compared to population, the mobile home activity was highest in Southeast Alaska. Juneau received 17 percent of mobile home loans; Sitka, 4.8 percent; and Ketchikan, 4.3 percent. Only 5 percent of mobile home loans went to rural areas. The cost involved in transporting mobile homes to remote sites is a likely reason.

The distribution of rural owner-occupied loans was close to proportionate with the population in the eligible areas. Rural Southeast Alaska received 15 percent of rural owner-occupied loans; rural Western, Interior, and Arctic Alaska received 64 percent; and Kodiak Island received 18 percent. A review of rural loans shows that most of the loans were made in the regional centers and larger villages (Table 12). Bethel, Nome, and Kotzebue received 52 percent of rural owner-occupied loans; and Petersburg and Wrangell received 11 percent. Possible explanations for the distribution are that the larger rural cities have more active real estate markets and that persons in these places have greater access to the Regional Housing Authorities and financial institutions which act as seller/servicers for the program. Additionally, there is greater opportunity to earn cash incomes in the regional centers.

There is additional evidence that access to seller/servicers in rural areas may be a factor in program participation. A review of geographic location of SMLPP loans turned up 54 loans which were located in rural areas as defined by AHFC (AHFC data base). The apparent reason for these loans' being part of the SMLPP and not the Rural Housing Mortgage Purchase Program is that the loan recipients used seller/servicers who did not participate as the seller/servicers for the rural program. The cost to the borrower is the higher interest rate of the State Assisted Mortgage program. These 54 loans were located in Cordova (21), Petersburg (14), Wrangell (7), Dillingham (4), Skagway (3), Unalaska (2), Kotzebue (1), King Salmon (1), and Yakutat (1).

Property Characteristics. An examination of the characteristics of properties financed by AHFC programs since July 1980 provides a broad overview of the Alaska owner-occupied housing market.

The housing characteristics of the State Assisted Mortgage program are used as a base case against which other AHFC programs can be compared. Table 13 summarizes the housing characteristics discussed.

TABLE 12. GEOGRAPHIC DISTRIBUTION OF RURAL LOANS
(as of October 31, 1981)

	<u>Special Mortgage Loan Purchase Program</u>	<u>Rural Housing Purchase Occupied Program</u>
<u>Southeast</u>		
Petersburg (3,001)	14	17
Skagway (819)	3	1
Wrangell (2,345)	7	7
Elfin Cove		1
Craig (560)		2
Metlakatla		2
Port Alexander (90)		1
Pelican (172)		2
<u>Western, Arctic, Interior</u>		
Regional Centers:		
Bethel (3,549)		53
Cordova (2,223)	21	
Dillingham (1,670)	4	6
King Salmon/Naknek (1182)	1	12
Kotzebue (2,250)	1	33
Nome (3,039)		26
Galena (805)		5
Kodiak Island Villages		39
McGrath (343)		2
Aniak (338)		1
St. Mary's (432)		1
Barrow (2,353)		2
Nonregional Centers:		
Yakutat (430)	1	
Unalaska (1,944)	2	
Port Lions (211)		1
Mountain Village (580)		1
Nunapitchuk		1
Seldovia (505)		1
Tanana (463)		3
	—	—
	54	210

SOURCE: AHFC Data Base.
State of Alaska, Department of Community and Regional Affairs,
July 1, 1981 Populations, Municipalities and Census Areas

TABLE 13. CHARACTERISTICS OF PROPERTIES FINANCED
THROUGH AHFC PROGRAMS

Special Mortgage Loan Purchase Program						
<u>Characteristic</u>	<u>Total</u>	<u>State-Assisted Mortgage</u>	<u>Home Ownership Assistance</u>	<u>Pledged Account</u>	<u>Mobile Home</u>	<u>Rural Owner- Occupied</u>
No. of Loans	9,792	8,680	733	356	891	213
Original Principal Balance	\$853,133,200	\$768,232,080	\$50,001,807	\$36,637,000	\$20,917,060	\$14,499,000
Mean Sales Price	\$98,033	\$99,988	\$68,215	\$110,141	\$25,765	\$82,466
Mean Note Amount	\$87,125	\$88,506	\$63,363	\$102,912	\$23,476	\$68,070
Mean Loan-to- Value Ratio	88.9%		94.221%	94.146%	91.1%	82.5%
Dwelling Type:						
Single Family	78.64%	80.2%	55.1%	88.2%	NA	96.71%
Condominium	13.55	11.4	42.0	9.3	NA	Ø
Duplex	5.70	6.4	Ø	.8	NA	3.29
Planned Unit Development	2.11	2.1	2.9	1.7	NA	Ø
New/Existing:						
New	25.7%	26.1%	17.2%	34.6%	6.51%	41.3%
Existing	74.3	73.9	82.8	65.4	93.49	58.7

SOURCE: AHFC Data Base

The mean sales price for SAM-financed properties was \$99,988 for the period July 1, 1980, through October 31, 1981. The mean mortgage loan amount was \$88,506. The predominant housing type was single family (80.2 percent), followed by condominiums (11.4 percent), duplexes (6.4 percent), and units in planned unit developments (2.1 percent). Finally, 26 percent of all units were new.

The mean sales price for homeownership assistance program properties was \$68,215 with a mean loan value of \$63,363 and a mean loan-to-value ratio of 94.2 percent. This lower mean sales price is expected due to both the sales price limit of \$80,000 and the income limits of the buyer. While the majority of homeownership assistance program borrowers (55.1 percent) purchases single-family residences, they purchased a greater proportion of condominiums than SAM borrowers (42.0 versus 11.4 percent). Also, homeownership assistance program borrowers purchased more existing structures than the market on average (82.8 percent versus 73.9 percent). Both of these factors can be attributed to the price of structures. Condominiums tend to be less expensive than single-family units, and existing structures tend to be less expensive than new structures, controlling for all other factors. AHFC data shows that over the period examined, the mean sales price of single-family residences was \$100,250, \$25,560 more than the mean sales price of condominiums. The mean sales prices of single family residences were \$114,275 for new, and \$95,275 for existing, a \$19,000 difference. The mean price for new condominiums of \$87,000 was \$15,450 more than for existing units.

The properties purchased by participants in the Pledge Account Mortgage Program (PAM) also showed the expected characteristics--just the reverse of HOF purchasers. PAM borrowers purchased higher-priced houses (mean sales price, \$110,141) although the loan-to-value ratio remained high at 94.1 percent. PAM borrowers purchased more single-family residences (88.2 percent) and fewer duplexes (.8 percent) than SAM borrowers. Additionally, new structures made up 35 percent of PAM purchases.

The characteristics of the properties purchased under the Rural Housing Mortgage Purchase Program are different from the characteristics of the SAM-financed properties. The mean sales price for rural loans was \$15,000 lower than for SAM loans, indicating that rural housing prices are generally less than urban prices. Single-family properties were the overwhelming structure type, 97 percent. New units made up 41 percent of rural owner-occupied purchases. This indicates that the rural housing markets are either expanding or there is currently a replacement of existing units in rural areas.

The mean mobile home purchase price in 1980-1981 was \$25,765. Only 6.5 percent of mobile home purchases statewide were for new mobile home units.

Program Financing and Costs

A review of AHFC's operations shows that a primary responsibility of AHFC is financial management. AHFC raises and invests capital funds within the framework of its housing programs.

The primary sources of capital funds are proceeds from mortgage bond sales, mortgage loan principal repayment, contributions of capital from the State of Alaska, proceeds from bonds sold to the State of Alaska, and funds generated through operations. The uses of capital funds include the acquisition of mortgages, the payment of mortgage bonds and notes, short-term investments, and changes in cash balances. Table 14 summarizes the sources and uses of AHFC capital for fiscal years 1978 through 1981.

Mortgage Bonds

The single, largest source of capital for AHFC is bonds. The proceeds from these bonds, issued on national capital markets, are used to purchase mortgages. As of December 31, 1981, AHFC had issued \$1,753 billion in mortgage bonds. Of this total, \$1.1 billion, or

TABLE 14. SOURCES AND USES OF AHFC CAPITAL FUNDS
FISCAL YEARS 1978-1981^a

(in millions of dollars)

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981^a</u>
<u>Sources of Capital Funds</u>				
Provided by Operations	9.808	13.538	30.343	23.735
Mortgage and Loan Principal Repayment	29.094	29.698	45.623	61.575
Net Proceeds from Sale of Mortgage Bonds	99.913	209.657	264.669	373.081
Net Proceeds from State of Alaska Notes		.905	4.712	7.310
Contribution of Capital from State of Alaska			400.000	150.000
Other	25.440	Ø	.096	.093
Total	164.255	253.798	745.443	615.794
<u>Uses of Capital Funds</u>				
Increase in Investments	21.241	34.909	189.363	180.006
Acquisition of Mortgages	116.968	189.490	549.404	427.833
Payment of Mortgage Bonds	1.850	3.580	5.005	7.690
Payment of Alaska Notes	.115	.301	.387	.329
Increase in Cash	- 1.730	.070	1.180	- .160
Other	25.811	25.448	.104	.096
Total	164.255	253.798	745.443	615.794

^aUntil Fiscal Year 1981, AHFC's fiscal year ran from December 1 to November 30; Fiscal Year 1981 was a transition year which ran from December 1 to June 30.

SOURCES: AHFC Annual Report 1978-1980
AHFC Financial Statement, 1981

63.3 percent, were issued for use in the Special Mortgage Loan Purchase Program which began in July 1980.

The structure of AHFC bond debt illustrates the growth and recent expansion of AHFC operations. Of the total bonds issued since the first issue in 1972, 98 percent of principal is still outstanding.

Structure of Bonds. The bond instrument used by AHFC has changed over time. Until the Mortgage Subsidy Bond Act of 1980 (Ullman Bill) limited their use, AHFC issued tax-exempt bonds. The Ullman Bill forced AHFC into the taxable market for the majority of its financing.

The tax-exempt bonds issued by AHFC prior to 1981 were structured as serial bonds with thirty years as the term of the longest bond. With serial bonds, principal payments are due at specified dates over the life of the bond issue. Since the mortgages financed with the proceeds from these bonds also had a maximum thirty-year life and principal repayments are included in even payment mortgages, the cash flow from the mortgages approximated the cash flow requirements of the bond issue. The serial bonds which matured in earlier years were to be paid off with mortgage loan principal payments. Mortgage loan prepayments were used to purchase new loans and pay off outstanding bonds. A prepayment is the paying off of a mortgage loan ahead of the specified schedule as when someone sells a house.

When AHFC entered the taxable bond market, it had to restructure its bond issues. First, taxable bonds are usually fixed term, not serial; that is, all bonds in the issue have the same maturity date, with interest payments due at specified times over the life of the bond. Second, due to interest rates and market expectations at the time AHFC entered the taxable market, AHFC could not expect to sell bonds with a thirty-year maturity.

The current taxable structure used by AHFC is the joint issue of two bonds, each issue with a different maturity. On the last two taxable bond sales, the terms are ten and twenty years. The two bond issues are then combined into a single bond pool for purchasing mortgages. For example, the most recent taxable bond issues were State Assisted Mortgage Bonds Series D (\$90,000,000 due December 1, 1991) and Series E (\$60,000,000 due December 1, 2001). The principal and interest payments on the mortgages pledged to that bond issue are deposited into a sinking fund as they are received. Principal and interest payments on the bonds are made from the sinking funds. Since the mortgages which secure the bonds have a longer legal life, AHFC has established additional security for investors. First, the original balance of the mortgage pool pledged to repayment of a bond issue is larger than the original balance of bonds. These additional mortgages are funded through state appropriations (state appropriations will be discussed in the next section). Second, AHFC establishes a source of funds which can be tapped if insufficient funds are available from the sinking fund to meet an interest or principal payment. The most recent device used by AHFC is a letter of credit. This letter of credit, arranged at the time of the bond sale, is a lending agreement between AHFC and a bank that guarantees AHFC's ability to borrow funds if the sinking fund does not provide adequate funds to meet bond principal and interest payments.

Level of Activity. In fiscal year 1980, AHFC issued \$269.4 million in bonds with net proceeds of \$264.7 million.⁶ Most of these bonds, \$230 million, were issued in July 1980 to provide initial bond funding for the Special Mortgage Loan Purchase Program. During fiscal

⁶Prior to fiscal year 1981, the AHFC fiscal year was December through November; for fiscal year 1981, the fiscal year was December through June; starting in fiscal year 1982, AHFC's fiscal year will run July through June.

year 1981, AHFC issued \$384.4 million in bonds with net proceeds of \$373 million. As of December 31, 1981, AHFC had issued \$500 million in bonds, 84 percent of its fiscal 1982 \$592 million bonding authority. This includes \$200 million of tax-exempt bonds issued under provisions of the Mortgage Bond Subsidy Tax Act of 1980. In order to ensure sufficient funds to finance operations at the level of public demand, AHFC requested supplemental bonding authority of \$210 million in January 1982.

Contributions by the State of Alaska

The State of Alaska has made a variety of financial contributions to AHFC since operations began in 1972 (Table 15). These contributions include direct appropriations, loans, purchase of AHFC bonds, and deposits to the state insurance fund. Total state contributions in all forms through fiscal year 1982 total \$891.98 million. By far the largest category of assistance is direct appropriations--94 percent of the total. Direct appropriations have increased dramatically as a result of the program changes in 1980. Of total state appropriations to AHFC of \$836.8 million, \$815 million has been appropriated since 1980 to fund current AHFC programs. The State of Alaska has loaned AHFC \$27.6 million since 1972. Additionally, the State of Alaska purchased \$10.0 million in rural housing bonds. Finally, the state has contributed \$17.6 million into the insurance funds used to secure the insured housing mortgage program and the rural insurance programs.

Special Mortgage Loan Purchase Program. The Special Mortgage Loan Purchase Program is the largest recipient of state appropriations at AHFC. For fiscal 1982, \$222 million of the \$265 million state appropriation was for the SMLPP program.

In the SMLPP program, the state appropriations are used to purchase mortgage loans. The cash flow derived from the principal and interest payments on these state funded mortgages are pledged to meet

TABLE 15. STATE OF ALASKA CONTRIBUTIONS TO AHFC, 1972-1982
(in millions of dollars)

Year Ended November 30	Direct Appropriations		Loans to Corporation (in thousands)	Purchase of Corporation Obligations	Deposited to State Insurance Fund
	Cash	Property			
1972	--	\$ 2.625	\$.811	--	--
1973	--	9.800	4.619	--	--
1974	--	--	3.720	--	--
1975	--	9.400	--	--	--
1976	--	--	.500	--	\$.391
1977	--	--	12.300	--	2.109
1978	--	--	--	--	.995
1979	--	--	.905	\$ 5.600	3.630
1980	\$114.000	286.000	4.712	--	5.505
1981 ^a	<u>150.000</u>	<u>--</u>	<u>--</u>	<u>4.400</u>	<u>4.960</u>
1982 ^a (budget)	<u>265.000</u>				
	\$529.000	\$307.825	\$27.567	\$10.000	\$17.590

^aFor year ended June 30.

SOURCE: AHFC. Official Statement, State-Assisted Mortgage Bonds, Series A, June 18, 1981.

the cash flow requirements of bonds. State appropriations are required because AHFC purchases mortgage loans with interest rates less than its own borrowing costs. The state-funded mortgages must supplement the bond-purchased mortgages to a level adequate to meet the bond debt service requirement. For example, if bond and mortgage interest rates are both 10 percent, interest payments from \$100 in mortgages will be sufficient to pay interest on \$100 in bonds. If, however, the bond interest rate is 15 percent, \$150 in mortgages at 10 percent is required to meet the bond interest payments of \$15.

The amount of the state appropriation pledged to each bond pool depends on the difference between AHFC's bond and program mortgage interest rates, the term of the bonds and mortgages, and the expected level of prepayment. AHFC calculates the state appropriation required for each bond issue based on the cash flow requirements of the bond issue. AHFC makes assumptions regarding the expected prepayment level and calculates the additional amount of mortgages required to meet the cash flow requirements of the issue. AHFC's goal is to minimize the state appropriation required for a given bonding amount and bond/mortgage interest rate differential (Goldbar, January 8, 1982).

Table 16 lists the amount of state appropriations utilized by the first seven bond issues under the Special Mortgage Loan Purchase program. The state appropriation required to supplement the bond funds rose from 3.7 percent of total funds available on Insured Mortgage Program Bonds, 1980 second series (the first issue under the SAM program) to 39.3 percent under State Assisted Mortgage Bond, Series B and C. The major reason for the increase is found in the difference between bond and mortgage interest rates. On Insured Mortgage Program Bonds, 1980 Second Series, AHFC's borrowing cost was 10.25 percent versus a mortgage rate of 10 percent (9 percent for state veterans). On State Assisted Mortgage Bonds, Series B and C, AHFC's borrowing cost of 19.153 percent exceeds the mortgage interest rate of 12.125 percent by 7.03 percentage points. For the first seven bond

TABLE 16. USE OF STATE APPROPRIATION BY BOND ISSUE, SPECIAL MORTGAGE PURCHASE PROGRAM
(millions of dollars)

	Insured Mortgage Housing Bonds (Tax Exempt)		State-Assisted Mortgage Bonds (Taxable)			Home Mortgage Bonds (Tax Exempt)	
	1980 Second Series	1980 Third Series	Series A	Series B and C	Series D and E	First Series	Second Series
Bond Proceeds Used to Purchase Mortgages	\$203.304	\$200.872	\$148.822	\$146.510 ^a	\$145.821 ^a	97.748 ^a	97.825 ^a
State Appropriation Pledged to Issue	7.851	39.061	82.641	94.775	56.000 ^b	29.502 ^b	23.300 ^b
Total Funds Available for Mortgages	211.155	239.933	231.463	241.285 ^c	201.821 ^c	127.250 ^c	121.125 ^c
State Appropriation as A Percent of Total Funds	3.7%	16.3%	35.7%	39.3%	27.7%	23.18%	19.24%
Costs of Funds ^d	10.25%	12.29%	17.05%	19.153%	19.411%	13.158%	13.19%
ANFC Mortgage Rate:							
First \$90,000	10.0%	10.0%	10.0%	12.125%	12.375%	10.0%	10.0%
Balance	10.25	12.29	17.05	19.153	19.411	13.158	13.19
State Appropriation as Percent of Total Funds for Each Percentage Point of Interest Rate Differential	14.8	7.1	5.06	5.59	3.39	7.34	6.03

^aNet proceeds from bond issue.

^dIncludes Cost of issuance.

^bANFC estimate at time of bond sale.

^cRate for nonveteran.

^eEstimate of total funds available.

SOURCE: ANFC

issues used to finance the SMLPP program, state appropriations of \$333 million was required, 24 percent of mortgage funds available.

While total state appropriations relative to bond proceeds increased due to increases in the bond/mortgage interest rate differential, the state appropriation per one percentage point of differential has declined since the first bond issue used to finance the Special Mortgage Loan Purchase Program. The state appropriation of 3.7 percent of total funds for Insured Mortgage Housing Bonds, 1980 second series represented a 14.8 percent share per one percentage point of bond/mortgage interest rate differential. Table 16 shows that this differential has decreased to as low as 3.4 percent per point of differential for State Assisted Mortgage Bonds, Series D and E.

As of November 31, 1981, AHFC had completed mortgage purchases under the first three bond issues used to finance the Special Mortgage Loan Purchase Program (Insured Mortgage Housing Bonds, 1980 second and third series and State Assisted Mortgage Bonds, Series A). For these issues, the mean state appropriation per mortgage loan purchased was \$3,108 for 1980 second series, \$13,960 for 1980 third series, and \$31,822 for State Assisted, Series A. On a per percentage point of interest rate differential, the appropriation declined from \$12,432 per percentage point for Insured Mortgage Housing Bonds, second series, to \$4,514 for State Assisted Mortgage Bonds, Series A. The actual cost of individual loans depends on the level of interest rate differential and the length of time the mortgage loan is held. (These issues are discussed in Chapter Seven on Program Costs.)

Other AHFC Programs. The mobile home program, the rural owner-occupied, and the rural nonowner-occupied programs are funded through direct state appropriations made to the Home Ownership Fund. The state appropriations for these programs increased from \$6.5 million in

fiscal year 1980 and \$17.0 million in fiscal 1981 to a total of \$43.0 million for fiscal 1982. For 1982, the appropriations were \$18.0 million for the mobile home program, \$20.0 million for the rural owner-occupied program, and \$5.0 million for the rural nonowner-occupied program.

AHFC has approved \$15.4 million in mobile home loans in the first five months of fiscal year 1982, an annual rate of \$37 million. This demand is approximately twice the 1982 appropriation. This additional demand will be financed with funds available from other sources. The rural programs are operating in 1982 and levels in line with the appropriations. Loan approvals in the Rural Housing Mortgage Purchase Program totaled \$6.3 million in the first five months of fiscal year 1982, a \$15.1 million annual rate. The Rural Nonowner-occupied Program has approved \$1.5 million through November 1981, a \$3.5 million annual rate.

Operating Expenditures and Revenue

The major categories of AHFC's operating costs are interest payments on outstanding notes and bonds; mortgage service fees; legal, accounting, and trustee fees; general and administrative expenses; and the provision for loan loss. Table 17 summarizes AHFC's operating costs and revenues for fiscal years 1978 through 1981. Over the period examined, AHFC's operating costs increased from \$26.3 million in 1978 to \$57.4 million in the seven months of fiscal year 1981. The composition of operating expenses has remained constant with interest payments on outstanding notes and bonds constituting 93 percent; mortgage service fees representing 4-to-5 percent; general and administrative costs declining from 2.0 to 1.4 percent; and legal, accounting, and trustee fees remaining below 1 percent. A new category of operating cost in 1981 was the monthly payments required under the HOF program.

TABLE 17. AHFC OPERATING REVENUES AND EXPENSES
FISCAL YEARS 1978-1981^a

(in millions of dollars)

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981^a</u>
<u>Revenues</u>				
Interest Income:				
Mortgage Loans	23.311	33.540	57.176	60.440
Investments	7.651	13.329	22.549	39.616
Loan and Other Fees	.732	1.031	1.378	2.193
Total	31.695	47.900	81.103	102.249
<u>Expenses</u>				
Interest on Notes and Bonds	24.483	35.654	51.159	53.350
Mortgage Service Fees	1.048	1.495	2.653	2.610
General and Administrative	.519	.661	.888	.800
Legal, Accounting, and Trustee	.161	.362	.490	.426
Mortgage Payment Assistance Subsidies	Ø	Ø	Ø	.137
Provision for Loan Loss	.059	.097	Ø	.065
Total	26.270	38.269	55.190	57.391
Revenues in Excess of Expenses	5.425	9.631	25.913	44.858

^aUntil Fiscal Year 1981, AHFC's fiscal years ran from December 1 to November 30; Fiscal Year 1981 was a transition year which ran from December 1 to June 30.

SOURCES: AHFC Annual Report 1978-1980
AHFC Financial Statement, 1981

Interest payments on outstanding bonds and notes cost AHFC \$53.35 million in the seven months of fiscal 1981. Interest payments will continue to grow as AHFC issues additional bonds to finance the SMLPP. AHFC pays its bond interest payments from payments it received on the mortgage loans. In fiscal 1981, AHFC collected \$60.4 million in mortgage interest payments.

General and administrative expenses combined with legal, accounting, and trustee fees cost AHFC \$1.3 million in fiscal 1981 and \$1.4 million in fiscal 1980. These expenses are budgeted for \$2.9 million in fiscal year 1982. AHFC finances these expenses through income earned on corporation activities.

The monthly subsidy required for the HOF program is funded through the income generated from capital contributed by the State of Alaska. At the time the program was authorized in 1980, the State of Alaska contributed \$50.0 million in mortgages to the home ownership fund. The income from these mortgages was to be used to make the monthly subsidy payments. In fiscal year 1981, AHFC disbursed \$137,000 from the fund. In fiscal year 1982, the State of Alaska pledged the income from the funds appropriated for the mobile home and rural programs to provide HOF subsidies. In December 1981, the HOF program paid out \$153,636 in subsidies to 891 recipients, a mean subsidy of \$172. The actual subsidies ranged from \$5.82 to \$333.

Summary

AHFC evolved from a supplier of mortgage funds for low and moderate income households in 1979 to the primary provider of mortgage funds in 1981 as a result of the Special Mortgage Loan Purchase Program which was created in June 1980. In fiscal year 1982, AHFC estimates that it will provide at or near \$1.0 billion for the purchase of below market interest rate loans in Alaska.

AHFC offers several mortgage programs from which potential homeowners may choose. The Special Mortgage Loan Purchase Program includes the Home Ownership Assistance Program for low- and moderate-income homebuyers and the Pledged Account Mortgage Program. There are also programs for rural residents and mobile home buyers.

The Special Mortgage Loan Purchase Program is financed through bond and state appropriated funds. The level of state appropriation required depends on the difference between the below-market interest rate provided and the cost of borrowing to AHFC. While the goal is ultimately to provide mortgage funds on the first \$90,000 of balance at three percentage points below AHFC's cost of funds, events of the past year have kept state appropriations at a higher level. These events include the limitations placed on AHFC to issue tax exempt bonds under the Mortgage Subsidy Bond Tax Act of 1980 and the historically high levels of interest rates.

The effects of AHFC programs on state housing markets and a further discussion of program costs are provided in Parts 2 and 3 of this report.

CHAPTER TWO

ALASKA STATE HOUSING AUTHORITY

In this chapter, we discuss the history and operations of Alaska's public housing authorities, the Alaska State Housing Authority and thirteen regional Native housing authorities. The Alaska State Housing Authority (ASHA) is the state's oldest housing agency. Created in 1945 by the territorial legislature, ASHA was a response to an acute housing shortage caused by the limited availability of financing, high costs of construction, and a small construction industry in the territory. The Alaska State Housing Authority was given responsibility for assisting in the development of decent, safe, and sanitary housing throughout the territory and, subsequently, the State of Alaska by building and operating public housing. In the 1950s and 1960s, ASHA's role was expanded to include several additional housing-related activities from providing planning assistance for boroughs as well as cities (1957), constructing water and sewer facilities and authority for their interim operation (1964), and acquiring or constructing public buildings for lease to the state (1965) to constructing rental and ownership housing for moderate income families (1965). Several of these functions have since been discontinued due to federal funding cuts or have been transferred to other state agencies; today ASHA functions primarily as a provider of subsidized low-income housing. In an appendix to this report, we describe the early history of ASHA and its housing production under past programs up to the early 1970s.

For twenty-five years, ASHA attempted to meet the housing needs of residents throughout the entire state as mandated in enabling legislation (Alaska Statutes, Title 18, Chapter 55). The agency encountered a number of physical, economic, and cultural problems with housing provision in the bush that have been difficult to resolve¹.

¹This discussion draws upon The Housing Element of the State of Alaska Comprehensive Plan (Division of Policy Development and Planning, 1978), which contains a review of several reports on housing problems in Alaska.

Physical problems include such things as getting materials and labor to bush locations on schedule, and the lack of ground water and difficulty of sewage disposal in permafrost areas. Chief among economic problems is the low level and irregular nature of cash income in most rural areas, making conventional housing finance methods unsuitable in the local economy. Housing operating costs such as heating costs can also be beyond the means of many rural Alaskans. ASHA also encountered a general lack of experience in many Native communities in operating and maintaining standard housing.

The combination of these problems resulted in generally poor working relations between ASHA staff and Native communities. This situation led in 1971 to state legislation providing for regional Native housing authorities (RHAs) to be established by the Native regional corporations (Alaska Statutes, Title 18, Chapter 55, Article 5). It was expected that regionally based authorities would better represent the needs of their Native constituents and would be better able to understand and resolve the special problems faced in predominantly Native villages.

There are thirteen RHAs in Alaska with jurisdictions corresponding to the twelve regional Native corporation boundaries and the federally recognized tribal lands in Metlakatla. ASHA retains the legislative authority to operate throughout the state but since the creation of the RHAs has confined its new projects to the cities and larger towns in Southcentral and Southeast Alaska.

ASHA and the RHAs are public corporate agencies of the state. The major role of each, however, has been that of an agent of the federal government. Virtually all of their housing has been financed through programs of the U.S. Department of Housing and Urban Development (HUD). Only recently has the state become systematically involved in funding low-income housing, and even in these cases, state money has primarily been used to leverage federal funds.

The state housing authority and the RHAs have the same legislative authority for carrying out their housing programs. The differences in their activities in general arise not from differing limits on their corporate powers, but from the different problems of their constituents. Today ASHA is involved almost exclusively in providing rental housing. The agency also manages some houses built under the Turnkey III homeownership program² which was initiated thirteen years ago, but ASHA has not been involved in any ownership programs since the early 1970s.

The RHAs, for the most part, administer a homeownership program for Alaska Natives, the Mutual Help for Indians Program. Since 1978, however, a few RHAs have constructed approximately 129 public housing rental units for families or elderly residents. There is a growing interest among some RHAs in becoming more involved in providing rental housing in the larger Native towns and regional centers, particularly those that have recently experienced steady economic growth (Patton, October 27, 1981).

In general, however, rental programs designed for large, developed population centers are inappropriate to and not used in the small, isolated communities served by the RHAs. Because of the expense of construction and management and the seasonal nature of the local cash economy, HUD is reluctant to build fewer than about twenty rental units in a town and requires evidence that the units it does build will, in fact, be rentable (Curtis, October 28, 1981).

Federal Housing Programs

Table 18 summarizes the federal housing programs that have been used in Alaska. The four programs that are presently active--the conventional public housing programs, Mutual Help for Indians, and both Section 8 programs--will be described in detail in the following

²Please refer to the discussion of the Mutual Help program of the RHAs and to Appendix A.

TABLE 18. FEDERAL HOUSING PROGRAMS IN ALASKA

Program	Dates of Activity in Alaska	Housing Type	Agency
Conventional Low-Rent Public Housing	1951 to Present	Rental	ASHA, RHAs
Turnkey III	1968 to 1970	Ownership	ASHA
Middle Income 221(d)(3)	1967	Rental	ASHA
Remote 200/ Mutual Help	1971	Ownership	ASHA
Mutual Help for Indians	1978 to Present	Ownership	RHAs
Section 8, New Construction	1976 to Present	Rental	ASHA
Section 8, Existing Housing Program	1976 to Present	Rental	ASHA

sections on ASHA and RHA activities. The operations of programs that are no longer being funded--Turnkey III, 221(d)(3), and Remote 200--will not be described in any detail, although program summaries are found in an appendix to this report. The new units produced in Alaska in the past decade under these programs are included in total production figures later in this chapter.

There are several requirements which HUD commonly imposes in most of its programs that will be discussed briefly. HUD usually sets program eligibility limits, such as income limits or priority for serving certain groups. In public housing and in both Section 8 programs, eligible tenants must be 62 years of age or older, be handicapped, or be a family. Their income must not exceed a maximum set by

HUD that is based on household composition and income levels in the area in which the housing is located; consequently, income limits vary across the state. Table 19 shows federal program income limits for Anchorage. The lowest limits are found in the bush, where income levels are the lowest in the state (Czech, December 8, 1981). The highest limits are set for Juneau, where incomes are the highest.

TABLE 19. ANCHORAGE INCOME LIMITS, PUBLIC HOUSING, AND SECTION 8
NEW CONSTRUCTION AND EXISTING HOUSING

Program	Single Person (Elderly or Handicapped)	Family of Two	Family of Three	Family of Four
Public Housing	\$13,700	16,800	18,900	21,000 ^a
\$8, New and Existing	16,350	18,700	21,000	23,350 ^b

^aLimit increases by approximately \$2,100 for each additional person.

^bLimit increases by approximately \$1,500 for each additional person.

SOURCE: Correspondence with John Curtis, Director of ASHA,
November 6, 1981.

A second requirement, imposed by Congress in 1969, is a limit on tenant monthly payments that applies to all federal housing subsidy programs. This law originally required that no subsidy recipient could be charged more than 25 percent of monthly income for rent and other housing payments. This rent/income ratio will increase to 30 percent this spring as a result of recent Congressional action (Czech, December 14, 1981).

HUD has also required that tenants in its housing projects have a broad range of incomes, within program income limits, that replicates the income distribution in the community. HUD imposed a further stipulation that at least 20 percent of tenants in a particular project be in the "very low income" category, defined as having an income of no more than 50 percent of the area median. Both of these requirements are also being changed. HUD will no longer require a broad income distribution and is effectively lowering income eligibility limits (Czech, December 14, 1981). In the future it will be difficult for anyone with an income greater than 50 percent of the area median to qualify for housing subsidies.

Finally, HUD imposes a per-unit total development cost limit on all federally funded new housing construction. This limit is currently set at \$92,000 and includes everything from architects' fees to brick and mortar and labor. This limit is particularly important for rural housing projects in Alaska since the costs of construction in the bush are so high.

ASHA and Federal Programs

Program operations and current and potential problems under Conventional Public Housing, Section 8 New Construction and Section 8 Existing Housing, are discussed in this section. While the programs are described in the context of ASHA, they operate the same way when used by the RHAs.

ASHA currently administers six federal housing programs. The three active programs for which new units are funded are Conventional Public Housing, Section 8 New Construction housing, and Section 8 Existing housing. The other federal programs that ASHA administers will be referred to only briefly as HUD funds no new units, and the programs involved no state funds.

Public Housing

Under the Conventional Public Housing program, HUD finances the development of a project and provides additional operating subsidies. The development subsidy mechanism is somewhat complicated. HUD sells tax-exempt, federally guaranteed bonds to private investors for the housing authority. The federal government pays off the bond principal and interest through annual contributions to the housing authority, which owns and operates the housing project constructed with bond revenues. Federal operating subsidies were not originally intended in the public housing program; tenant rents were expected to cover operating expenses. In the late 1960s, when these expenses--namely utility charges, salaries, etc.--began to rise faster than tenant incomes, Congress expanded the federal contribution to include part of project operating costs as well as all of the capital costs of public housing.

While ASHA owns, operates, and maintains its public housing, it must adhere to the requirements set by HUD (described above) regarding tenant eligibility and rent payments. HUD allows the housing authority the choice of setting tenant asset limits, an option ASHA has chosen to exercise. The Anchorage asset limits for public housing tenants are \$15,000 for the elderly and handicapped and \$10,000 for a family. The average net income of a tenant in ASHA public housing is \$7,350 per year; the average rent paid by a tenant is \$150 per month (Curtis, November 6, 1981).

Table 20 lists ASHA's low-income public housing projects. ASHA has built eighteen projects under this program since 1951, totaling 891 units. There is a demand for at least another 500 units, as indicated by the waiting lists. Public housing waiting lists are fairly good indicators of unmet demand since any qualified applicant who cannot be served immediately is put on the list, and that list is updated monthly (Wilson, November 23, 1981).

TABLE 20. CONVENTIONAL PUBLIC HOUSING

LOCATION: Project Name	Year Built	Number of Units	Number on Waiting List
TOTAL		1060	92
ANCHORAGE		449	278
1. Willow Park	1953	150	
2. Loussac Manor	1967	62	
3. Fairmount	1969	88	263
4. Acquisition ^a	1981	99	
5. Park View Manor	1981	50	15
FAIRBANKS		155	17
1. Birch Park	1951	75	
2. Spruce Park	1973	80	17
JUNEAU/DOUGLAS		117	50
1. Cedar Park	1952	50	
2. Cedar Park Annex	1967	25	26
3. Mountain View	1977	42	
4. Geneva Woods	1974	25	24
KETCHIKAN		64	120
1. Schoenbar Park	1969	24	85
2. Sea View Terrace	1977	50	35
SITKA: Paxton Manor	1966	24	11
PETERSBURG: Vista View	1967	12	7
KODIAK: Pacific Terrace	1967	40	43
VALDEZ: Valdez Arms	1967	14	7
CORDOVA: Eyak Manor	1970	16	1
BETHEL: Bethel Heights ^b	1968	120	47
NOME: Beringvue ^b	1970	29	1
WRANGELL: Etolin Heights ^b	1969	20	10

^aExisting units in three- and four-plexes bought by ASHA.

^bBethel Heights, Beringvue, and Etolin Heights were built and financed under other federal programs. Public Housing subsidies were granted to them when these projects experienced financial and other operating problems.

SOURCE: ASHA Records

The primary concern of HUD is that public housing projects be income solvent, that is, able to meet operating expenses with operating income. The housing authority derives its operating income from two sources, tenant rent payments and federal operating subsidies. Because of the low income levels of public housing tenants and the 25 percent rent/income limit, ASHA has depended on the operating subsidy for about half of its operating revenues (see Table 32). If these funds are significantly decreased, ASHA will be placed in a difficult situation under the new federal requirements. It will not be able to raise rents above 30 percent of any tenant's income, an undesirable move under any circumstances; nor will ASHA be able to replace the poorest tenants with new ones having higher incomes.

Public housing operating subsidies are not a guaranteed source of income for housing authorities. The funds are appropriated annually by Congress, which is under no obligation to continue these appropriations at current levels, or even at all. It is quite possible that they may be dramatically reduced in future spending cuts. Given the various constraints on ASHA under this program, such federal cuts could make it impossible for ASHA to meet program requirements and may result in financial difficulty for the housing authority. Under these circumstances, the authority would probably sell its public housing on the private market, unless other funding sources could be found.

Section 8 Subsidy Programs

While federal budget cuts may have important impacts on all federal housing programs, they would be less likely to lead to potential insolvency in the Section 8 programs. Before describing how these programs operate and how budget cuts may affect them, it is necessary to explain why the programs were instituted and how they differ from earlier federal housing programs.

In the 1960s and early 1970s, housing programs proliferated, but many projects floundered financially due to poor program design or

administration or faced criticism based on perceived discriminatory or other harmful social effects. In 1973, President Nixon suspended all principal subsidized housing programs for being inequitable, inefficient, duplicative, and too expensive. Section 8 was advanced to solve these problems by consolidating previous programs and relying on the private sector to build and manage subsidized housing, as opposed to relying on the public sector (Weicher, 1980).

Before Section 8, housing programs relied entirely on a "supply-side" approach. That is, subsidies were used to increase directly the number of housing units by financing some portion of capital costs of new housing. The benefits of the subsidies were only indirectly passed on to the nominal program beneficiaries. For example, interest subsidy programs³ were a popular supply-side approach in the 1960s. An interest subsidy effectively reduces the cost to the developer of building housing, the intention being to induce production of new housing units. This development cost savings was expected to be passed along to the program beneficiary in the form of lower rents or house prices.

A number of problems arose in many programs in the late 1960s and early 1970s. They cost more than had been anticipated in some cases; in others they were actuarially unsound or did not serve the groups intended as recipients. In general, the units built were often not affordable to intended program users (Weicher, 1980).

Under "demand-side" approaches, there is a shift away from direct production incentives that are tied to the housing unit being subsidized. The emphasis instead is on a subsidy that goes directly to the

³Section 221(d)(3) and Section 236 are two examples of interest subsidy programs for rental housing. Section 235 is an example of a homeownership program that used interest subsidies. See Weicher, Housing: Federal Policies and Programs.

needy family, enabling the recipient to afford housing in the private, unsubsidized market. The subsidy is tied to the recipient, not to a particular housing unit. The anticipated indirect effect is an increase in housing production, caused by the increase in the effective demand for housing from the poor whose incomes are increased by receiving subsidies.

The Section 8 Existing program fits this description; it is a pure demand-side approach. The Section 8 New Construction program, on the other hand, fits the supply-side description. Any program that directly produces new units is a supply-side program since the subsidy must be inseparable from the housing units that are built. The only similarity between the two Section 8 programs is the method by which the per-unit amount of subsidy is calculated. Both programs are described below.

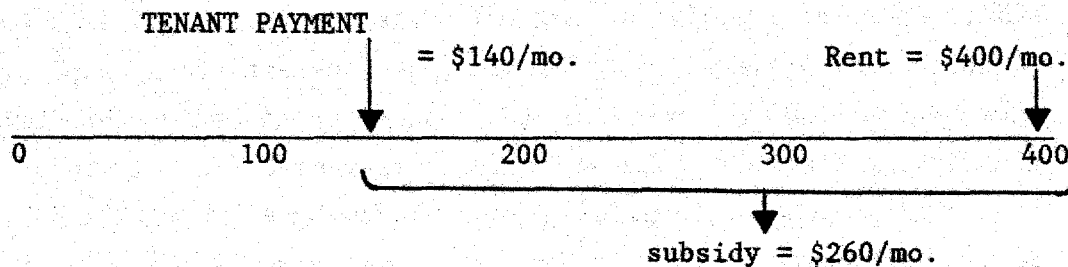
Section 8 New Construction. ASHA's new Section 8 housing closely resembles public housing since both are constructed and managed by ASHA. ASHA, as a public agency, was able to finance its Section 8 New Construction projects with state low-interest loans and grants. Without these state subsidies made, the projects would not have been financially feasible. The state funds prevented federal housing funds allocated to Alaska from being lost to the state,⁴ as HUD's practice is to reallocate funds that will not be used in one area to other parts of the country where they will be used.

In Section 8, the subsidy is not used to reduce the cost of constructing the housing; it is used to make the housing affordable to the tenant. The subsidy amount for each apartment is the difference between the rent on the unit and the tenant's monthly payment, which currently may not exceed 25 percent of monthly income.

⁴HUD's Fair Share Allocation system is described in Appendix B.

For example, for an eligible tenant with an annual income of \$6,720, or \$560 per month, the tenant payment for a subsidized apartment may not exceed \$140 (25 percent of \$560). Assume that the rent required to pay for utilities, maintenance and repairs, other operating costs, and for debt amortization is \$400 per month (see Figure 2). The difference between the tenant payment and the rent is \$260; this is the amount of subsidy HUD pays on that apartment each month. Under the 30 percent rent/income ratio to be instituted this spring, the tenant's payment will increase to \$168 per month, and the subsidy will decrease by \$28 to \$232 per month. Note that the \$260 or \$232 payment is not used to reduce the cost of building or operating the housing. It is used to reduce the cost for that eligible tenant of renting that unit.

FIGURE 2. DETERMINING THE AMOUNT OF SUBSIDY
UNDER SECTION 8 PROGRAMS



HUD sets maximum allowable rents for standard quality (nonluxury) apartments and houses that receive Section 8 subsidies, called Fair Market Rents (FMRs). The FMR is not the rent paid by the tenant; it is the amount received by the landlord from both the tenant payment and the HUD subsidy. The FMR limit is set to prevent landlords from charging rents above market levels, thereby preventing larger federal subsidy outlays than are necessary. If the project sponsor, be it a private developer or ASHA, cannot amortize the mortgage debt and operate the housing with the income from the allowed rents, the project is not built.

Fair Market Rents for Section 8 New Construction units are designed to reflect the costs of constructing and operating new housing by setting them at the level charged for comparable private units. The process of setting FMRs is complex. HUD bases them on a survey of rents on nonsubsidized apartments in the area where the project will be built. FMRs are revised annually to account for changes in construction costs and in the local housing market. Table 21 shows FMRs for Section 8 New Construction in effect in Alaska as of November 1981.

There are several criticisms of HUD's FMRs. Some claim that FMRs are outdated by the time they come into effect due to the time lag between when the survey is made and the time the FMRs are used--a year to a year-and-a-half later (Young, December 13, 1981). This reduces the incentive for developers to build Section 8 housing. Rents usually increase, so Section 8 housing may rent for less, but it costs just as much to build as unsubsidized housing.

ASHA owns and operates five Section 8 New Construction projects, containing 285 rental units (see Table 22). In November 1981, there were 130 eligible applicants on waiting lists for these units. These lists, however, are not a good indicator of unmet program demand. Unlike Conventional Public Housing, Section 8 lists are closed when ASHA anticipates no open units and turnover is low. No new applications are taken by the housing authority, regardless of the eligibility of the needy individual or family.

TABLE 21. FAIR MARKET RENTS FOR SECTION 8 NEW CONSTRUCTION

Market Area	Structure Type	Number of Bedrooms				
		0	1	2	3	4 or more
Anchorage	Detached			643	711	735
	Semi-Detached/Row		553	616	671	694
	Walkup	384	453	531	628	650
	Elevator/2-4 Story	503	592	662		
	5 + Story	512	602	673		
Fairbanks	Detached			633	690	751
	Semi-Detached/Row		542	608	683	737
	Walkup	476	517	584	657	723
	Elevator/2-4 Story	583	670	746		
	5 + Story	595	684	760		
Juneau	Detached			670	763	794
	Semi-Detached/Row		538	650	727	763
	Walkup	431	481	599	693	735
	Elevator/2-4 Story	483	545	625		
	5 + Story	507	572	650		
Ketchikan	Detached			589	670	745
	Semi-Detached/Row		478	561	639	710
	Walkup	385	435	510	581	645
	Elevator/2-4 Story	442	505	592		
	5 + Story	464	515	609		
Coastal Area, ^a N. of Aleutians/ N. Coastal Area, Barter Island	Detached		861	947	1042	1146
	Semi-Detached/Row		836	920	1012	1113
	Walkup	738	812	894	983	1081
	Elevator/2-4 Story 5 + Story					

^aMarket areas are not combined. FMRs are identical for these market areas.

SOURCE: Federal Register, Vol. 45, No. 170.

TABLE 22. SECTION 8 NEW CONSTRUCTION

<u>Location Project Name</u>	<u>Year Built</u>	<u>Number Units</u>	<u>Number on Waiting List</u>
Total		285	130
Anchorage		137	96
1. Chugach View	1977	120	66
2. Ptarmigan Park	1979	17	30
Fairbanks: Golden Towers	1976	96	30
Cordova: Sunset View	1979	22	2
Seward: Glacier View	1979	30	2

SOURCE: ASHA

Tenants in ASHA's Section 8 New Construction projects have an average annual income of \$6,400 and pay an average of \$133 per month (Curtis, November 6, 1981).

There are also seven privately owned and managed housing projects in Alaska built under the Section 8 New Construction program. Each of these projects was financed with FHA mortgage insurance, an important factor in the financial feasibility of these projects. They have a commitment from HUD for 20, 30, or 40 years, depending on the term of the project loan. Table 23 lists these projects, the number of units, and the subsidy commitment.

TABLE 23. PRIVATE SECTION 8 NEW CONSTRUCTION
HOUSING IN ALASKA

<u>Project</u>	<u>Subsidy</u>	<u>No. Units</u>	<u>Date</u>
1. Bethel: Ayalpik Apts.	\$228,804	24	FY 81
2. Juneau: Madsen/Tiffany	392,928	52	FY 81
3. Fairbanks: Chenana Apts.	320,820	51	FY 76
4. Fairbanks: Executive Estates	682,560	108	FY 78
5. Fairbanks: Park West Apts.	522,720	84	FY 77
6. Anchorage: KBL Apts.	477,024	76	FY 78
7. Kodiak: Kodiak Elderly	400,620	55	FY 78
TOTAL	3,025,476	450	

SOURCE: U.S. Department of Housing and Urban Development.

Section 8 Existing Housing. This program bears little similarity to either of the two programs described earlier. ASHA administers the Section 8 Existing program, but its role is not that of landlord. Eligible participants must find their own house or apartment in the private market that meets HUD's requirements. They are responsible to their private landlord for their rent payments and for other responsibilities as tenants. ASHA is involved in determining eligibility (same eligibility requirements as in Section 8 New Construction), in inspecting the units, in entering into and terminating contracts with landlords, and in passing through to the landlords the subsidy from HUD.

The only similarity between the Section 8 Existing and New Construction programs is the way the per-unit subsidy amount is determined. HUD pays the difference between 25 percent of the recipient's income and the rent on the apartment, just as in the New Construction program.

HUD also sets FMR limits for Section 8 Existing housing lower than the FMRs for New Construction (see Table 24). The reason given for lower FMRs for existing housing is that it should rent for less than new housing because it was less expensive to build. This reasoning, however, may not be valid. All rents respond to the level of housing demand, increasing when demand increases. New housing is built only when rents can be charged that offset the costs of building and managing the housing, with a profit margin included. New units rent for amounts close to that for older units; people may be willing to pay a little more for newer housing, but if a new apartment costs much more than older ones, it will remain vacant unless something makes it worth more. Setting lower FMRs for the Section 8 Existing program does not reflect this relationship. Subsidy recipients are experiencing increasing difficulty in finding apartments with rents as low as the FMRs (Strasbaugh, December 7, 1981; Terrell, December 16, 1981).

TABLE 24. FAIR MARKET RENTS FOR SECTION 8 EXISTING HOUSING^a

<u>Location</u>	<u>Number of Bedrooms</u>				
	<u>0</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
Anchorage	332	404	475	546	618
Fairbanks	332	404	515	592	670
Juneau	332	404	515	592	670
Kenai	332	404	515	592	670
Ketchikan	332	404	515	592	670
Matanuska-Susitna	332	404	515	592	670

^aNew FMRs will be published early in 1982.

SOURCE: Federal Register, Vol. 46, No. 52, p. 17505.

As program funds become available, the HUD Anchorage Area Office allocates them around the state. They are allocated in the form of a certain number of rent subsidy certificates for different types of units, from efficiency to five-bedroom apartments. The mix of units determines the number of certificates: the more certificates for large units, that is, for large families, the fewer the households that receive them. This tradeoff between number and size of families receiving subsidies also applies to Section 8 New Construction and any other housing program, because the amount of available funds is not unlimited. HUD attempts to be equitable in its distribution of funds by basing the mix of units it subsidizes on local needs and on the mix of units previously subsidized in that area. Table 25 shows the distribution of Section 8 Existing subsidies in Alaska.

Tenants with Section 8 Existing subsidies have average annual incomes of \$7,100 and pay an average of \$148 per month for rent (Curtis, November 6, 1981).

TABLE 25. SECTION 8 EXISTING HOUSING

<u>Location</u>	<u>Number Certificates Allocated</u>	<u>Number Certificates Under Contract</u>	<u>Number On Waiting List</u>
State Total	1,363	1,032	479
Anchorage ^a	980	772	299
Fairbanks	100	100	100
Kenai/Soldotna	110	110	47
Ketchikan	40	40	11
Juneau ^a	11	1	22
Mat-Su ^a	122	9	0

^aAnchorage and Mat-Su received a new allocation of certificates in the fall of 1981; consequently, a large number of these certificates have not yet been contracted.

Juneau received its eleven-certificate allocation in 1980, but due to extremely low vacancy rates, only one has been successfully contracted. The remaining ten allocations must be returned to HUD.

SOURCE: Alaska State Housing Authority.

Regional Housing Authorities

Mutual Help Housing

Most RHA activity currently takes place under the federal Mutual Help for Indians housing program. As the name implies, the program serves only the Native population. Today's Mutual Help program is the latest in a series of three low-income homeownership programs that began in the early 1960s with the Turnkey III program.⁵ The major differences between the programs have been in how monthly payments are computed.

Participating families initially lease houses owned by the RHA and gradually build up equity in the homes they occupy. Ownership passes to the family under three circumstances: when family income increases to the point where it can obtain permanent financing; when the amount contributed to an equity account equals the unamortized debt and closing costs; or after 25 years.

Eligible participants are low-income Native families with a potential for homeownership; that is, the ability to meet the minimum payments required. Income limits vary from one RHA to another; each RHA sets maximum and minimum limits for families of different sizes. The maximum income limits must be approved by HUD, which requires that they not exceed 80 percent of the area median income unless no other source of mortgage financing is available in the area where the applicant lives. The minimum income limit is the level of income the RHA determines is necessary to pay home operating costs and the minimum monthly payment.

⁵In 1968 and 1970, before the creation of RHAs, ASHA constructed 230 houses under Turnkey III--180 in Bethel and 50 in Nome. Approximately 138 of these units have been converted to rentals due to the inability of many participants to maintain a home buyer status. (Barbara Wilson, ASHA; Performance Review of ASHA: 2,8.) HUD has not accepted new Turnkey III applications since 1973.

Participating families are required to contribute either land for the house site, labor in constructing the house, building materials, cash, or a combination of these, valued at \$1,500. In addition, the family must make a monthly payment to the RHA. This monthly payment has two components; the first is an administrative service charge that covers the RHA program administrative expenses, insurance on the house, and payments in lieu of local property taxes. The second component of the monthly payment is an amount that goes into a family equity account. The entire monthly payment may not exceed 25 percent of family income; thus, the amount budgeted to the equity account is the difference between 25 percent of income and the administrative charge. A participating family may have an income low enough that no payments are ever made to the equity account. Nonetheless, after 25 years, ownership will pass to such a family as long as it has paid its utility costs and the monthly administrative service charge.

The monthly payment may change if the costs of administering the program changes and if family income changes. The RHAs periodically recertify family income to adjust monthly payments and to determine if the family is eligible for permanent financing, one of the ways a family can attain ownership status.

Once a family is determined eligible for permanent financing and elects to take out a mortgage loan, its obligations change from those under an occupancy agreement to those under a promissory note and mortgage, which are held by the RHA. The RHA lends the family the amount for home purchase at the current FHA interest rate. The purchase price is established as the portion of original development cost that has not been paid off by HUD in its annual contributions to the RHA, plus loan closing costs. The family continues to make its payments to the housing authority, but now it is paying principal and interest on its mortgage loan. If the family's income subsequently decreases, this payment schedule can be adjusted to a certain extent to prevent hardship and the possibility of default.

Several advantages accrue to a family that achieves this arrangement, despite the fact that its monthly payments increase. The family can sell the house without any special restrictions. If it can qualify for a loan from another lender, the family can get out of the program altogether. This means an end to annual house inspections and income recertification. And whether or not it finds private financing or keeps its RHA mortgage, it is able to take the usual tax deductions for ownership expenses.

Housing construction under the Mutual Help program has been financed entirely by the U.S. Department of Housing and Urban Development. By mid-1981, HUD had financed approximately 2,547 Mutual Help houses under the latest program and had applications from RHAs for another 612 units (see Table 26).

TABLE 26. MUTUAL HELP HOUSING PRODUCTION

<u>Housing Authority</u>	<u>No. Units Financed^a</u>	<u>No. Units in Applications</u>
Aleutian	131	38
ASRC	146	25
AVCP	698	306
Bering Straits	230	55
Bristol Bay	219	0
Cook Inlet	122	30
Copper River Basin	72	20
Interior	311	125
Kodiak Island	166	12
Metlakatla	36	0
Nana	252	10
North Pacific Rim	116	21
Tlingit-Haida	48	0
TOTAL	2,547	612

^aIncludes units completed, under construction, and with funds reserved.

SOURCE: Department of Housing and Urban Development.

The 1981 Alaska legislature established a Supplemental Housing Development Fund in the Department of Community and Regional Affairs (CRA) that makes grants to RHAs for the cost of on-site sewer and water facilities, road construction to the project site, and the extension of electrical distribution facilities to individual residences (1981 House Bill 502 and 503). Staff at several RHAs maintain that without these funds, it would be much more difficult to build any housing in their jurisdictions because of the HUD per-unit total development cost limit. The total cost of housing involves more than the materials and labor that go into the actual structure. Federal programs often require that houses constructed with federal funds conform to standards that include water, sewer, and electrical service. It is difficult to build within HUD's cost limit because the costs of construction in rural Alaska are high. The CRA grants for water, sewer, etc. are not included by HUD in its development cost calculations, and the grants allow federal funds that would have funded infrastructure to be used to meet other necessary expenses.

At this time, the entire \$12.3 million appropriated by the state for this program have been committed to RHA projects that will build between 500 and 600 new houses (Crane, January 1982).

State-Funded Housing

In the early 1970s, the state undertook construction of a rental housing project under no federal program, with no federal funding or involvement. This project is described below.

Marine View

During a severe housing shortage in Juneau, Alaska, in 1972, the Alaska State Housing Authority initiated construction of the Marine View apartments. The 98-unit project consisted of 64 one-bedroom, 32 two-bedroom, and 2 three-bedroom units. Financing for the \$3.9

million project was obtained from the Alaska Housing Finance Corporation (AHFC). Terms of the loan included interest at 3 percent over 36 years with the first five years requiring interest-only annual payments. Despite its predominantly low-income composition, the project did not receive any federal subsidy due to insufficient federal allocations (Special Review of Marine View).

Since initial occupancy in early 1974, the project has been in financial difficulty. Due to increased annual debt payments (principal portion) and other costs, in mid-1979 ASHA converted three floors of the nine-floor structure to office space. Various state agencies occupied the three floors in 1979 with the state retaining a negotiable option on the fourth floor. The state exercised the option in early 1980, and ASHA, after examining various alternatives, agreed to convert. Fourth-floor tenants receiving eviction notices were either provided relocation assistance in the form of lump-sum payments of \$4,000 or were assisted in moving. Assistance to tenants occupying the first three floors was not necessary because there was much greater lead time; the tenants either moved to higher units in Marine View as they became available or to other projects.

Marine View now contains 60 apartments on the upper five floors. Tenants must meet income and asset limits: maximum annual incomes cannot exceed \$19,500 for a single person, \$22,270 for a family of two, \$25,100 for three, \$27,825 for four, and \$29,600 for a family of five. The maximum asset limit is \$50,000 per household. The average gross income of a Marine View tenant is \$20,000 annually, and the average rent paid is \$308 per month for a one-bedroom unit and \$385 per month for a two-bedroom unit.

ASHA's experience with Marine View led to the conclusion not to attempt to construct low-income housing without the commitment by HUD of federal operating subsidies. The HUD area manager has indicated to ASHA that housing units developed from non-HUD funds may be eligible

for operating subsidies but will be governed completely under the terms and conditions normally required by HUD (Curtis, October 28, 1981). Any such arrangement could not guarantee a fixed level of subsidy, however, since funds for operating subsidies are appropriated annually by the U.S. Congress and are subject to annual congressional adjustments.

Low-income housing built under such an arrangement with HUD could be of substantial financial benefit to the state's residents. Project development costs comprise a relatively small part of the total project-life subsidy cost; a relatively small state expenditure could bring in a much larger amount of federal funds. Today's political climate makes the future of operating subsidies, and housing subsidies in general, uncertain. Under these circumstances, it would be unwise to consider this strategy, unless the state is willing to provide state funds for operating subsidies or raise rents to levels sufficient to sustain the project if no federal funds were available.

Subsidized Housing Production

Since 1970, ASHA and the RHAs have constructed about 3,478 new housing units throughout the state. About 2,236 units for homeownership and about 1,242 rental units were built. The combined impact of public housing authority production on the state as a whole has been small; these units account for only five percent of the net change in number of units from 1970 to 1980.

HUD is an important factor in determining how federal housing subsidies are distributed around the state. Most federal housing assistance funds are allocated to different geographic regions based on housing need, as measured by population, poverty, and housing conditions (see Appendix B). Housing authorities influence the distribution of these benefits by responding to funds availability with well-prepared project applications. State agencies, therefore, have only limited influence over where the federal funds are spent.

Table 27 shows the geographic distribution of subsidized housing units managed by the various housing authorities. By far the greatest impact has been in the Northwest region, where one in five households receives subsidies through the public housing authorities.

TABLE 27. GEOGRAPHIC DISTRIBUTION OF SUBSIDIZED HOUSING
MANAGED BY STATE HOUSING AUTHORITIES

	<u>No. Households With Subsidy^a</u>	<u>Percent of House- holds In Region</u>
Southeast	708	3.87
Southcentral ^b	2,424	2.92
Central	1,567	6.30
Northwest	997	20.74
	<u>5,696</u>	

^aIncludes recipients of Section 8 Existing Housing subsidies and residents of public housing, Section 8 New Construction, HUD Remote Housing, Bartlett, Turnkey III and 221(d)(3) projects.

^bIncludes Aleutian and Pribilof Islands.

SOURCES: U.S. Department of Housing and Urban Development
Alaska State Housing Authority

Program Beneficiaries

In this section we examine the income, age and racial characteristics of federal housing subsidy recipients. Current data on RHA program participants are not available; detail will be provided only for ASHA participants. It is certain, however, that RHA beneficiaries are predominantly Natives and families. In at least three regions, Kodiak Island, Bering Straits, and AVCP, they usually have the minimum income required to participate in the Mutual Help Program (Knight, January 14, 1982).

ASHA housing projects contain a high proportion of very low income tenants (having incomes no greater than 50 percent of the area

median). Table 28 shows the portion of very low income ASHA tenants in various cities. As a whole, 64 percent of all public housing and Section 8 New Construction projects fall into this category. Recipients of Section 8 Existing subsidies also usually have very low incomes⁶ (Snyder, November 19, 1981).

TABLE 28. VERY LOW INCOME HOUSEHOLDS IN ASHA HOUSING^a

	<u>Number</u>	<u>Percent of ASHA Units</u>
Anchorage	351	60
Fairbanks	190	76
Juneau/Douglas	72	62
Ketchikan	46	72
Sitka	10	42
Petersburg	9	75
Kodiak	20	50
Valdez	8	57
Cordova	24	63
Seward	26	86
	$\Sigma = 756$	64.3%

^aIncludes public housing and Section 8 New Construction units.

SOURCE: Alaska State Housing Authority.

A large portion of ASHA housing, 37.9 percent, is rented by elderly households (see Table 29). Persons aged 62 or older comprise only 4 percent of Alaska's population (Bureau of the Census, unpublished data). It is difficult to estimate what portion of elderly households needs housing assistance. The problem is generally recognized as an important one, however, and the state has had a program to

⁶Data on Section 8 Existing recipients were collected only for Anchorage, which accounts for 72 percent--or 980 out of 1,363--of all current certificates. Of those in Anchorage, 78 percent of recipients have very low incomes.

facilitate the provision of senior citizen housing for several years (see Chapter Three). A representative of the Older Persons' Action Group indicated that affordable, adequate housing is the biggest problem the elderly face today (McVickers, January 10, 1982).

Native and black households living in ASHA's housing are shown in Tables 30 and 31. Nearly 40 percent of ASHA's tenants are Natives, and 8 percent are black. Only 7 percent of the population in ASHA-served places is Native (1980 Census of Population Advance Counts), but Natives have historically had lower incomes than the rest of the state's residents. In 1970, 39.3 percent of all Native families had incomes below poverty level, while only 9.3 percent of all families in the state fell into that category (1970 Census of Population).

TABLE 29. ELDERLY HOUSEHOLDS IN ASHA HOUSING^a

	<u>Number</u>	<u>Percent of ASHA Units</u>
Anchorage	176	30
Fairbanks	135	54
Juneau/Douglas	50	35
Ketchikan	18	28
Sitka	3	13
Petersburg	3	13
Kodiak	3	7
Valdez	4	29
Cordova	24	63
Seward	<u>30</u>	<u>100</u>
TOTAL	446	37.9

^aIncludes public housing and Section 8 New Construction.

SOURCE: Alaska State Housing Authority.

TABLE 30. ALASKA NATIVE HOUSEHOLDS IN ASHA HOUSING^a

	<u>Number</u>	<u>Percent</u>	<u>% of 1980 Population</u>
Anchorage	193	33	5
Fairbanks	102	41	7
Juneau ^b	65	46	11
Ketchikan	31	48	15
Sitka	14	58	21
Petersburg	1	8	11
Kodiak	24	60	14
Valdez	2	14	6
Cordova	16	42	15
Seward	<u>8</u>	<u>27</u>	13
TOTAL	456	38.8%	

^aConventional Public Housing and Section 8 New Construction projects.

^bIncludes Douglas.

SOURCE: ASHA Public Housing and Section 8 New Construction program records.

TABLE 31. BLACK HOUSEHOLDS IN ASHA HOUSING^a

	<u>Number</u>	<u>Percent</u>	<u>% of 1980 Population</u>
Anchorage	47	8	5
Fairbanks	25	10 _b	9
Juneau/Douglas	1	- _b	-
Ketchikan	18	28	-
Sitka	0	0	-
Petersburg	0	0	-
Kodiak	0	0	-
Valdez	1	7	1
Cordova	0	0	-
Seward	0	0	-
TOTAL	92	7.8%	

^aConventional Public Housing and Section 8 New Construction projects.

^bLess than one percent.

SOURCE: ASHA Public Housing and Section 8 New Construction program records.

The evidence presented indicates that the impact of housing authority operations in the state as a whole have been small. The Northwest region has felt the greatest impact: in 1980, over 20 percent of households received housing assistance through RHA activity. The distribution of the benefits of housing authority activity appears to be consistent with the distribution of need among state residents, according to HUD's indicators of need.

There is no evidence that ASHA's operations fail to serve particular poor groups, the elderly and Natives, for instance. The greatest gap between needy families and federal program service exists in the bush, where a large portion of the population cannot benefit from the Mutual Help homeownership program because their incomes are so low. Any program to benefit this group must provide operating subsidies to help meet the costs of operating and maintaining a home.

State Funding

States do not normally provide any funding in the public housing, Section 8, or Mutual Help for Indians programs. In Alaska, however, the costs of construction exceed the limit currently allowed by HUD. To prevent federal funds from being lost to the state, supplemental funds have been provided through the Department of Community and Regional Affairs through two programs: the Supplemental Housing Development Fund and the Senior Citizens Housing Development Fund. The former of these, described briefly in the discussion of RHA activities, is a new program, with \$12.3 million in capital funds appropriated by the legislature in 1981. The program for elderly housing has provided funds for four ASHA elderly projects. Sunset View, Glacier View, Sea View Terrace, and Mountain View received grants totaling \$1,658,095; the funds were used to reduce ASHA's debt service for these projects.

In five cases with ASHA projects, the state has also made low-interest loans to ensure project feasibility. Permanent loans totaling \$11,211,453 at 7 percent interest were made for two elderly projects, Chugach View and Golden Towers. Three interim low-interest loans, also at 7 percent, were made for two additional elderly and one family project, Sunset View, Glacier View, and Ptarmigan Park. The original principal amount of the loans totaled \$4,629,000; ASHA reduced its indebtedness on Sunset and Glacier View by using its grants from the Department of Community and Regional Affairs to pay off a portion of its loans immediately (Curtis, January 12, 1982). Table 32 summarizes ASHA's state loans and grants.

The state, then, has used its resources in a limited way to take advantage of federal housing funds allocated to Alaska. By enabling the financial feasibility of these projects with its grants and loans, the state secured a continuing stream of federal subsidies which surpasses the state investment over the years.

TABLE 32. STATE FUNDING FOR ASHA PROJECTS

<u>Project</u>	<u>Grant</u>	<u>Loan</u>
Sunset View	\$183,600	\$1,455,000
Glacier View	215,100	1,984,000
Sea View Terrace	761,311	
Mountain View	498,084	
Chugach View		5,911,453
Golden Towers		5,300,000
Ptarmigan Park		1,190,000

SOURCE: Alaska State Housing Authority.

Program Costs

The costs to the state of its investment in ASHA housing have been small. Its grants have totaled about \$1.66 million, nearly \$400,000 of which was used by the grantee, ASHA, to pay back a portion of the state's own loans to this agency. The actual net grant amount comes to \$1,259,395.

The state's loans to ASHA, despite their total original principal value of \$15,840,453, will cost the state relatively little. Most of this total, \$11.2 million, will be repaid over 40 years with 7 percent interest. The cost to the state of making these loans equals the value of the interest subsidy, which is determined by the alternate uses to which the money could have been put and the rate of return on those uses. The remaining \$4.6 million was loaned at an interim rate of 7 percent. Negotiations on renewing these interim loans will probably provide the state with an effective rate of return of 14 or 15 percent on the remaining principal balance (Curtis, January 12, 1981) if the loans are renewed. The costs of the state interest subsidy on these loans will be lower than for the permanent loans, and will also be determined by the return on alternate uses for these funds.

It is impossible to determine the real costs of building Alaska's federal projects under the Public Housing and Section 8 New Construction programs. The capital costs of public housing are indeterminate because HUD periodically rolls over the bonds used to finance development costs. All of the Section 8 New Construction projects were financed at below market rates, so real development costs can only be estimated.

It is easier to determine the operating costs of these programs. Tables 33 and 34 show operating revenues and expenses for most of Alaska's public housing and for ASHA's five Section 8 New Construction units. Please note that none of the capital costs of public housing are shown and that only a portion of these costs are shown for the five Section 8 projects.

TABLE 33. INCOME AND COST OF OPERATION FOR 1980-1981

PUBLIC HOUSING^a - 797 UNITS

	<u>Per Unit Month</u>	<u>Amount</u>
<u>Revenues</u>		
Income from Tenant Payments	\$154.80	\$1,480,487
HUD Net Subsidy	<u>154.70</u>	<u>1,479,611</u>
Total Revenues	\$309.50	\$2,960,098
<u>Operating Expenses</u>		
Administrative Cost	56.88	544,039
Utilities	106.43	1,017,947
Maintenance and Operations	75.78	724,712
General Expenses	42.18	403,363
Addition to Reserves	<u>28.30</u>	<u>270,671</u>
Total Expenses	\$309.57	\$2,960,752

^aCapital costs not shown; they are paid by HUD separately.

SOURCE: Alaska State Housing Authority.

TABLE 34. INCOME AND COST OF OPERATION FOR 1980-1981

SECTION 8 NEW CONSTRUCTION PROJECTS - 285 UNITS

	<u>Per Unit Month</u>	<u>Amount</u>
<u>Revenues</u>		
Approximate Rental Income	\$130.00	\$ 444,600
HUD Subsidy	<u>420.00</u>	<u>1,436,600</u>
Total Revenues	\$550.00	\$1,881,200
<u>Operating Expenses</u>		
Administrative Cost	77.66	265,610
Utilities	66.18	226,340
Maintenance and Operations	60.03	205,321
General Expenses	39.08	133,683
Amount Available for Amortization ^a	<u>307.05</u>	<u>1,050,246</u>
Total Expenses	\$550.00	\$1,881,200

^aDoes not include state capital grants and low-interest loans; therefore, does not reflect total costs of these units.

SOURCE: Alaska State Housing Authority

The costs of actual operations of a unit of public housing are about equal to the operating costs of a unit in a Section 8 New Construction project. Administration, utilities, maintenance and operations, and general expenses for a public housing unit total \$281.27 per month, and for the Section 8 unit they total \$242.50. Higher average utility costs for public housing units account for most of the difference: public housing is older and a smaller portion of public housing units are located in Anchorage, where utility costs are lower than the rest of the state (Briggs, November 24, 1981).

It is impossible to account for government expenditures for Section 8 Existing housing on a basis comparable to these other two programs. ASHA is not the owner and operator of the housing; there is no way to judge what portion of the federal rent subsidy pays for what costs. George Briggs, the senior housing management official at ASHA, asserts that not only do the costs vary from one unit to another because of differences in the age and type of building, they also vary with family circumstances and from one city to another. He maintains there is no satisfactory way to control for the multitude of indeterminate variables to obtain a figure that accurately represents the costs of this program.

If the total program revenue for this program (see Table 35) is spread equally among all units subsidized, the monthly per unit federal expenditure comes to \$367.70. This figure should not be interpreted to mean that this program is more expensive than the public housing and Section 8 New Construction programs; the full costs of units under these programs are not reflected in the figures contained in this report. On the contrary, given the fact that the full capital costs are not included, the Section 8 Existing program has probably been less expensive than public housing and Section 8 New Construction. It is impossible to say how much less expensive it has been for the various reasons given above.

Data on the costs of the Mutual Help program for Indians are not available. HUD finances the total development costs of the houses. Program administrative expenses and home operating costs are paid for by program participants. Table 36 shows the amount HUD has committed annually for housing construction under this program since 1976. The figures represent amounts HUD has committed to various projects in those years; they do not represent amounts actually spent or units actually built in those years.

TABLE 35. INCOME AND COST OF OPERATION FOR 1980-1981

SECTION 8 EXISTING PROGRAM - 935 CERTIFICATES
FOR ANCHORAGE ALLOCATION AREA ONLY

	<u>Amount</u>
<u>Revenues</u>	
Total Income (HUD)	\$4,125,691
<u>Operating Expenses</u>	
Total Rental Assistance ^a	3,637,742
Administrative Cost	369,374
Utilities	- 0 -
Maintenance and Operations	3,891
General Expenses	61,303
Nondwelling Equipment	13,721
Addition to Reserves	<u>39,630</u>
Total Expenses	\$4,125,661

^a Paid to landlords by ASHA on behalf of tentnats.

TABLE 36. HUD COMMITMENTS FOR MUTUAL HELP HOUSING, 1976-1981

	<u>Dollars</u>	<u>Number of Units</u>
1981 ^a	\$65,122,000	754
1980	55,148,000	604
1979	50,392,000	562
1978	34,730,000	411
1977	24,108,000	323
1976	17,633,000	<u>216</u>
		2,870

^a First three quarters of 1981.

SOURCE: U.S. Department of Housing and Urban Development.

Summary: Program Effectiveness

When the territorial and then the state legislatures established ASHA and later the RHAs, the agencies were intended to take advantage of any federal housing programs and funds made available. The housing authorities have done just that in the past decade or so, despite the mismatch between federal eligibility and construction-cost limits and Alaskan incomes and costs. Virtually all HUD funds allocated to Alaska have been used. This has been the most important limiting factor on the activities of these agencies.

It is difficult to assess housing authority achievements in goal-oriented terms. No specific standards were established in state legislation by which to measure performance. The housing element of the 1978 state comprehensive plan provides few directions related to housing authority activities. If considered in the light of the broadly stated goal, "... to insure the opportunity for each Alaskan to live in safe, sanitary, efficient, and comfortable housing," the housing authorities cannot achieve their purpose unless many more state and federal resources are made available.

It is quite unlikely that federal funding will continue at the level of the past few years. New subsidized housing production is being cut significantly under the current national administration. Substantial cuts in operating subsidies may be made. The Mutual Help for Indians program may have no new units funded next year under current plans, and special fund set-asides for Indian housing are being eliminated. In the light of these changes, we can expect few new subsidized units and greater competition between the various housing authorities for available funds.

It is clear that these changes will have a greater impact on the bush than on Alaska's cities. Although the Section 8 Existing program will be changed to a less complicated system with more restrictive

eligibility standards, the new voucher system will still benefit urban renters to the extent that there are available rental units. Most rural towns and villages, however, cannot benefit from this type of rent subsidy since so few rental units are available. The greatest need in rural Alaska is for new housing production, the cost of which is beyond the means of most rural residents.

The outlook for the public housing authorities, then, is uncertain. If no new funds become available, they will function as managers of current, ongoing programs. Alaska's housing authorities, however, do comprise an experienced organizational structure for housing provision throughout the state. Should the state choose to apply its resources to the problems of Alaskans who cannot benefit from mortgage programs, it would be prudent to take advantage of the network of housing authorities with housing provision experience and knowledge of the problems faced by state residents.

CHAPTER THREE

DEPARTMENT OF COMMUNITY AND REGIONAL AFFAIRS

The Division of Housing Assistance of the Department of Community and Regional Affairs is the state administrative office in charge of several housing programs. As such, its programs and activities are indicative of state housing policies and of priorities for direct state action. This office administers the Nonconforming Housing Loan Fund, the Senior Citizens Housing Development Fund, and the Supplemental Housing Development Fund. The first two of these three programs will be described in this chapter; the Supplemental Housing Development Fund is described briefly in the discussion in Chapter Two of the federal Indian housing program. These three funds have a combined capital budget of \$60.3 million for fiscal year 1982.

The Nonconforming Housing Loan Program is similar to the loan programs of AHFC; the Division serves as a secondary mortgage market institution. The first part of this chapter deals with the role and activities of the Division of Housing Assistance in the program's first year of operations.

The Senior Citizens Housing Development Fund performs a very different function. The primary focus of this program is to leverage federal housing funds and assist municipalities in meeting the housing needs of their elderly. The second part of this chapter describes the Senior Citizens Housing Development Program. This program's function is very different from that of the loan program. The emphasis is on ensuring that available federal funds can be used in Alaska. These two programs represent the two basic approaches the state has taken in its housing policies.

The Nonconforming Housing Loan Program

Legislative History

In the 1980 legislation that created the Nonconforming Housing Loan Program (1980 Senate Bill 1; Alaska Statutes, Title 44, Chapter 47, Sections 360-560, as amended), the legislature found that private mortgage financing for housing that fails to meet customary design or construction standards, but that is acceptable in terms of health and safety, is generally unavailable, especially in rural Alaska. Existing state and federal loan programs, such as the rural housing program of the Alaska Housing Finance Corporation, have not met the need for financing the purchase of houses that fit this description. Private lenders are at times reluctant to lend because the cost of making mortgage loans in rural Alaska is high; one visit to inspect property with delinquent payments, for example, can easily cost more than a loan servicer receives as annual payment for loan servicing. Banks are also unwilling to hold loans in their portfolios that are thought to be risky or that they cannot sell. The Nonconforming Loan Program was designed to correct this failure of the private housing finance industry and state mortgage subsidy programs.

The broadly-stated legislative program goal is to provide financing for nonconforming housing so that people in all parts of the state have an equal opportunity to obtain housing (1980 Senate Bill 1, Section 72, Paragraph 5). Program funds may be used to purchase from private lenders loans for the purchase of existing nonconforming housing and loans for building materials, renovations, or improvements to nonconforming housing. In addition, the 1981 legislation authorized the Division of Housing Assistance to originate loans for these purposes and added authority for originating and purchasing construction loans to owner-builders. The construction loans need not be for nonconforming housing; if used to build standard housing, however, the owner-builder must have been rejected for financing by private lenders (1981 Senate Bill 148; Hodge, January 15, 1982).

In addition to expanding program activities, the 1981 legislation focused the program on rural areas of Alaska by requiring that

"Not more than 20 percent of the total principal amount of loans made for nonconforming housing may be made in cities of organized boroughs and service areas of unified municipalities where the population of the city or service area exceeds 3,500" (1981 Senate Bill 148, Section 17, Paragraph (6)).

Loans that are made in towns larger than 3,500, such as Nome, are defined as rural if they are not located in an organized borough. Any community with fewer than 3,500 residents that is not in the service area of a municipality with over 3,500 is also considered rural, even if it is located in a borough.

The 1981 legislation also provided for establishing field offices to provide assistance and information to private financial institutions and their borrowers (1981 Senate Bill 148, Section 26 (a)). Five field offices have been established, one each in Nome, Kotzebue, Bethel, Dillingham, and Fairbanks.

The program's goal is to ensure that state residents have equal access to financing for nonconforming housing. The legislative provisions regarding regional funds allocation, however, may have a countervailing effect on the goal of equal program access. The director of the Division of Housing Assistance is charged with allocating funds across the state. Any such allocation scheme adopted, however, is minimally binding on the Division; the director is permitted to reallocate funds among the regions as he considers necessary. This provision is intended to facilitate the speed of fund disbursement, but it may bias the program in favor of those regions with greater access to participating lenders, since they can more readily take advantage of the program.

Equal program access cannot be achieved merely through the provision of the regional field offices. These offices currently provide information and assistance to seller/servicers and potential borrowers; and while they may perform an important facilitating function, they do not overcome the limitations of an absence of a well-developed housing market. At least until the Division of Housing Assistance begins direct lending, areas under-served by participating seller/servicers will be at a disadvantage relative to other areas better served by private financial and real estate institutions.

In summary, the Nonconforming Loan Program was instituted because homebuyers in rural Alaska were not being served by other state housing agencies and the private mortgage finance industry. The program makes loans available to qualified purchasers of housing who are not acceptable to other lenders, and offers the same low interest rates charged by AHFC. The absence of well-developed rural housing markets, however, may limit program availability in some areas of the state.

Program Guidelines

Eligible properties. Nonconforming housing is defined as not meeting minimum building standards established by national or state codes regarding construction practices, design, or structural characteristics¹ (Program Handbook, 1980: Sections 1.26, 2.02; Program Information Sheet). The nonconforming appellation does not refer to the financial status of the borrower nor does it indicate the use of unusual or experimental loan terms. It is the house that is nonconforming, not the loan nor the borrower's characteristics.

¹One widely used code is the HUD Minimum Property Standards, U.S. Department of Housing and Urban Development, which references the major nationally known codes regarding building practices, electrical system requirements, fire resistance, etc.

A structure is nonconforming because it possesses one or more nonstandard physical features. It may not meet minimum space requirements, for example, or may have an unconventional foundation or utility system. Obsolescent designs, such as no bathroom on the second floor, are also defined as nonconforming. The property must, however, be certifiable by an appraiser that its nonconforming features will not impair the health or safety of the occupants (1981 Emergency Regulations 19AAC95.130; Alaska Statutes 44.47.370(1), (7)). This program will also finance standard houses that are being constructed by their owners, but only if the houses are located in areas where other lenders refuse to make loans.

Program staff agree that the definition of nonconforming housing is vague but insist that the nonconforming determination must be made on a case-by-case basis. They assert that any written definition detailing specific features would prove unacceptable because it would inevitably exclude properties that should be eligible. The problem presented by this vague definition concerns Division staff very little but does affect any evaluation of program activities. It confounds the determination of whether the program is, in fact, being used as intended; that is, to purchase or make loans only for housing that is ineligible under any other state or federal housing loan program (Program Handbook, 1980: Section 2.02).

Eligible borrowers. There are no maximum income limits for borrower eligibility under this program. Borrower income must be sufficient to meet debt service payments and other living expenses. In determining adequacy of income, steady income obtained through seasonal occupations is included if it is documented. The Division also considers subsistence activities in its determination of income eligibility (Price, November 5, 1981). Loans are made only to borrowers who intend to occupy on a year-round basis the nonconforming, single-family house or duplex that is to be financed.

Responsibilities of program participants. The role of the Division of Housing Assistance as a secondary mortgage market institution is to provide incentives to private lenders to make loans on properties that they otherwise will not serve. These incentives include reducing the risk to lenders of making these loans while compensating them for the costs of servicing them. The Division owns the loans and assumes any expenses associated with default or foreclosure. Lenders are also compensated by fees for loan origination and servicing. The origination fee is a one-time payment that may not exceed 1 percent of the loan principal amount and is paid by the borrower at closing. The maximum servicing fee is one-half of one percent of the unpaid principal balance; it is paid monthly by the Division of Housing Assistance. Typically, the origination fee may be about \$600; and the servicing fee, around \$300 for the first year.

The Division expects to begin direct lending this spring (Smodey, January 19, 1982). The rationale for direct lending is to extend financing to areas where private lenders are unwilling to do business, even in the limited role of seller/servicer. Lenders will not make loans in some areas because the cost of origination and servicing is high and because demand for mortgages is low (Hodge, January 15, 1982). The Division will, of course, incur the same costs of operating in these areas. As a direct lender, it may act as seller/servicer, or the agency may contract with private institutions for loan servicing (1981 Senate Bill 148, Section 24).

Lenders, or seller/servicers, perform a number of activities.² They are responsible for reviewing loan applications and securing verifications of borrower income, employment, credit, title, previous

²The following discussion is derived from the Nonconforming Housing Loan Program Handbook, Division of Housing Assistance, December 1980.

loan refusal, and veteran status. The seller/servicer must provide the Division with a statement that the property does not qualify for conventional financing if other lenders operate in the area where the housing is located. The seller/servicer also conducts the applicant credit analysis, approves or disapproves the loan, submits it to the Division for approval, prepares closing and note purchase documents, conducts the loan closing, and services the loan.

The five field offices, located in Bethel, Nome, Kotzebue, Dillingham, and Fairbanks, are staffed by a loan examiner/information officer and a secretary. These offices are intended to increase access to and provide information on all state loan programs, including those of AHFC and the Department of Commerce and Economic Development. Field staff forward loan applications to lenders, screen applicants for eligibility, provide initial property inspections, assist lenders in obtaining documentation for application review and closing, assist in counseling delinquent borrowers, and so on.

Loan terms. The current maximum loan amounts, loan-to-value ratios, interest rates, and maximum loan terms for home purchase mortgages are indicated in Table 37. The loan amounts and loan-to-value ratio are those established for Alaska by the Federal National Mortgage Association (FNMA). For remote areas not connected by road, railway, or the State Marine Highway, the maximum loan amount is 85 percent of that set by FNMA for loans with 90 percent and 95 percent loan-to-value ratios (Program Handbook, p. 3-4; Alaska Statutes, Section 44.47.390, as amended).

Originally, the director of the Division of Housing Assistance set the interest rates, which were required to be at least on a par with rates for other state loan programs, namely AHFC. The 1981 legislative amendments set interest rates at the same level as for loans purchased by AHFC from the proceeds of the most recent applicable issue of taxable bonds (Alaska Statutes, Section 44.47.410, as

amended). Unlike AHFC loans, however, the low interest rate applies to the entire mortgage principal amount, instead of only the first \$90,000.

TABLE 37. NONCONFORMING HOUSING MORTGAGE PURCHASE
LOAN TERMS AS OF FEBRUARY 1, 1982

<u>Type of Loan</u>	<u>Maximum Loan Amount</u>	<u>Loan-to- Value Ratio</u>	<u>Interest Rate</u>	<u>Maximum Term</u>
Single-Family (nonveteran)	\$147,750	95%	12 3/8%	30 years
Single-Family (veteran)	\$147,750	95%	11 3/8%	30 years
Duplex (non-veteran)	\$189,000	95%	12 3/8%	30 years
Duplex (veteran)	\$189,000	95%	11 3/8%	30 years
Rural/Remote Areas Single-Family	\$125,500	95%	12 3/8%	30 years
Rural/Remote Areas Duplexes	\$160,000	90%	12 3/8%	30 years

SOURCES: Nonconforming Housing Loan Program Handbook, Division of
Housing Assistance, December, 1980.
Ray Price, Division of Housing Assistance.

Delinquency and default procedures. If a borrower is late by 45 days or more in loan payments, the seller/servicer must make at least three attempts to contact the borrower and reinstate payments, notify the Division of Housing Assistance, and provide any appropriate loan counseling. If after 60 days the borrower cannot be reached or the payments are not reinstated, the loan is declared in default by the seller/servicer, who notifies the Division of this action. Again, counseling sessions and reinstatement must be attempted. If at the end of 120 days the loan cannot be reasonably reinstated, the seller/servicer assigns the loan to the Division for servicing. The Division must henceforth bear the expense of reinstatement attempts or fore-

closure if that should prove necessary. The Division also reimburses the seller/servicer for expenses connected with delinquent payments, such as the costs of property reinspections (Program Handbook, 1980: Sections 11.01-11.03).

In summary, the Nonconforming Housing Loan Program makes mortgage money available for houses and in areas which private lenders and AHFC usually would not accept. Without the inducements offered through the program, lenders would not finance houses with nonstandard physical features nor those in certain remote locations because the risks of financing and the costs of origination and servicing are high. In addition to expanding the activity of lenders, the program serves as a conduit for state subsidies that make homes more affordable to Alaska residents who do not benefit from the low-interest loans of AHFC.

Mortgages made under the Nonconforming Housing Loan Program carry terms and conditions similar to those required by AHFC and private lenders, and they make the same financial demands on borrowers.

Program Activity

Any conclusions drawn from an analysis of program activity at this point must remain tentative. It is too early to judge the program's delinquency and default record, or to determine how effectively information has been disseminated, and what level of loan demand will be sustained. The Nonconforming Housing Loan Program has been in operation for only one year.

Banks were advised in January of 1981 that loan processing could begin; it was April when the Division of Housing Assistance actually started receiving applications (Smodey, January 25, 1982). By mid-December, 177 mortgage loans had been purchased by the loan fund for an original principal balance of \$10,797,025. Thirty-seven applications had been denied, and 114 were in the review process, representing \$7,622,250 (Division of Housing Assistance, loan files). Of the

328 applications received, 54 percent had been purchased and 11 percent denied. Thirty-five percent were under review.

Most applications--306 of 328, or 93 percent--have been received in the past six months. Table 38 shows the number of applications received since July 1981. If applications continue at the same rate, the Division will process about 600 applications in 1982.

TABLE 38. LOAN APPLICATIONS RECEIVED IN 1981 FOR
THE NONCONFORMING HOUSING LOAN PROGRAM

<u>Month</u>	<u>No. of Applications</u>
July	51
August	77
September	68
October	48
November	31
December	<u>31</u>
$\Sigma = 306$	

SOURCE: Division of Housing Assistance.

Potential program demand. It is virtually impossible to estimate with any accuracy the potential demand for this program using existing information. No data have been recorded from which a reasonable estimate could be derived. Any attempt to collect such data, moreover, would be quite difficult as well as expensive due to the fact that the definition of nonconforming is so vague. A detailed set of characteristics would have to be identified and data on them gathered, and specific guidelines defining acceptability to other state and national housing lenders would have to be developed and applied.

The complexity of this latter task would be compounded by the vagueness of AHFC's standard regarding acceptability in its loan purchase programs. AHFC underwriting standards state that it will buy loans that conform to generally acceptable community standards as long as the structure provides adequate, safe, sound, and sanitary housing. One would expect, in fact, that community standards would deem most adequate, safe, sound, and sanitary housing as acceptable and that there should be only a small residual requiring financing through the Nonconforming Housing Loan Program.

The pool of houses that qualify for this program is further limited by the fact that most of them already exist. A homebuilder could not borrow from a private lender to build a nonconforming house, and there are few people with the income necessary to build in areas where all housing is essentially nonconforming because of the absence of standard utilities and other local circumstances.

Beneficiary and Loan Characteristics

In the following sections, the characteristics of borrowers and loans are examined to determine who the nonconforming loan program is serving. It is necessary to ascertain whether the program is benefiting the people the legislature intended it to benefit and to discover groups who may need housing assistance but who are unable to take advantage of this particular program.

Borrower characteristics. The income, previous ownership experience, and state residency characteristics of borrowers under this program are examined in this section.

The Nonconforming Housing Loan Program is a program for homebuyers, and, as in AHFC loan programs, minimum income requirements are implicit. Borrowers must demonstrate their ability to repay a mortgage loan by showing steady employment at a verifiable wage or salary, a verifiable credit record of at least two years, and evidence of

repayment of recent credit obligations. This program is not intended as a low- or moderate-income homeownership program, although the interest subsidy does enable some borrowers to qualify for loans that they could not afford at market rates.

The income distribution of households with nonconforming housing loans is shown in Table 39. Half of the borrowers have annual household incomes between \$20,000 and \$40,000, while nearly as many--almost 45 percent of borrowers--have annual incomes above \$40,000. Only 4 percent of borrowers have incomes below \$20,000.

Comparison with the incomes of AHFC borrowers (see Table 9 in Chapter 1) shows that nonconforming program borrowers have somewhat lower incomes. Over half, 55.4 percent, of the nonconforming program borrowers have incomes of \$40,000 or less, while fewer than 40 percent of all AHFC borrowers fall into this category. Borrowers under AHFC's rural owner-occupied program, while having incomes lower than those under the Special Mortgage Loan Purchase Program, also have higher incomes than the nonconforming program borrowers.

TABLE 39. DISTRIBUTION OF HOUSEHOLD INCOME FOR
NONCONFORMING HOUSING LOANS

<u>Annual Income</u>	<u>No. of Borrowers</u>	<u>Percent of Borrowers</u>
< \$10,000	0	0
\$10,000 - \$20,000	7	4.0
\$20,000 - \$30,000	38	21.5
\$30,000 - \$40,000	53	29.9
\$40,000 - \$50,000	34	19.2
\$50,000 - \$60,000	20	11.3
> \$60,000	<u>25</u>	<u>14.1</u>
	$\Sigma = 177$	100.0%

SOURCE: Division of Housing Assistance.

In contrast, the incomes of Alaska's rural population are considerably below those of both AHFC and nonconforming program borrowers. Half of the rural residents in the Interior, Southcentral, and Southeastern regions have family incomes below \$20,000 (ISER, 1979 Alaska Public Survey) and are unlikely to qualify for these loans. Residents of those areas with a large Native population, for example, the NANA and Lower Yukon-Kuskokwim areas, have even lower income levels (Kruse, 1982; House Research Agency, 1981); thus, an even smaller portion of the population in those areas is financially able to use this program.

Just over half, or 51 percent, of all nonconforming housing loans were made to first-time homebuyers. This is a fairly high rate of participation by first-time buyers; the national average was 36 percent in 1978 (U.S. Department of Housing and Urban Development). Twenty-four borrowers, or 14 percent, had been state residents for less than a year. These figures are not unexpected in a growing state with a young population like Alaska. Well-paid newcomers to Alaska and households with an income sufficient for the first time to purchase a house are taking advantage of the opportunity for homeownership that the program presents.

Geographic Distribution of Loans

The urban/rural distribution is the first geographic breakdown that we examined. Legislation requires that no more than 20 percent of the total principal amount loaned be made in cities in boroughs and municipal service areas when the population of the city or service area exceeds 3,500 (Alaska Statutes, 44.47.385(6)). Table 40 shows the number of loans made in areas defined as urban. As indicated, over 75 percent of the total principal amount loaned in the first program year was for housing located in urban areas. The Fairbanks and Anchorage areas accounted for 55 percent of the total.

TABLE 40. NONCONFORMING HOUSING LOANS MADE IN
URBAN AREAS AS OF DECEMBER 14, 1981

<u>City</u>	<u>No. of Loans</u>	<u>Principal Amount</u>	<u>Percent of Total Principal Loaned</u>
Fairbanks	62	\$3,113,500	28.8
Anchorage ^a	40	\$2,861,450	26.5
Juneau	10	\$813,950	7.5
Sitka	6	\$536,400	5.0
Ketchikan	5	\$361,650	3.4
Kodiak	4	\$353,650	3.3
Kenai	<u>2</u>	<u>\$104,550</u>	<u>1.0</u>
TOTAL	129	\$8,145,150	75.4%

^aIncludes Eagle River, Chugiak, Girdwood, Palmer, Wasilla, and Willow.

SOURCE: Division of Housing Assistance Program records.

The locations of property for which loan applications were still being reviewed was examined to determine if their urban/rural distribution differed from that of closed loans. As of mid-December, 114 applications representing \$7,622,250 were being processed. Of these, 36 were for properties located in urban areas, with a total mortgage value of \$2,015,700. This represents 26.5 percent of the total dollar volume being processed. A much lower proportion of loans being processed were for urban areas than for loans that had been closed.

The amount of loans in urban areas would still exceed the statutory limit, however, even if none of the urban loans in processing were approved and all of the rural ones were approved. If this were

the case, 48.9 percent of loan principal would be loaned in urban areas, and 51.1 percent would be in rural areas.

It is not difficult to explain why so many loans have been made in urban areas, despite the intended rural focus of the program. The major Alaskan cities alone (Anchorage, Fairbanks, and Juneau) contain well over half of the state's entire housing stock--about 60 percent--a large portion of which is at least twenty years old. The sheer size of urban housing markets, and the number of older homes in them, virtually guarantee strong urban demand for nonconforming housing loans.

Forty-three loans³ had been made in rural areas by December 14, 1981, with a total principal amount of \$2,651,875. Table 41 shows their location. Over half of the rural loans have been made in Nome, Bethel, and Kotzebue; sixteen are located in Nome alone. Southcentral Alaska has eleven loans, followed by the Interior; only three loans have been made in Southeast.

Several factors may explain this distribution of loans. The most important of these is that Kotzebue, Bethel, and Nome are regional centers having larger population concentrations and higher income levels than most of the bush. A loan program such as this one can only function in areas which have a housing market complete with available houses, mortgage lenders, and buyers with incomes large enough to borrow money. Southeast Alaska may also be at some disadvantage in having no Division field office.

³The location of five loans is not available in program records.

TABLE 41. GEOGRAPHIC DISTRIBUTION OF RURAL, NONCONFORMING
HOUSING LOANS AS OF DECEMBER 14, 1981

	<u>Number Of Loans</u>
<u>Southeast</u>	
Craig	2
Yakutat	1
<u>Southcentral</u>	
Dillingham	1
Homer	2
Chitina	1
Cooper Landing	1
Gakona	1
Seward	1
Soldotna	1
Unalaska	1
Valdez	1
<u>Interior</u>	
Fort Yukon	4
Delta Junction	1
Nenana	1
McGrath	1
<u>Western Coastal</u>	
Nome	16
Bethel	3
Kotzebue	3
Eek	<u>1</u>
TOTAL	43

SOURCE: Division of Housing Assistance

Loan Characteristics

The mean purchase price for houses financed through the Nonconforming Housing Loan Program is \$64,700, and the mean mortgage note amount is \$61,000. The average loan-to-value ratio for these loans is 93 percent.

Houses financed by the Nonconforming Housing Loan Program had sales prices and mean note amounts considerably lower than those financed by AHFC's rural owner-occupied program (see Table 12). Houses financed through the nonconforming program sold for \$17,766 less on the average, and mortgage amounts averaged \$7,000 less than AHFC rural loans despite the fact that the Division loaned a higher portion of the sales price. This basic relationship holds when properties with nonconforming loans are compared to only existing houses from this AHFC program, although the price difference drops by nearly \$6,000 to \$11,900. In other words, the price difference is not explained solely by the fact that the nonconforming houses are older.

Most of the loans--93 percent--financed by the nonconforming program were made for the purchase of housing. Only seven loans, or 4 percent, have been made for housing construction to owner-builders, with five of these also for permanent mortgage financing. Only four loans fall into the categories covering loans for building materials or housing renovation or improvement (Division of Housing Assistance Program records).

Funding the Nonconforming Housing Loan Program

This program has had a fairly large budget impact on the State of Alaska. All funds, both operating and capital, are directly appropriated from the General Fund. The operating budget for the Division of Housing Assistance Nonconforming Loan Program activities was \$662,500 in fiscal year 1981, and \$1,176,000 for fiscal year 1982. Capital funds of \$10,000,000 and \$40,000,000, respectively, were appropriated in those years (Pelto, January 29, 1982; Smodey, January 28, 1982).

The long-term budgetary impact of this program, however, will be much less than the approximately \$52,000,000 short-term impact. Because this is a loan program, the state will be repaid the sums it loans, with interest. Unless a high rate of default and foreclosure is experienced, the actual long-term state investment will be relatively small; its size will be determined by the difference between the loan interest rate and the rate of return the state would have experienced had it used its money for other programs or financial investment purposes.

It is unlikely that sources of program capital funds other than state investment could be found for a program of this type. By definition, other mortgage investors, both state and national, are unwilling to invest in this housing.

Program Costs

The Nonconforming Housing Loan Program has been expensive, in part because it is a new program. Program start-up costs include staff recruitment and training, office organization, program design, and information dissemination to the public and to other program participants. In addition, the nature of the program entails costs that traditional mortgage lenders do not incur. It is expensive to provide information and loan services to locations and borrowers not served by other financial institutions. Investment in nonconforming housing and rural Alaska is also perceived as riskier than traditional housing investment. Finally, program costs have been substantially increased by providing field offices for outreach to potential borrowers and seller/servicers.

A total of \$1,838,500 in operating funds has been appropriated thus far, and 177 loans have been closed. If the total administrative budget is averaged over the number of loans purchased, the cost of each loan closed comes to an eye-opening \$10,387.

A more accurate estimate of the ongoing costs of operating this program may be obtained by examining program activity and funding after start-up and by spreading actual expenditures out across the total number of loans processed, since at least an equal amount of staff effort goes into applications that are rejected or still under review. Because most activity has occurred since July, 1981, the cost of processing loan applications in that period is examined. From July to December 1981, the Division spent about \$335,900 on operations. With 306 loan applications received from July to December 14, the cost of processing each application averages to \$1,097, or 1.8 percent of the average loan amount.

This figure is interpreted as the cost per loan processed of administering the program at current levels of activity, net of program start-up costs. It includes underwriting, information dissemination, and general administrative costs. In comparison, AHFC spends about \$192 per application processed,⁴ or approximately .2 percent of the average AHFC loan amount. This figure, however, is not strictly comparable to that for the Division of Housing Assistance. AHFC costs include legal and trustee expenses that the Division does not incur, and accounting and portfolio management costs, two functions which are performed by other state offices for this program. This comparison does suggest that AHFC enjoys lower costs deriving in part from the sheer size of their operations.

A major organizational factor contributing to the cost of the nonconforming program is the operation of the five field offices. In fiscal year 1982, operating these offices accounts for 45 percent of

⁴Based on 6,308 applications received in the first five months of FY 1982.

the entire program operating budget, over \$500,000 (fiscal year 1982 Division of Housing Assistance Operating Budget). There is some doubt as to the value of the contribution to program activity and operations of these offices.

Summary

The Nonconforming Housing Loan Program was created to extend mortgage financing at below-market rates to a portion of the housing market not served by traditional lenders and AHFC, due to the high costs of originating and servicing these loans. For this reason, the expense of the program is partially built in, partially due to its short operating history, and also due to the expense of operating field offices.

The potential for program demand is unknown but essentially a fixed amount since most nonconforming houses already exist. The major program flaw lies in the flexible, vague definition of nonconforming, which may result in overlap with AHFC's comparable rural program. If so, this creates needless additional state expense due to program duplication and costs borrowers more because of the higher financing charges for nonconforming loans.

Senior Citizens Housing Development Program

Program Background

The Senior Citizens Housing Development Program was created in 1975 to address the problem of the affordability of suitable housing for low- and moderate-income elderly households. Elderly state residents frequently have limited incomes and assets and are often further restricted by their physical capabilities, factors which significantly limit their ability to rent or buy suitable housing. These problems are compounded in many Alaskan communities by the shortage of any kind of housing, but especially housing designed to meet the needs of senior citizens.

The purpose of this program is to assist communities in obtaining funding to develop new or to improve existing housing for senior citizens. The Division of Housing Assistance makes grants on loans to municipalities and public and nonprofit corporations for these purposes. The intent of enabling legislation and program administrators is to rely on local initiative and resources for solving local housing needs. The Division keeps its involvement in the projects to a minimum but provides assistance and information to assist locally-based organizations in providing housing for senior citizens.

Program Strategy

This program was designed to supplement the resources of local housing sponsors who have, at times, been unable to take advantage of various sources of development capital because of the substantial expense involved in securing development funds. Fund matching, documentation, and site acquisition requirements, for example, have in the past been barriers to applying for federal funds for small communities and private sponsors because they often have limited financial resources.

Federal housing programs have a number of conditions that must be met that require considerable "up-front" money. Small communities usually must hire development and design consultants to prepare documents needed in the application process; and while federal programs allow these costs to be included in total project funding loans, these expenses are reimbursed only after the fact.

The Division of Housing Assistance makes two types of grants or loans to qualified sponsors to overcome these barriers. These are facilitating grants/loans and seed money grants/loans. Only grants have been made through this program to this point, but loans remain an option that may be exercised in the future.

Facilitating grants/loans. This program can provide funds to assure the financial feasibility of a project which will be funded primarily from other sources. There are several federal programs which specifically fund the development of housing for the elderly. One major obstacle to successfully using these programs, mentioned previously in the context of AHSA, is the total development cost limit that HUD applies, which generally will not allow meeting the costs of building even minimally adequate housing. Facilitating grants can be used to fill the gap between allowed federal funding levels and the actual cost of building in Alaska. Cost acceleration during project construction is another problem that may prevent the completion of a project. Cost acceleration may increase the total cost beyond the means of both the community and the federal program. Facilitating grants may be used to fill this gap as well.

Facilitating funding is used by local housing sponsors which have some capability to begin a housing program with their own resources. The sponsor may be able to afford the required initial survey, needs assessment, and planning but may be unable to make up for the inadequate federal cost limits. There are other municipalities and private sponsors, however, which have no staff planning or development skills and which cannot afford to hire them. These are the groups for whom seed money was made available.

Seed money grants/loans. Seed money provides "up-front" money for the preliminary work needed to obtain financing commitments from a federal agency such as HUD or the Farmers Home Administration. The funds are available only for the costs of activities that can be included in a development cost budget that is submitted to a federal agency for approval. These activities may include a needs assessment, site selection, development of preliminary designs and budget estimates, and establishment of project feasibility.

There are also restrictions on the amount of seed money which can be made available to any single project. No more than 3 percent of the estimated total development cost or \$1,500 per unit, whichever is less, will be funded by the Division of Housing Assistance.

Receiving a seed money grant does not preclude the sponsor from applying for a facilitating grant or loan later in project development. The application process involved in acquiring either type of grant or loan is presented in a Program Handbook prepared by the Division of Community Planning of the Department of Community and Regional Affairs.

Program Activity

Grants to municipalities from the Senior Citizens Development Fund have contributed to the construction of 350 new units of elderly housing since the program began. Forty-seven of these were financed entirely by the state before the strategy of leveraging other sources of development capital was initiated. The total development cost of these state-financed units was \$2,278,005. For 303 of the new units, state grants of about \$4.6 million leveraged \$16.3 million in federal funds; each state dollar insured that \$3.50 of federal funds was spent in Alaska.

In addition, seed money grants totaling \$303,000 have been made to eight municipalities to assist them in obtaining funds to build another 118 new units for senior citizens.

Program Funding, Costs, and Effectiveness

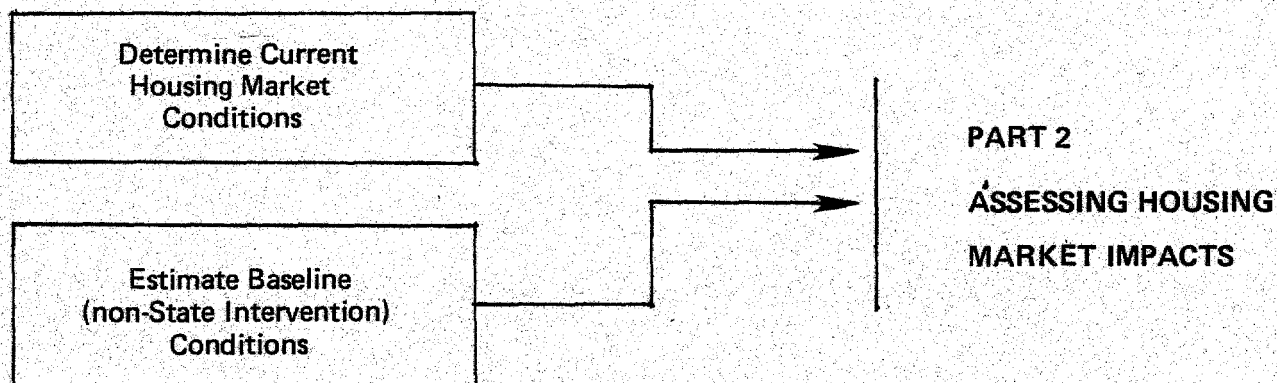
The Senior Citizens Housing Development Fund in 1976 was authorized \$7.5 million from bond revenues for capital funds. These funds became available in increments from the proceeds of several sales of state bonds which were to be payed off through state appropriations.

In 1981 the state legislature authorized \$16 million in additional capital funds for this program, \$8 million for fiscal year 1981, and an equal amount to be appropriated for fiscal year 1982 (Smodey, October 9, 1981). Legislation stipulated that at least half of these funds must be used for leveraging federal money, the remainder to be used as the need arises.

The capital costs of this program have had the greatest impact on the state budget, whether the state appropriates a lump sum directly to the program or whether state appropriations are used to pay off state bonds. The program administrative budget has been small, totaling less than \$500,000 over six years of operations.

In terms of benefits accruing to state residents, it is quite cost-effective for the state to pursue its strategy of leveraging federal funds. About 22 percent of the total development cost of 303 housing units was funded by the state, with 78 percent coming from federal capital funds. In addition, a continuing stream of federal subsidies for elderly housing is associated with these projects that far outweighs the \$4.6 million state investment.

The effectiveness of this program strategy, however, does hinge on the availability of housing development funds from other sources. The possibility of significant reductions in federal housing subsidies jeopardizes the future of this strategy.



The purpose of Part 2 is to assess state program impacts on Alaska's housing markets. Population, employment, income, and interest rate trends are used to estimate housing sales, prices, and costs, both with and without the state housing program interventions. Estimates are then derived for such indirect impacts as real estate commissions, financial fees, the purchase of construction labor, and materials. The analysis and findings are presented in the following chapters:

Chapter 4: Direct Housing Market Impacts

Chapter 5: Indirect Impacts

CHAPTER FOUR

DIRECT HOUSING MARKET IMPACTS

Introduction and Summary

The demand for and the supply of housing comprise the essential analytic elements of a housing market, with the interaction between them determining housing prices. Within a given market, such as Alaska, changes in population size and composition, the number of households, household incomes, financing charges, and the desired type and quality of housing all affect the demand for housing. Similarly, the supply of housing is impacted by both the cost of producing housing and the profits earned by doing so.

Since the initiation of the state's current housing programs in July 1980, Alaska's housing market has experienced significant increases in activities over what had occurred in either 1979 or the first half of 1980. Measured by either the amount of new construction, the number of houses sold, the changes in housing prices or rents, or vacancy rates, dramatic changes have been occurring in Alaska's housing market. However, a substantial portion of these changes are attributable to population growth, not to the state's programs. The issue we examine in this chapter is the effect the state's housing programs had on Alaska's housing market during the period of July, 1980 through August, 1981. In essence, we determine these effects by comparing the changes that have occurred in Alaska's housing market with the changes that would have occurred without the state's housing programs.

More specifically, we address the following questions:

- (a) What caused the large increase in demand for housing during 1981? Was it caused by the state loan programs or were there other causes such as increases in in-migration

and population growth in the state? To answer this question, it will be necessary to determine if the loan programs increased the opportunities for new homebuyers. That is, did the reduced interest payments bring new buyers into the markets or were they simply offset by higher house prices which resulted in unchanged monthly mortgage payments and essentially unchanged opportunities for potential new homebuyers? The key to this question is whether the loan programs increased the amount of construction of new housing.

(b) Was the quality or the type of housing constructed affected by the loan programs?

(c) How were renter households affected? Did the loan programs affect the level of rents, vacancies, or conversions?

(d) What effect did the rural loan programs have on housing markets in rural areas? in the bush? Was financing made available in areas of the state and for types of housing for which mortgage funds had previously been unavailable?

In 1980, housing prices in Alaska were low, relative to their replacement costs, because of the large supply of housing left from the years of the pipeline construction. The number of vacant housing units started to decline in 1980, falling from levels as high as 10 percent of the entire housing stock in Anchorage to current levels of under 2 percent. As vacancy levels fell, the price of houses began to rise. This rise in the price of existing homes during 1980 and 1981 appears to have been caused primarily by increases in population which resulted from high rates of employment growth, particularly in the Anchorage and Fairbanks areas.¹

The increase in demand for housing caused by the growth of population caused the price of existing housing to rise. Until the price of existing housing was bid up to equal the cost of building similar housing, there was very little new construction. Homebuyers got more

¹Net migration to Anchorage in 1981 was estimated to be 10,700, the third largest annual increase due to net migration in the history of Anchorage.

for their money by buying older homes until the prices of older homes were bid up to the cost of building a new house of similar quality. Thus, the prices of existing homes rose much more rapidly in 1980-1981 than did new home prices.

To illustrate this point, in Anchorage, the price of new homes of similar quality rose approximately 18 percent during the period 1979-1981, which closely parallels the increase in building costs. Although the price of new housing in Anchorage sold for an average of \$25,000 more than the price of existing homes during 1980 and 1981, the average price of new homes did not rise by more than 6 percent between the 1980 and 1981 building seasons, paralleling again the rise in construction costs.

Population growth was sufficient during 1980-1981 to cause existing house prices to rise up to their replacement costs. As we will demonstrate subsequently, the loan programs added to this demand by allowing at least 1,300 additional first-time homebuyers to buy homes during the period from July 1980 through August 1981 than would otherwise have occurred. The remaining homebuyers during this period would have purchased homes even without the loan programs; for many homebuyers, the interest subsidy simply allowed them to increase the quality of the homes they bought.

The loan programs, by increasing the number of potential homebuyers, increased total demand for sales homes and thereby caused the amount of new construction to increase by approximately one-third and sales of all homes to increase by approximately 4,000. This was equal to one-third of all the house sales during the period. The loan programs also significantly affected the quality of new houses built by increasing the price buyers could afford to pay by as much as 25 percent. The primary effect was to increase the number of new homes built to sell for over \$120,000. No systematic effect was seen

on the amount of condominium construction; in fact, condominium construction decreased as a share of total units built in Anchorage while it increased in both Fairbanks and Juneau.

The state's home loan programs also benefited renter households by diverting renter households into home ownership. Without the state's program, an estimated 1,300 households would still be in the rental market, further lowering vacancy rates and increasing rents. However, these benefits of reducing demand for rental housing were partially offset by the loan program's financial incentive to convert rental units into sale units, and thereby, decreasing the available supply of rental housing. While we know the number of conversions in multi-family rental structures was not large, we do not know the number of single-family or condominiums which were converted from rental to sales units. Thus, we are unable to precisely estimate the program's impact on the rental market.

The remainder of this chapter will examine in detail the conclusions reached above.

Methodology

The number of households in the state is determined by the level of population, the age structure of the population, and social patterns. A household is defined as the person or persons occupying a housing unit. A housing unit is defined as separate living quarters with either direct access from outside, or a common hall or kitchen facilities for exclusive use of occupants.²

Increases in the number of households are accommodated by a decrease in housing vacancies, an increase in housing construction, or by the sale of new mobile homes. If new units are constructed,

²These are definitions used by the U.S. Census.

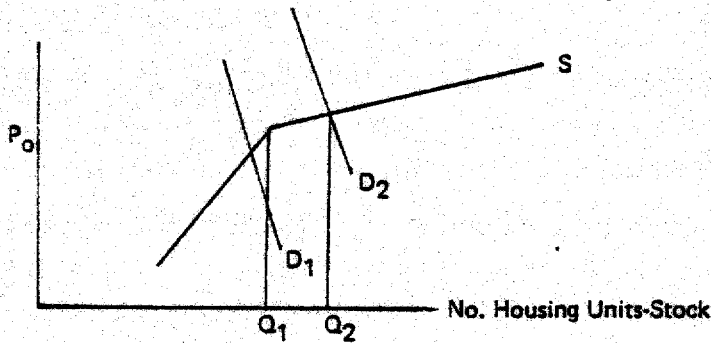
their prices will be at least equal to their costs of construction and the price of land. We also assume unsubsidized, nonrental units will not be built unless market rents will cover interest costs and maintenance. When prices are too low to induce new construction, prices, and rents for the existing housing stock are determined solely by their demand. When prices or rents are high enough to induce new construction, the prices of new homes, as well as existing homes, is determined by the interaction of both the supply and demand for housing.

Prices and rents can be in equilibrium at values below the cost of constructing additional housing units of similar quality. If there is then an increase in the number of households, vacancies will decline and prices or rents will increase until they are high enough to induce the construction of new units (see Figure 3).

So far, we have dealt with the entire housing stock and have argued that the total supply is inelastic until new construction is induced. That is, new homes will not be built until the price of existing homes rise to equal the cost of replacing the house. However, the supply of either existing rental or sales housing is elastic below this price because of the possibility of conversions. That is, sales housing can be rented and rental housing can be sold, depending upon market conditions³ (see Figures 4 and 5). The effect of the state loan programs is to decrease interest rates only to homebuyers. This shifts the demand curve to the left for rental housing, resulting in lower rents, and the conversion of rental units to sales units (see Figure 5). The demand for sales units is then met partly by conversions and partly by new construction, causing the supply curve to shift to the right. The more inelastic the relevant part of the supply curve is for rental units, the smaller the effect on conversions.

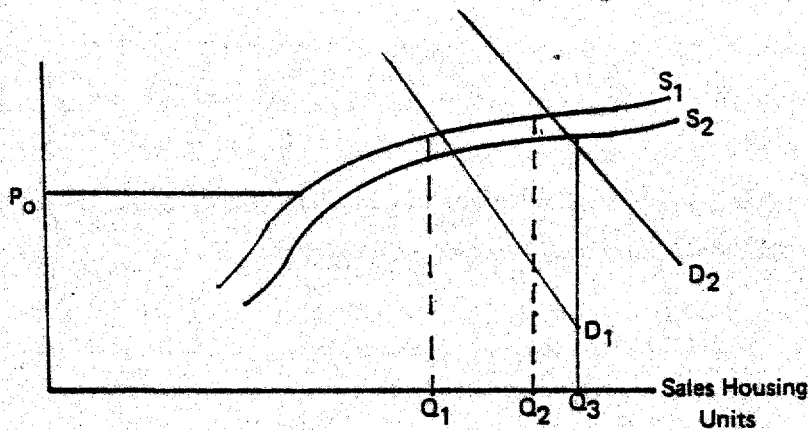
³Many people think of conversions only as the change over from apartments to condominium sales, however, single family housing can be rented or sold depending on market conditions, and the same is true for condominiums.

Figure 3



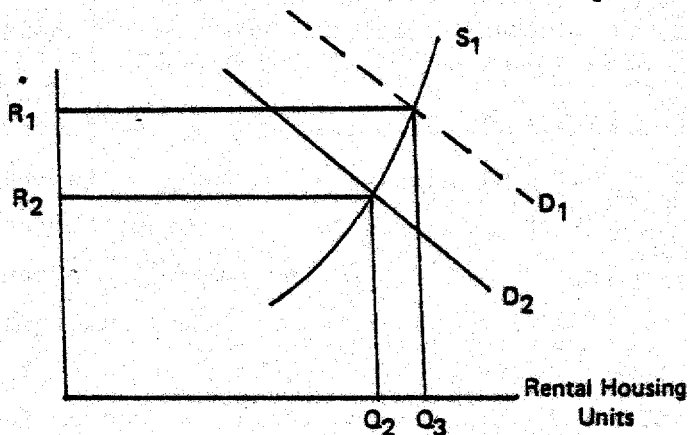
- D_1 – Represents the demand for the existing stock of housing at beginning of period.
- D_2 – Represents a new demand curve which has shifted to the right because of an increase in the number of households.
- $Q_1 - Q_2$ – Represents construction of new units (or new mobile homes).
- P_0 – Represents the price above which new construction will take place.

Figure 4 – Sales Units



- D_1 – Represents demand for sales units w/o loan programs.
- D_2 – Represents shift in demand for sales units as a result of below-market interest rates.
- S_1 – Supply curve for sales units (conversions and new construction).
- S_2 – Shift in supply curve due to decrease in rents. (Figure 5)
- Q_1 – Represents the number of sales housing at beginning of period.
- $Q_1 - Q_2$ – Represents construction of new sales units due to shift in demand from sales rental units and conversions from rental sales due to increase in sale price.
- $Q_2 - Q_3$ – Represents rental to sales conversions due to decreases in rents as loan program shifts demand curve for rentals.

Figure 5 – Rental Units



- D_1 – Represents demand for rental units w/o loan programs.
- D_2 – Represents shift in demand for rental units as result of below-market interest rates.
- S_1 – Supply of rental units (conversions and new construction).
- Q_2 – Represents the number of rental units at beginning of period.
- $Q_2 - Q_3$ – Represents conversions of rental to sales due to shift in demand from rental to sales units.

Model of Demand and Supply of Sales and Rental Units

It can also be seen in Figure 4 that the more elastic the supply of new sales units, the less the effect on prices and the smaller the effect on rental sales conversions. The extent to which the increased demand is met by conversions and new construction depends on the relative elasticities of the two supply curves.

The conversion of rental units (the difference between Q_1 and Q_2 in Figure 5) is less than the increase in sales units (the difference between Q_1 and Q_3 in Figure 4). Therefore, new housing construction occurred, and the total number of housing units has increased from Q_1 to Q_2 as shown in Figure 3 and 4.

A portion of the supply curve of sales units would be expected to be less elastic than the supply curve of rental units due to greater ease of convertibility from single family and condominiums to rental status than convertibility of some of the rental stock (multi-family rental) to sales status. These relative elasticities reverse in the upper end of the supply curves with the elasticity of supply of new sales units being more elastic than the supply of new rental units.

The demand curves will intersect the upper end of the supply curve for sales and rental units if vacancies for sales and/or rental units are very low. Since vacancies fell to very low levels in both sales and rental units during the period in which we measured impacts (and new construction of sales units occurred), we can assume the demand curves were cutting the upper ends of the supply curves. Thus, for sales units, the relevant portion of the supply curve was elastic, and for new rental units it was inelastic.

To estimate the shift in the demand from rental units to sales units induced by the loan programs, we measured the number of households who would have rented housing units without the state loan programs. Some first time homebuyers and households migrating to the

state would not have been able to buy a sales unit with market interest rates. These households would represent the minimum response to the loan program since other households would have chosen to rent rather than buy. The greater the shift from rental to sales, the larger the proportion of that increased demand that would be accommodated by conversions as the demand curve would cut the supply curve of rental units in its more elastic portion.

In Figures 4 and 5, because of the more elastic supply of sales housing, new construction will take place as the demand for rentals decreases and the demand for sales increases. The difference between $[Q_2 \text{ and } Q_1]$ in Figure 5 and $[Q_1 \text{ and } Q_2]$ in Figure 4 represents either new units constructed, or new mobile homes sold. These additions to the housing stock increase vacancies and lower rents. However, because in actuality, rents rose considerably in 1981 in the major cities in Alaska, and almost no construction of new rental units was induced, we know that the supply curve for new construction of rental units is inelastic in the current rent range.

There was a substantial increase in the construction of sales housing during the period, however, making it possible to estimate the elasticity of a portion of the supply curve of new construction. Ideally, we needed to measure the price of identical new houses built in the spring of 1980 and in the summer of 1981. From this measured price change would be subtracted exogenous changes in the cost of labor, materials, financing, and land. The remaining price change would be the measure of the degree of inelasticity of the supply curve for new sales units. A portion of this remaining price increase would be attributed to the increase in demand for sales housing caused by the loan programs.

As proxies for these ideal measurements, we collected data on all new single family homes built and sold in Anchorage in 1979, and compared this price distribution with a sample of these houses which

were resold in 1981. We also had separate price distributions for all new single family and condominium sales in the summer and fall of 1980 and the summer of 1981 in Anchorage.⁴ The detailed results of these measurements are discussed in the following text. In general, the data shows in the supply curve of new sales units in Anchorage during the study year to have been very elastic.

We estimated the increased supply of new sales housing, which was met by new construction of single family condominiums or mobile homes, by using historical shares of the market. Similarly, the increase in quality of new sales housing units induced by the programs was estimated using the standard price elasticity of one. For instance, if the lower interest rates reduced cost of sales housing by 20 percent, it was assumed households would spend 20 percent more on housing.

Construction and Sales Impact

New Households and Demand for Housing

Increased demand for housing can refer to an increase in the amount of housing desired by each household (such as an increased demand for larger or better quality houses), or it can refer to an increase in the total number of housing units demanded. In general, if household incomes are increasing relative to housing prices, households will increase their demand for better quality housing. Although changes in incomes and prices can affect the total number of households (two families sharing a house can undouble, or children can afford their own apartment), in general, the total number of households is much more a function of changes in the total size and age

⁴The price data for 1980 and 1981 comparisons doesn't hold quality of housing constant, and the sample of 1979 homes resold in 1981 may not be a representative sample of homes built in 1979. Nevertheless, the data seems good enough to identify significant changes in prices.

structure of the population. The lower interest rates which resulted from the state loan programs consequently have had their primary effect on the type and quality of housing demanded.

Employment growth has been the major cause of the increase in households (i.e., population) between 1980 and 1981. The increase in population and households can be witnessed by the dramatic fall in vacancy rates, especially in Fairbanks and Anchorage, and also by the increased absorption of newly built housing units. This large increase in households appears to represent a significant in-migration of persons to Alaska.

Employment in the state has increased by 10,000 jobs during the twelve-month period ending in November of 1981. Most of the new jobs were in Anchorage and Matanuska-Susitna. Anchorage had an increase of 8,700 jobs--11 percent--and Matanuska-Susitna had an increase of 800 jobs. Excepting Fairbanks, which also had a significant increase of 800 jobs, the remainder of the state showed only small employment gains.

Apartment vacancies in June 1980 were approximately 5,000 units in Anchorage and 900 units in Fairbanks. In June of 1981, one year later, these vacancies had been reduced to 2,000 in Anchorage and 300 in Fairbanks (Federal Home Loan Bank of Seattle).⁵ In addition, there were at least 3,000 new homes sold during the last half of 1980 and the first half of 1981. Vacancy levels would have been even lower (and prices and rents even higher) if there had not been an excess supply of housing available in the state during 1980.

⁵All indications are that current vacancies are considerably less.

Demand for Sales Housing

The demand for homeownership comes from (a) existing homeowners in the state who are trading up their housing quality; (b) households moving to Alaska; (c) renter households who want to buy; and (d) persons forming new households. Existing homeowners in Alaska who move and buy other houses do not represent a net increase in the demand for sales housing. Only first-time homeowners (previous renters and newly formed households) and households moving to Alaska represented net increases in demand. These households may not have bought new houses, but homeowners in Alaska who wanted to "trade up" could not have done so unless there had been someone who would buy their old homes. Consequently, first-time homeowners and households migrating to Alaska represent the net increase in Alaska's total demand for homeownership.

During the period from July 1980 to August 1981, Alaska Housing Finance Corporation financed homes for 4,500 first-time homeowners (41 percent of all the homes sold and financed through Alaska Housing Finance Corporation). Of these first-time homebuyers, approximately 650 had been in Alaska less than a year.⁶ First-time homebuyers in Alaska and recent arrivals accounted for 55 percent of total home sales during the last half of 1980 and the first half of 1981. See Table 42 for the distribution of first-time homebuyers by city and by housing market in the state.

⁶Of the 10,000 homes sold and financed through AHFC during this same period (which was probably about 80 percent of all home sales), 17 percent, or 1,700 were sold to households who had been in the state less than one year.

TABLE 42. FIRST-TIME HOMEBUYERS BY TYPE OF HOUSING PURCHASED^a

	New Homes		Existing Homes		Mobile Homes				Total Loans	Total First-Time Homebuyer
	Total	1st Time	Total	1st Time	New		Existing			
					Total/1st	Total/1st				
Anchorage	1,310	317	4,698	2,069	16	5	350	247	6,374	2,638
Chugiak	57	20	54	21			6	6	117	47
Eagle River	229	62	300	103			8	7	537	172
Total	1,596	399	5,052	2,193	16	5	364	260	7,028	2,857
Wasilla	147	61	152	58			5	2	304	121
Willow	10	4	6	2					16	6
Palmer	33	11	77	36			7	2	117	119
Total	190	76	235	96			12	4	437	176
Kenai	61	21	114	50	3	1	9	5	187	77
Soldotna	50	12	107	35	1		12	10	170	57
Total	111	33	221	85	4		21	15	357	134
Ketchikan	54	20	168	70	9	7	29	15	260	112
Homer	16	4	38	11	1		4	4	59	
Seldovia			2		1		22	12	25	
Total	16		40		2		26	16	84	39
Fairbanks	247	84	825	341	4		100	67	1,176	492
Juneau	179	46	340	134	10	6	143	100	672	286
Douglas	6	3	25	12					31	15
Auke Bay			4	1					5	1
Total	185	49	369	147	10	6	143	100	708	302
Wrangell	3		11	2		7				
Petersburg	6		25	1	1		11	7		
Total	9		36							
Cordova	5	1	16	6	5	3	14	19	40	19
Valdez	15	3	46	15			30	17	91	35
Total	20		62	21			44	36	131	54
Sitka	39	14	76	30	3	1	40	20	158	65
Kodiak	11	2	139	40	2	1	18	12	170	55

^aData from AHFC on loans made July 1980 to October 1981.

Supply of Sales Housing

If as many as 6,000 households became homeowners during a period of slightly more than a year, what was the source of these additional housing units? The supply of housing for sale came from (a) homeowners leaving Alaska and selling their homes, (b) vacant homes which were sold, (c) sales of new mobile homes, (d) conversions of rental units to sale units, and (e) the construction of new homes.⁷

Vacant single-family homes and new mobile homes did not contribute a major share to the supply. There were only 200 fewer vacant single-family and mobile homes in Anchorage and 70 less in Fairbanks in June of 1981 than in June of 1980 (Federal Home Loan Bank Board of Seattle). Sales of new mobile homes also were low. Mobile home shipments to Alaska have been falling since 1975, when 1,400 units were shipped to the state. In 1980, only slightly more than a hundred units were shipped in. Shipments in 1981 totaled approximately 200 (National Conference of States on Building Codes and Standards, Inc., McLeon, Virginia). Of the 833 mobile homes financed through Alaska Housing Finance Corporation from July 1980 through October 1981, only 58 were new units.

The supply of sales housing provided by conversions of rental units to sales units is difficult to estimate; however, the number of multifamily conversions appears to have been small. For instance, multifamily rental units proposed for conversion in Anchorage in the fall of 1981 was 227 units (Anchorage Real Estate Research Report, Fall 1981).

Conversions in multifamily structures designed for rental use require planning, fairly extensive legal work, and usually require rehabilitation. Conversions of single-family houses or condominiums, on the other hand, require essentially nothing but the owner's decision to sell.

⁷Homeowners in the state who sell their homes and buy another do not provide net additions to the supply of sales housing and, therefore, are not counted here as part of the supply.

Although no data is collected on single-family or mobile home conversions from rental to sales, the 1980 Census showed approximately 30 percent of the single-family homes in Anchorage occupied by renters. Owners of rental homes may have chosen this year as an opportune time to sell, especially owners who may have left the state during the past couple of years and have been unable to sell because of the low housing demand.

The last source of supply of sales units is new construction. There were 2,600 new homes financed through Alaska Housing Finance Corporation, and an estimated additional 300 new homes financed through other lending institutions during the last half of 1980 and the first half of 1981. Residential construction in Anchorage trebled in 1981 over its 1979-1980 levels; in Fairbanks, it doubled. Juneau and Ketchikan, however, had new construction levels similar to that of 1979 and only 30 percent above their 1980 levels. Because Anchorage and Fairbanks experienced large increases in employment and population during 1981, the demand for additional housing was greatest in these cities; and, therefore, more new construction occurred there.

Effect of the State Loan Programs on the Demand for Sales Housing and the Construction of New Homes

The major effect of the state's loan programs has been to increase the number of households that could afford to become homeowners. Whether these new homeowners bought older, existing homes or newly constructed ones did not matter. Owners of older homes, by selling to these new homeowners, were then able to upgrade their housing quality by buying new homes. If fewer new homeowners had entered the market for sales housing, fewer existing homeowners would have been able to sell their homes, and demand for new homes would have been reduced.

To analyze the importance of this new-homebuyer effect, we estimated the number of first-time homebuyers who could not have afforded to buy a house at the market interest rates which existed during 1980 and 1981. Of all the homes financed through Alaska Housing Finance Corporation, 41 percent (4,483 out of a total of 10,986) were bought by first-time homebuyers. Of these first-time homebuyers, 578 bought mobile homes.⁸

Most of these first-time homebuyers could not have afforded the house they bought at market interest rates, and many also could not have afforded to buy even the least expensive house without the interest subsidy provided by the state. For instance, for a homebuyer borrowing the maximum subsidized amount of \$90,000, the difference in monthly payments between borrowing at a market rate of 15 3/4 percent and the AHFC current rate of 12.375 percent is \$215. This reduction in interest costs allows a household with \$10,000 less income to still qualify for a mortgage. Low-income households qualifying for the Housing Assistance Program can borrow at 6 percent up to a maximum of \$76,000. To borrow the maximum of \$76,000 with monthly mortgage payments not exceeding 28 percent of income requires an income of \$19,000 per year. It would require monthly payments of almost \$1,000 per month and an income of \$45,400 to borrow the same \$76,000 at a market rate of 15 3/4 percent.

Of the 2,600 first-time homebuyers in Anchorage, 1,130 could not have afforded a minimum-priced \$65,000 house at market interest rates of 15 3/4. Of the 425 first-time homebuyers in Fairbanks, 96 could not have afforded the minimum-priced house of \$54,000. In Juneau, the minimum-priced house was \$65,000, and 80 of the almost 200 first-time homebuyers could not have afforded to buy it.

⁸Approximately 3,200 bought homes in Anchorage, Fairbanks, and Juneau.

These households represent 37 percent of the first-time homebuyers in the three cities, and they would have found it difficult to afford desirable housing since only a small part of the sales inventory would be available to them. It would be expected that most of these households would have chosen to rent.⁹ If these first-time homebuyers had not bought houses during the past thirteen months, it would have decreased the demand for sales housing by 1,300 units.

People moving to Alaska also represent increases in the demand for sales housing. Approximately 1,700 homebuyers (17 percent of the total who bought homes last year) had been in Alaska less than a year. About one-third (38 percent) of this number were first-time homeowners and have been discussed above. Of the remaining two-thirds, only a small percentage did not have sufficient income to afford a minimum-priced house at market interest rates. Therefore, it appears that most persons who were previous homeowners and who moved to the state during 1981 would have been able to buy a home even without the interest subsidies provided by the state.

In summary, it appears that the demand for additional sales housing in the state was increased by at least 1,300 units by the state programs. The estimates include only those households who would not have been able to buy a home; they do not include households which, though they could afford to buy a home at market interest rates, would have chosen to rent.¹⁰

⁹An additional 1,400 first-time homebuyers lived outside these three cities, and we will assume the same percentage of these homebuyers also could not afford to buy a home.

¹⁰These estimates were made using the prices of homes sold during the period from July 1980 through August 1981. Our analysis of house prices shows that price levels would have risen to their current levels even in the absence of the loan programs (see succeeding sections on house prices). Therefore, it is appropriate to use these prices when making the above estimates on the affordability of housing.

The increased demand for sales housing was met by the construction of new sales housing, the sale of new mobile homes, and by conversions of rentals to sales. Because of the relative elasticities of the supply of rental and sales housing--inelastic for rental housing and elastic for sales housing--a larger proportion of the increased demand for sales housing was met by new construction¹¹ than by conversions of rental to sales units (see Methodology section).

For the purposes of this study, we are assuming that approximately 300 of the supply of additional sales units were conversions of rental units. For the increased demand to have been met totally by conversions from rental to sales would have required a perfectly elastic supply of rental units, and for none of the increased demand to have been met by conversions would have required a perfectly inelastic supply curve. Neither polar case is realistic. We have chosen what we feel is a reasonable proportion of the supply response attributed to conversions.

Effect of State Loan Programs on Total Home Sales

There is a relationship between the sales of older homes and the sales of new houses. The number of older home sales, relative to new ones, depends upon the type of housing being built and the incomes of the new homebuyers. If, for instance, lower-priced homes are being built and most of the first-time homebuyers are younger with lower incomes, the new homes will be sold to the first-time homebuyers. If, on the other hand, the new homes are more expensive than the majority of the existing stock, existing homeowners will trade up, and the first-time homebuyers (with the lowest incomes) will buy the least expensive older homes. Therefore, the ratio of new to existing units sold will vary according to the price range of the new units built relative to the incomes of the first-time homebuyers.

If there are fewer sales of new homes, there will be fewer sales of existing homes. Using the ratio of new-to-older homes sold during

¹¹Sales of new mobile homes were very low. See previous page.

the period July 1980 through August 1981 (approximately 3,000 new and 9,000 older homes were sold), it is probable that there would have been about three fewer older homes sold for each new home not sold. The state loan programs, by increasing the sale of new homes by perhaps 1,000 units, therefore, appear to have increased total house sales by approximately 4,000 (33 percent of all sales).¹²

Price Impacts

In this section, we examine the price impact of the program. We focus on how the program impacted the price of a similar house. This differs from the impact on the average price of housing since average housing prices reflect the increasing proportion of higher quality housing. We argue that because housing prices are determined by the interaction of supply and demand, as long as housing prices (of existing units) are below the cost of new construction, increases in demand bring only price increases. Once new construction is profitable, subsequent price increases are moderated by increases in supply. Although the program had the effect of increasing demand, we show that population growth moved the demand onto the elastic portion of the supply curve. Thus, the effect of the program on prices can be measured by examining the price changes of the replacement costs of similar housing.

Prices of Existing Homes. Prices of existing homes may or may not reflect land values and the costs of building a home of similar quality. For instance, after the oil pipeline was finished in 1977, many households left Alaska, leaving behind a housing stock much larger than needed by the remaining households. Vacancy levels in

¹²Average ratio of new home sales to existing home sales in 59 SMSAs was .9 to 3.2 for years 1974-1976. Ratio was higher in high growth areas. "Transactions in New and Existing Homes," J. Weicher, Urban Institute, Washington, D.C., 1980.

sales and rental units were extremely high, and prices and rents fell. Vacancies were as high as 10 percent of the housing stock in Anchorage and 9 percent in Fairbanks in June 1980. The prices of existing homes did not rise as rapidly as construction costs because of this excess supply. For the same reason, there were very few new housing units constructed in either 1979 or 1980.

Prices of existing housing in several housing markets in the state were bid up by the state's recent population growth until, by the latter half of 1980 and 1981, they reflected the costs of new home construction. Builders responded to these market conditions, and home construction in 1981 tripled in Anchorage and doubled in Fairbanks over 1980 levels. Home construction in Juneau and Ketchikan, on the other hand, was higher in 1981 than in 1980 but did not increase significantly over 1979 levels. In cities such as Juneau and Ketchikan, the rate of new home construction between 1975 and 1977 was small compared with that experienced in either Fairbanks or Anchorage. These cities were not left with the large stock of post-pipeline excess housing as were Anchorage and Fairbanks. Therefore, their rate of home construction maintained a more even pace. Juneau and Ketchikan also have not had the employment and population growth experienced by Fairbanks and Anchorage in 1981. As a result, they have had much less demand for new housing. Again, this illustrates the points that when the existing housing in a city is selling for less than the costs of building new housing of similar quality, very little new construction will occur.

Prices of New Houses. Prices of new homes will rise because (a) better quality or better located houses are built; (b) costs of construction and site development increase; or (c) builders and land owners are able to charge higher prices and make higher-than-normal profits.

Most homes are built on speculation; that is, builders try to judge what the market demand will be and then build the type and quality of housing which they think they will be able to sell. If builders see larger or higher quality units selling rapidly, they will start building more expensive houses. If they see the reverse, they will start building smaller, less expensive ones.

Once a house is built, the builder has to accept whatever price homebuyers are willing to pay for it.¹³ However, if there are more persons wishing to buy houses than there are houses available, house prices will be bid up. They will then sell for more than they cost to build, and builders in the short run will make abnormal profits. Each builder will wish to rapidly respond when demand is high relative to the supply of housing, for that is when the highest profits can be made. If they do so, the supply of houses increases more rapidly than the number of potential homebuyers and prices will fall until there are no extra profits made.

Site developers go through the same process. The planning periods for site development are 12-to-18 months, allowing for the approval and recording of plats and developing of the sites. The construction and sale of new houses require an additional six months. Therefore, if increases in demand for housing are unanticipated by land developers and builders, it may take as long as 18-to-24 months before the supply of new housing increases sufficiently to bring house prices into alignment with the costs of construction.

Increases in demand for housing can temporarily affect the cost of construction materials; i.e., unexpected demand can create shortages. But, in general, construction material prices and construction interest costs are set in national markets and are not affected by local demand.

¹³The builder could, of course, pay off the construction loan and wait for a better market, but few builders are either able or willing to do this.

Lot prices, on the other hand, are very much affected by local changes in demand for housing. Lot prices will increase for two reasons: (a) the costs of land development increase or (b) the demand for raw land increases. If more land is demanded for housing, land will be bid away from its present uses and put into housing. The cost of an addition to the supply of land for housing is set by a combination of the value of the land in its alternative uses and the cost of developing the land into a home building site.

The lowest cost lots available for housing set the bottom price for new home sites; and all other building lots, including those with existing houses, will attain their value by being some multiple of these lowest-cost lots. New building sites are usually further away from the center of town and are usually less preferred by homebuyers to those closer to town. Therefore, when new building sites are demanded, prices of older sites will rise to reflect their new, higher relative value.

In order to define the effects of the state loan programs, we will compare the change in building costs to the change in housing prices. If prices rise more rapidly than costs, a portion of the difference will be attributed to the additional demand generated by the state programs. Conversely, if building costs and housing prices changed by the same relative amounts, we will conclude that the state programs did not produce any measurable price effects. A second issue is whether the state programs may have increased housing demand enough to cause the cost of construction labor and materials to rise in the state. This issue will also be examined. Since the largest price increases and the greatest number of new housing units constructed during the last year were in Anchorage, we will focus on this housing market for our analysis of price impacts. If measurable price impacts cannot be obtained for Anchorage, it seems certain that they cannot be obtained for anywhere else in the state.¹⁴

¹⁴The Anchorage housing market also has the best data available in Alaska.

Prices of Homes in Anchorage

The most rapid rate of population growth in the state during 1980-81 occurred in Anchorage; therefore, if home prices did not rise faster than building costs in Anchorage, it is doubtful if this occurred anywhere in Alaska.

To estimate what part of the rise in Anchorage house prices was attributable to the state's loan programs, we first had to measure the actual increase in the price of existing and new homes. We expect prices of houses of constant quality and location to rise by at least the increase in construction and land prices. As was mentioned previously, if the demand for housing increases more rapidly than supply, prices will be bid up higher than costs and higher-than-normal profits will be made.¹⁵ If house prices do not rise as rapidly as costs, then there will be no new housing constructed.

In Table 43, changes in single-family house prices for the two-year period from June of 1979 to June of 1981 are given for various districts in Anchorage. Price changes vary between 8 percent in Mountain View to 37 percent in Spenard. The problem is the need to measure changes in prices of houses of similar size, quality, and location. For instance, in Table 43 the price changes in several of the Anchorage Districts are heavily impacted by new housing. The higher prices of new housing may represent increases in quality and not necessarily increases in price when quality is held constant.

In Anchorage, new home sales as a proportion of all sales have been rising, going from 19 percent in the summer of 1980 to 35 percent in the summer of 1981. The average price of all homes sold also has been increasing. Therefore, the increases in the average recorded price of all homes sold do not necessarily indicate at what rate the price of existing houses rose during the period.

¹⁵Existing homeowners would also be paid more for their homes than they would receive later when the supply of new houses increases.

TABLE 43. HOUSE PRICES IN ANCHORAGE

New and Existing Single-Family Sales
Anchorage Multiple Listing Service
Spring 1979 to Spring 1981

<u>Number of Sales</u>		<u>Percentage Change in Median Single-Family Home Prices</u>
	Anchorage	21
299	Spenard	37
592	West Tudor-Diamond	20
503	Diamond South	27
569	Abbott Road-Rabbit Creek	30
1,228	East Debarr-Tudor	16
251	Mountain View	8
393	Eagle River	19

	<u>Newly Constructed^a Single Family Homes Sold in 1979</u>	<u>1979 Single-Family Homes^b Resold in 1981</u>
Under \$80,000	12%	8%
\$80,000-\$100,000	36%	35%
\$100,000-\$140,000	41%	35%
Over \$140,000	11%	22%
Average House Price	\$102,000	\$120,000
Percentage Price Increase 1979-1981 = 17.6%		

SOURCES: ^aMultiple Listing Service, Inc., Anchorage.

^bAlaska Housing Finance Corporation

In order to set a baseline from which to measure the changes in prices of housing of constant quality and location, we chose to compare the selling prices of new, single-family homes in 1979 with the selling prices of 1979 homes resold in 1981. We also chose newly built homes because the selling prices would reflect construction and land costs in 1979. Data were obtained from the Multiple Listing Services, Inc., of Anchorage on all sales of new homes in 1979, and this was compared with data from Alaska Housing Finance Corporation on houses built in 1979 and resold in 1981 (see Table 43). The average increase in price over the two-year period was 18 percent. We then measured changes in construction and land costs from 1979 to 1981 and compared them to the changes in house prices. If house prices rose faster than their replacement costs, we took this to mean that demand increased faster than supply; and house prices were, in the short run, inflated.

To measure increases in the price of new houses, we compared the prices of new homes built and sold in 1980 with those built and sold in 1981. New home sales between July 1980 and May 1981 represented units constructed during the 1980 building season while the new home sales between June and August 1981 were built during the 1981 building season. There was a 5.6 percent increase in prices between the 1980 and 1981 new homes, which corresponds to the relatively small increase in construction costs reported during the same period (see Table 44). Using price data on all single-family homes sold and financed through AHFC during the period, we found that the price of existing homes rose 9 percent (see Table 44).

Price increases of this magnitude appear to contradict the experiences of many homeowners in Anchorage who saw prices rising very rapidly in 1981. Anchorage prices did not start to rise significantly until the spring of 1981, however. By then, vacancy levels in Anchorage had been reduced to less than half of their 1980 levels, and prices of existing homes were bid up rapidly. Prices from July 1980 through May 1981, however, rose monthly by an average of 0.3 percent

TABLE 44. CHANGE IN DISTRIBUTION OF PRICES OF SINGLE-FAMILY HOMES IN ANCHORAGE

Sales Prices	Existing Homes			New Homes		
	July-Dec. 1980 ^a	Jan.-May 1981 ^b	June-Aug. 1981 ^c	July-Dec. 1980 ^a	Jan.-May 1981 ^b	June-Aug. 1981 ^c
< \$80,000	25%	29%	20%	8%	12%	8%
\$80-100,000	40%	29%	27%	24%	25%	16%
\$100-140,000	29%	33%	41%	38%	35%	44%
> \$140,000	6%	8%	11%	30%	28%	32%
Avg. Home Price	\$98,000	\$101,000	\$107,000	\$124,000	\$123,000	\$131,000
Percentage Change in Prices Between Bond Sales		(3%)	(6%)		(0)	(6.5%)
Newly Constructed Units as a Proportion of All Sales	19%	23%	35%	19%	23%	35%

^aJuly 1, 1980, Bond Sale, Alaska Housing Finance^bDecember 1, 1980, Bond Sale, Alaska Housing Finance^cJune 1, 1981, Bond Sale, Alaska Housing Finance

for a total average annual increase of 3.1 percent. But during the period June through August 1981, the monthly increase averaged 2 percent for an annual rate of 24 percent.

During this same general period of time (April 1979 to the spring of 1981), developed building lots in Anchorage increased approximately 26 percent, from \$30,000 to \$38,000. This increase was divided between increases in raw land prices and increases in site development costs. The price of land rose two-and-one-half times, while site development costs increased by approximately 12 percent (Alaska Valuation Service Data; Investigator's Estimates).

Construction costs--including labor, materials, builder's profit, and overhead--increased over the three-year period 1979 to 1981, inclusive, by 22 percent.¹⁶ The price of construction materials in Anchorage for the period August 1979 to August 1981 showed an overall increase of from 5-to-10 percent between 1979 and 1981; prices fell between August of 1979 and 1980 as the contraction in the national building industry began. Prices for some materials--lumber in particular--are still less than they were in 1979 (United Builders Supply, Anchorage). The costs of labor and materials in Anchorage have thus been held down by the virtual collapse of home building activity in the rest of the country despite the large increases in construction interest rates.¹⁷

In summary, we estimate that the costs of a new home in Anchorage increased by about 20 percent between the spring of 1979 and the summer of 1981, for an average annual increase of between 8 percent and 9 percent. The Alaskan Construction Escalation Index shows an

¹⁶As measured by the Boeckh Construction Index.

¹⁷On a typical new house of \$130,000, construction interest costs can add \$15,000.

increase of 13 percent from spring 1979 to spring 1981 (HMS, Inc., Anchorage, Alaska), and the Boeckh Index shows 15.5 percent. Our estimates of 20 percent include both the increase in the costs of land and site development costs.

None of this evidence is definitive, but the picture we have pieced together is that prices of homes rose at the same rate as costs. The state loan programs did not increase demand so rapidly that the prices of new homes were bid up faster than the increases in their construction costs. Home building kept pace with the increasing demand, and few short-term supply bottlenecks occurred.¹⁸

Land prices, on the other hand, did rise rapidly, and the loan programs, by increasing the demand for more single-family homes did affect their average levels.

Since the price of land depends entirely on the amount of its demand, the state loan programs, by affecting the amount of single-family home building, had an impact on land prices. Land prices, as we mentioned previously, rose by two-and-one-half times in Anchorage between the spring of 1979 and the spring of 1981. Raw land values in Anchorage rose from an average of \$3,000 for a developed building lot costing \$30,000 in the spring of 1979 to \$7,600 for a developed lot selling for \$38,000 in the spring of 1981. A large percentage of the rise in the price of land measured between 1979 and 1981 occurred in the spring of 1981 as the demand for lots by homebuilders increased. The loan programs increased the amount of new construction and, hence, the demand for building lots by approximately 33 percent in Anchorage during the period from July 1980 to August 1981; therefore, the programs are responsible for approximately the same percent of the rise

¹⁸This last year was a good time to have a building boom with the rest of the country in a construction slump. There were excess supplies of materials and of construction labor in the rest of the country, and, therefore, these costs have seen only nominal increases in Alaska.

in raw land prices. Even though land prices rose rapidly in the spring of 1981 (and will be higher for the 1982 building season if the demand for new homes continues), the impact on house prices is still relatively small. For example, a 36 percent increase in undeveloped land increases the price of a \$130,000 home by only 2 percent.

Effect of State Loan Programs on the Quality and the Mix of Housing

Effects on the Type and Quality of New Housing

Of the 2,500 new houses sold and financed through AHFC in the period from July 1980 through August 1981, 800 (32 percent) were sold for less than \$90,000; 855 (34 percent) were priced between \$90,000 and \$120,000; 504 (20 percent) were priced between \$120,000 and \$150,000; and 375 (15 percent) were sold for over \$150,000 (see Table 44).

At market interest rates of 15 3/4 percent, it would have required an annual income of \$64,000 and a 20 percent downpayment to afford a \$130,000 home. Only 12 percent (approximately 1,100 households) of all the homebuyers at AHFC had incomes of \$64,000 or greater. Approximately 1,500 homes over \$130,000 were financed through AHFC (about half were existing homes and half were new homes). The households who could afford these homes would have been reduced by approximately 400, or 27 percent, without the low interest loan programs.

The average new homes built during July 1980 through August 1981 sold for almost \$25,000 more than the average existing home (see Table 45). In Anchorage, 44 percent of all new homes sold for over \$120,000; whereas only 17 percent of existing homes sold in that price range. The difference in price between the newly constructed homes and the existing homes is greater in Anchorage than in any other area of the state. In Fairbanks, 48 percent of the new homes and 32 percent of existing homes sold for more than \$90,000, much less than what

TABLE 45. DISTRIBUTION BY PRICE OF NEW AND EXISTING HOMES FINANCED BY AHFC
DURING PERIOD JULY 1980 - OCTOBER 1981

Price	Anchorage		Fairbanks		Juneau		Remainder		Total	
	New	Existing	New	Existing	New	Existing	New	Existing	New	Existing
< \$70,000	104	962	26	296	2	74	51	334	183	1,668
\$70,000-80,000	127	732	52	133	16	56	100	169	295	1,093
\$80,000-90,000	154	696	53	136	9	72	101	191	317	1,087
\$90,000-100,000	189	762	45	128	9	59	63	120	353	1,051
\$100,000-110,000	152	526	21	110	56	29	51	77	257	694
\$110,000-120,000	177	491	10	62	32	27	43	53	248	613
\$120,000-130,000	118	294	15	22	18	16	29	41	174	373
\$130,000-140,000	133	217	11	16	12	15	25	15	186	263
\$140,000-150,000	112	123	6	5	16	10	8	13	134	151
\$150,000-160,000	106	89	2	3	8	3	4	7	118	102
\$160,000-170,000	67	51	2	3	5	3	8	3	80	60
\$170,000-180,000	44	32	2	3	3	2	1	1	48	35
\$180,000-190,000	30	20	2	1	1	1	3	1	35	21
\$190,000-200,000	30	20	2	1	2	1	2	1	35	21
> \$200,000	53	37			2		3	1	58	40

Total	1,596	5,052	247	825	185	369	492	1,026	2,520	7,272
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Percentage Distribution

< \$90,000	24%	47%	52%	68%	14%	55%	51%	68%	32%	53%
\$90,000-120,000	32%	36%	32%	26%	59%	31%	32%	24%	34%	32%
\$120,000-150,000	23%	13%	13%	5%	20%	12%	13%	8%	20%	11%
> \$150,000	21%	4%	3%	1%	7%	2%	4%	0	15%	4%

has been seen in Anchorage.¹⁹ The new housing built during 1980-1981 was on average considerably more expensive than the average existing home, with the difference being largest in Anchorage and least in Fairbanks.

The loan programs also changed the type of housing lower-income households bought. Many homeowners with incomes less than \$30,000 were able to purchase a home because of the loan programs. Households borrowing \$90,000 or less in 1981 could borrow 25 percent more at the current AHFC interest rate (12.375 percent) than at the market rate (15 3/4 percent) and still have the same monthly mortgage payment. At the 1980 AHFC interest rate on the first \$90,000 of 10 percent, they were able to borrow approximately one-third more. Low-income home-buyers qualifying for the Homeowners Assistance Program at AHFC in either 1980 or 1981 found their house-purchasing power tripled (see Table 46).

The increase in the ability of lower-income households to buy homes did not necessarily increase the number of lower-priced homes built. Approximately 4,000 (60 percent) of older homes sold were priced under \$90,000; whereas only 800 (32 percent) of all new homes sold for less than \$90,000.

If the loan programs had not existed, many lower-income buyers would have dropped out of the sales market, and households which bought homes selling between \$90,000 and \$110,000 would have had to settle for homes costing from \$70,000 to \$90,000. Sales of new mobile homes would probably not have increased substantially without the loan programs because of the lack of available mobile home pads. (Mobile

¹⁹In Juneau, 53 percent of the new homes and 21 percent of existing homes sold for over \$110,000.

TABLE 46. MAXIMUM AFFORDABLE HOUSE AT VARYING INTEREST RATES^a

Year	AHFC Interest Rates	Annual Income Levels					
		<u>\$20,000</u>	<u>\$30,000</u>	<u>\$40,000</u>	<u>\$50,000</u>	<u>\$60,000</u>	<u>\$70,000</u>
1980	<\$90,000 - 10%						
	>\$90,000 - 11%	\$58,000	\$89,000	\$116,500	\$144,500	\$171,000	\$198,500 ^b
1981	<\$90,000 - 12.375%						
	>\$90,000 - 19.5%	48,000	73,000	99,000	113,000	130,500	146,500
	<\$90,000 - 12.375%						
	>\$90,000 - 16.0%	48,000	73,000	99,000	116,500	136,500	156,000
<u>Market Interest Rates</u>							
1979	12%	50,000	72,000	100,000	126,500	150,000	172,000
1980	15%	39,000	61,000	83,000	100,000	124,500	145,500
1981	16.5%	38,000	55,500	74,500	94,500	111,000	131,000

^aEstimated using 10 percent down payment and .28 income-to-loan ratio.

^bMaximum mortgage amount at AHFC is \$149,000.

homes continued the trend of the last several years, representing an even smaller share of all new housing in the state in 1980 and 1981 than in 1979.)

Multifamily construction was not affected by the loan programs in any systematic way; multifamily was a smaller share of new construction in 1981 in Anchorage but a larger share in Juneau and Fairbanks than in previous years. However, the demand for condominiums and townhouses would probably have been larger without the increased purchasing power provided by the loan programs.

Multifamily housing units have accounted for more than 50 percent of new housing built in Anchorage every year since 1974 until the building seasons of 1980 and 1981 when, for each year, multifamily housing accounted for less than 30 percent of the housing constructed.

Multifamily has increased as a share of new construction between 1980 and 1981 in both Fairbanks and Juneau, increasing from 10-to-22 percent in Fairbanks and from 34-to-46 percent in Juneau. Almost all multifamily construction since 1978 in all three cities has been sold as townhouses and condominiums. The gap between rent levels and construction costs has been too wide to support the construction of new multifamily rentals (see section on Effects on Renters).

Effects on the Existing Housing Stock

Quality of the housing stock has increased, not only by the addition of new houses but also through rehabilitation of older houses and apartments. No data on the amount of rehabilitation which occurs is available for the state, but we can at least speculate about the effects of the loan programs on the rehabilitation of older housing units.

There is no active loan program at AHFC for households who would like to borrow money to remodel and repair their homes, although a new

loan program for housing rehabilitation is planned for 1982. The existing loan programs, by reducing the cost of housing to homebuyers, might encourage buyers to seek higher-priced, better quality housing; and sellers, therefore, would have a greater chance to profit by remodeling and improving the quality of their homes. Such effects, however, would be of minor significance.

The conversion of older, multifamily rentals to condominiums is usually accomplished with substantial rehabilitation of the rental apartments being converted. The loan programs, by increasing the number of homebuyers (particularly in lower-income groups), would have increased the demand for lower-priced sales units and, therefore, would encourage the conversion and rehabilitation of former rental units.

Rental Housing

If the state loan programs had not reduced the cost of buying a home, at least 1,300 more households would be renters rather than homeowners. The increased demand for rentals would have decreased rental vacancies even further than current levels and rents would be higher than they are now.

Most of the increased demand for rental units would have occurred in Anchorage and Fairbanks, the cities which had the largest population growth during 1980 and 1981 and the largest number of first-time homebuyers who were able to buy a house because of the loan programs. Rental vacancies in Anchorage and Fairbanks are low, and additional renters would not have been accommodated without overcrowding and even more pressure on rent levels.

The change in the number of renter households due to the loan programs can be estimated, but there is no data on the change in the number of rental housing units. The number of conversions from multifamily rentals to condominiums is relatively small; however, single-family homes, which constitute a large proportion of the supply of

rentals, can pass from rental to sales status, and the number is unknown (see above section on Supply of Sales Housing).

The current rent levels in most parts of Alaska, even though considerably higher than they were two years ago, have not yet encouraged developers to construct new units. Rent levels will have to be higher than they are now or long-term interest rates will have to fall before new rentals will be economically feasible. For instance, at long-term interest rates of 18 percent, the monthly interest payment on a new \$50,000, one-bedroom apartment would be \$750. Rents for a typical 600-square-foot, one-bedroom apartment would have to be close to \$900 per month. Demand for rental units at those necessary rent levels is not very large.

The planning period for a multifamily project is at least two years. It requires one year for the designing, financing, and permitting processes and another year for construction. Therefore, even if the loan programs had not existed and rents had risen to higher levels, it is improbable that any construction of rental units would have occurred during 1981. Because of the disparity between the costs of building and financing multifamily rental units and current rent levels, construction of rental units will probably not occur until interest rates decline.

Effects on Rural Housing Markets²⁰ of State Mortgage Loan Programs

The new mortgage loan programs established by the state in 1980 promoted mortgage lending in rural as well as urban Alaska. There were over 300 loans pending or purchased by the state in rural areas between July 1980 and October 1981 through AHFC and the Housing Assistance Division of CRA.

²⁰Rural housing markets are defined as the areas outside of Anchorage, Matanuska-Susitna, Fairbanks, Juneau, and Ketchikan.

The six areas of rural Alaska in which more than 20 mortgages were purchased were Nome (68), Kobuk (48), Kenai-Cook Inlet (53), SE Fairbanks (27), Yukon-Koyukuk (30), and Bethel (20). Housing sales and mortgage demand is usually highly correlated with population, employment, and income growth. We therefore expected to find more mortgages originated in areas which were having the most rapid growth. Four of the above mentioned areas have had substantial growth in per capita income during 1974-1979: Nome, Kenai-Cook Inlet, Yukon-Koyukuk and Bethel; SE Fairbanks and Kobuk exhibited no growth in per capita income during the period; however, they have had increases in population (see Table 47).

The effects on rural housing markets of the state loan programs cannot be evaluated as yet. The programs are too new, and the number of loans purchased is too small to be able to say whether the loan programs had an impact on new construction or quality of housing. Since the planning period for new construction is longer in rural areas than in urban areas, effects on the housing stock would not be expected to show for at least a couple of years.

The amount of construction of new housing in rural Alaska has been substantial during the last decade. Comparisons between the 1970 and 1980 Census show additions to the housing stock in rural Alaska of approximately 18,000 houses. Comparing the additions to the 1970 housing stock shows that 42 percent of the housing in rural Alaska is less than ten years old. Removing the Kenai Peninsula housing inventory from these figures to better estimate housing changes in the more remote rural areas changes this percentage of new housing only slightly, to 40 percent.

Since housing is being built in substantial numbers in the most remote areas, the question is how is it being built and financed? The United States Department of Housing and Urban Development has been financing large numbers of homes in rural Alaska under the Mutual Help

TABLE 47. RURAL HOUSING MARKETS

<u>Rural Census Areas</u>	<u>Housing Units-1980</u>	<u>Change in Number of Houses 1970-1980</u>	<u>Change in Pop. 1970-1980</u>	<u>Change in^a Per Cap. Income 1974-1979</u>	<u>State^b Mortgage Purchases 1980-1981</u>
Wade Hampton	1,173	483	+20%	-16%	1
Nome	2,608	908	+14%	+42%	68
Kobuk	1,486	565	+19%	0	48
North Slope	1,158	557	+22%	+116%	6
Yukon-Koyukuk	3,192	1,364	+12%	+120%	30
Aleutian Islands	1,704	441	0	+30%	4
Kodiak	3,557	1,018	+6%	+59% ^c	
Valdez-Cordova	4,145	1,757	+68%	+80% ^c	12
Kenai-Cook	11,740	5,671	+52%	+42%	53
Prince of Wales/ Outer Ketchikan	1,385	378	0	+14%	13
Haines	743	263	+20%	+20%	8
Skagway-Yakutat-Angoon	1,553	618	+26%	+53%	4
Wrangell-St. Petersburg	2,363	728	+25%	+80%	4
Dillingham	1,952	894	+19%	d	9
Bethel	3,297	1,331	+23%	+33%	20
SE Fairbanks	2,490	1,061	+33%	0	27
Bristol Bay	369	155	-5%	+51%	5

^aLocal area personal incomes, 1974-1979

^bAHFC and CRA Mortgage Purchases

^cPer capita income for Cordova-McCarthy

^dPer capita income not measured separately for Dillingham

SOURCE: U.S. Department of Commerce.

and Turnkey III programs. The houses are built by the Regional Housing Authorities and financed by HUD. Over the last six years, HUD has provided 250 million dollars to finance 2,900 homes.

The two other federal agencies which provide financing and grants for homeownership in rural Alaska are the Farmer's Home Agency of the United States Department of Agriculture and the Bureau of Indian Affairs. Farmer's Home Agency has financed over 1,400 homes, providing almost \$61 million in low-interest mortgage funds, and the Bureau of Indian Affairs has financed 429 homes for over 10 million dollars during this same six-year period.

These three federal agencies--HUD, Farmer's Home Agency, and the Bureau of Indian Affairs--have been significant sources of funds for financing homes in rural Alaska. However, less than half of the new housing constructed in rural Alaska during the 1970s was financed by these agencies. The remaining homes have been self-financed or financed through financial institutions in the state.

To evaluate the relative effect of the state's loan programs in rural Alaska, a comparison can be made of the dollars provided by the three federal sources of home financing and the mortgage purchases made by CRA and AHFC in rural Alaska.

The state loan programs purchased approximately 300 mortgages for \$20 million in the first 18 months of the loan programs, which can be compared to the approximately \$70 million per year which has been provided by the three federal agencies. It appears that the state is becoming one of the significant sources of mortgage funds in rural Alaska.

CHAPTER FIVE

INDIRECT IMPACTS

In Chapter Four, the direct effects of state loan programs on housing markets were identified. The housing programs have implications not only for the borrower who qualifies for a loan at below-market interest rates but also for the sectors of the economy which are involved in the production and sale of housing. The major indirect impact is the generation of income which results from increases in housing market activity.¹ In this chapter we describe how each sector generates its real estate related income and estimate the magnitude of income generated in selected sectors as a result of state loan program induced real estate activity.

Income is generated in the sale of both new and existing houses. The sale of real property, whether new or existing, can require the participation of the finance, real estate, insurance, and service sectors. These sectors provide goods and services which are paid for by the buyer and seller. In the sale of a new structure, income is also earned by the factors of production. The major components of income to the factors of production are wages to construction and other labor, payments for building materials, and profits to the builder and original land owner.

For each sector we provide estimates of income on a per unit and on an aggregate sector basis. The estimates of income for each sector are based upon common, but not universal, practices of the industries involved. For example, real estate commissions are collected on sales where realtors participate, but realtors do not participate in every transaction. We have factored these considerations into the aggregate estimates based on information obtained from these industries.

¹Income is defined as the flow of money to each sector.

The purpose of the aggregate estimates is to identify the magnitude of the effects, not to calculate exactly the incomes earned by the sectors as a result of state programs. The income estimates reported are not for total sector income, but the income generated as a result of state loan programs. To review, in Chapter Four we estimated that the state loan programs were responsible for the construction of approximately 1,000 new housing units and the sale of 3,000 existing residential units during the period July 1, 1980 to October 31, 1982. Those estimates are the basis of the aggregate income calculations presented in this chapter.

Finance

Under the state mortgage loan programs, the financial industry acts as the seller/servicer of state-funded mortgage loans. Financial institutions charge fees for these services. The loan fee, charged at the time of closing, is usually one percent of the original loan amount. The servicing fee paid by AHFC for the Special Mortgage Loan Purchase Program is $\frac{3}{8}$ of one percent of the unpaid balance. The service fee is collected over the entire life of the mortgage.

Based on these fees, we estimate that financial institutions earned approximately \$3.5 million in mortgage loan origination fees between July 1, 1980, and October 31, 1981, as a result of the state loan programs.² Furthermore, the mortgage loans resulting from the program made during this period generated approximately \$1.2 million in loan servicing fees in the first year.

Financial institutions also participate in the production of new housing units by providing the construction financing. While the term of construction loans varies, the typical construction loan has a

²Assumes the average loan-to-value ratio is .90; the mean sales price of new structure is \$110,800; the mean sales price of existing structures is \$91,100; and the loan origination fee is one percent of loan balance.

1.5-to-2 percent loan origination fee and has interest rates 1-to-2 percentage points above the prime interest rate. Construction loans are usually disbursed over the life of the loan on a percentage completed basis.

The 1,000 new units constructed as a result of state loan programs generated demand for construction loans. This demand is estimated at approximately \$78 million.³ With a construction loan fee of 2 percent, construction loan fees are estimated at \$1.6 million.

The interest income earned on a construction loan depends on the interest rate and the length of the loan. The length of loan depends on the construction scheduling and on the market conditions. Interest costs can escalate quickly if the structure does not sell according to schedule. Given the variability, estimates of construction interest income are more speculative. Using an 18 percent interest rate and a five-month term, we estimate construction loan interest payments at approximately \$3.0 million.

Real Estate

The real estate industry acts as agents for the buyers and sellers. Generally, the real estate sector receives commissions based on the sales price for their participation in a real estate transaction. In Anchorage, the commissions are six percent of the sales price for existing housing and five percent for new housing.

For an existing house with a sales price of \$91,100, the real estate commission calculated at 6 percent is \$5,466. A new house with a sales price of \$110,800 would pay a commission of \$5,540.

Estimates of income earned by the real estate industry depend on use of the industry by sellers. As a result of state loan programs,

³Assumes the construction loan-to-sales price ratio is 70 percent, and the average sales price is \$110,800.

we estimate the real estate sector earned \$4.2 million in commissions on the sale of new homes and \$12.3 million on existing homes.⁴

Services and Insurance

The completion of a real estate transaction requires services from title insurance companies, surveyors, appraisers, and credit rating agencies. Additionally, private mortgage insurance may be required for the new mortgage. Each of these businesses generates income from their real estate activities. We estimate that the closing costs of a real estate transaction, excluding those previously discussed, can typically range from 1.0-to-2.5 percent of a property's sale price. Closing fees, other than finance fees and real estate commissions, can range from \$900 to \$2,700 per unit. We estimate that the income generated by these fees as a result of the state loan programs ranges from \$3.5-to-\$8.6 million.

Construction

The construction of new housing units creates construction jobs. The National Association of Home Builders has estimated that the construction of an average single-family unit generates .862 person years in construction employment: .627 in building and .235 in land development (National Association of Home Builders, 1979). We estimate that the state loan programs increased construction employment by the equivalent of about 850-to-900 jobs for one year. To place the increased employment in perspective, we compare it to past employment levels in the construction sector.

⁴Assumes 75 percent of real estate transactions involve payment of a real estate commission.

In the third quarter of 1980, the last quarter for which detailed employment data is available, total construction employment averaged 14,044, of which general building and special employment was 8,861 (Alaska Department of Labor, Third Quarter, 1980). Of this total, 1,500 were in residential building and 5,800 in special trades. Since specialty trade workers also participate in nonresidential building, the total size of the residential construction work force is less than 7,700, and probably in the range of 2,500 to 3,000 workers.⁵ The 850-900 person years of employment generated by the state loan programs represent approximately 30-to-35 percent of the residential construction work force as measured in the Third Quarter 1980.⁶

Residential construction workers are usually nonunion in Alaska. Based on an average wage rate of \$14 per hour, construction income generated as a result of state loan programs is estimated at \$20 million.

Wholesale

The suppliers of construction material also benefit from an increase in residential construction activity. While the ratio of materials cost to the sales price varies depending on the design and size of structure, the choice and availability of materials, and the magnitudes of the other costs of production, it typically represents 30-to-40 percent of a structure's sales price.⁷ The total volume of

⁵This number is obtained by allocating the special trades employment into the residential, nonresidential, and heavy construction categories on the basis of employment in each construction category.

⁶Alaska Department of Labor estimates of construction employment in the third quarter of 1981 are approximately the same as actual employment in Third Quarter 1980.

⁷These figures are based on data collected by the Anchorage Real Estate Research Committee.

material purchases resulting from the state loan programs for the period July 1, 1980, through October 31, 1981, is estimated at \$33-to-\$44 million.

Unlike the income generated by Alaska financial institutions, real estate companies, and construction workers, a major portion of this income goes out of state since the Alaska economy imports a high proportion of the goods it uses. Based on data presented in the 1977 Census of Wholesale Trade for Alaska, we estimate that the cost of goods sold constitute approximately 75 percent of total sales. Assuming that all of the goods are imported, we estimate that 8 to 11 million dollars of income was generated in Alaska as a result of the state housing loan programs.

Indirect Impacts Not Quantified

There are two types of indirect impacts which we have identified but did not quantify. First, we did not quantify income flows in specific sectors due to insufficient information. These sectors include manufacturing, transportation, and mining. As with wholesale, these sectors are subject to a high level of out-of-state leakage. Also, we did not estimate the profits earned by landowners and homebuilders. The reason is that any estimate would be highly speculative, since we do not know the cost structure of the many transactions which affect profitability.

The second type of indirect impact not quantified is the multiplier effect. The effects of the income generated through real estate transactions depend on how the income is distributed. Major types of distribution include wages and salaries to employees; the payment for other operating expenses including rent, supplies, and services; and profits. Through distribution of the income generated through increased real estate activity, there is also an increase in activity in the general economy. This effect is referred to as the multiplier. While the concept of the multiplier is easily understood, the actual level of the multiplier is difficult to estimate. One

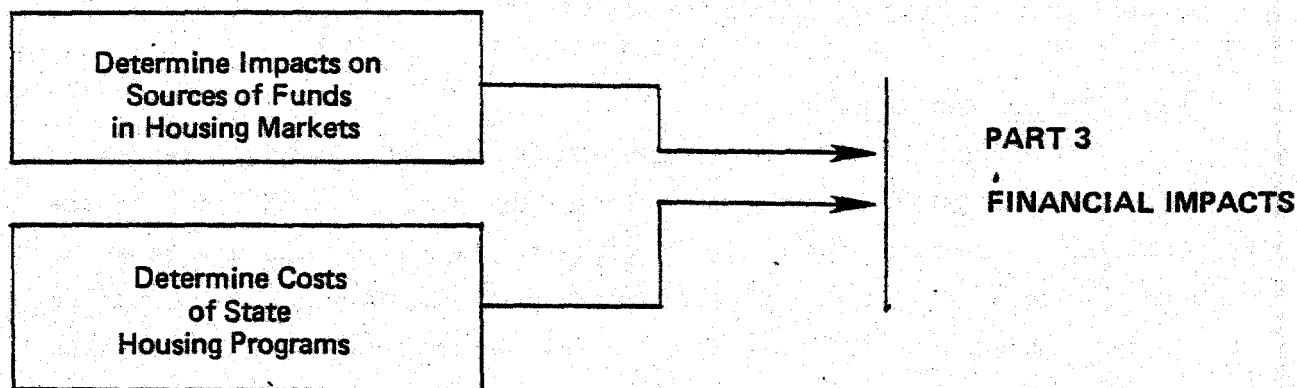
particular point is that the multiplier based just on real estate activity would be less than multipliers commonly quoted for the so-called "basic" sectors of the economy.

Total Versus Net Income

The estimates of income presented in this chapter represent estimates of total income generated by the state induced real estate activity. The net effect of the programs on Alaska income depends on two factors: out-of-state leakages and diversions of resources to single family housing. As discussed in the wholesale section, a high percentage of total income leaks out of state due to the import of building materials. Similar leakages can occur in other sectors in cases where out-of-state firms or owners are involved. For example, out of state banks providing construction loans and out-of-state insurance companies selling insurance. Another example is the employment of temporary migrants to Alaska in housing related jobs. The second factor which affects net income is the extent to which resources were diverted from other activities to owner occupied residential construction. For example, if construction workers would have had other work, the full effect of these jobs is not a net benefit. Since diversions did occur, our estimates overstate the effect of the state housing loan programs on incomes in Alaska.

Summary

In this chapter, we have identified the sectors of the Alaska economy which are affected directly by the increased activity in housing markets resulting from the state housing loan programs. Based on the estimate of state loan program induced housing activity of 1,000 new and 3,000 existing units, we estimate that the measurable indirect impact of the housing programs is approximately \$57 to \$65 million. This estimate factors in the leakages in only the wholesale sector. Leakages in other sectors were not estimated. Furthermore, the estimate does not include profits earned by landowners or builders, and the multiplier effects on the impact of diversion of resources.



The purpose of Part 3 is to assess the financial impacts on the sources of funds going into Alaska's housing markets as well as the costs of housing programs to the state. Impacts on sources of funds were determined by comparing the actual portfolios of primary lenders, secondary lenders, and homebuyers with what they probably would have been without state program interventions. State appropriations to the programs are identified. Program costs are then defined in present value terms and compared with the value of the subsidies received by homebuyers. The analyses and findings are presented in the following chapters:

Chapter 6: Impact on Sources of Mortgage Funds in Alaska

Chapter 7: Costs to State Government

CHAPTER SIX

IMPACT ON SOURCES OF MORTGAGE FUNDS IN ALASKA

The State of Alaska, through its public agencies, has for many years been a major source of funds for the financing of owner-occupied homes. During the past six years, the state's holdings of residential mortgages have increased over four-and-one-half times from approximately 6,400 mortgages in 1975 to slightly more than 31,000 in 1981, a loan portfolio worth close to two billion dollars (see Table 48).

The state's role is that of a secondary mortgage lender performing similar functions to that of the two national mortgage lenders, the Federal National Mortgage Association and the Federal Home Loan Mortgage Corporation; that is, the state, through its agencies, purchases loans from financial institutions which originate and service mortgage loans. Commercial banks, mutual savings banks, and savings and loan associations are the loan originators and primary lenders. Alaska Housing Finance Corporation, the State Pension Funds, and the Department of Community and Regional Affairs Housing Assistance Division perform the role of secondary mortgage lenders. The State's Veterans Loan Program was a major purchaser of mortgage loans until 1980, when the program ended and a Veterans Loan Program was initiated at AHFC.

The Pension Funds now hold almost 6,000 mortgages valued at almost \$315 million, which represents about 15 percent of the mortgages held by all state agencies. The funds place about \$60 million a year into residential mortgages. The State's Veterans Loan Program, which purchased loans made to veterans in the state from about 1975 to 1980, was turned over to AHFC in 1980. The dollar volume of mortgages purchased per year under the Veterans Program rose from \$43 million in 1976 to \$94 million in 1978, and then fell to \$29 million in 1979. There are presently about 4,000 mortgages worth about \$270 million in

TABLE 48. VOLUME OF ALASKAN RESIDENTIAL MORTGAGES HELD IN THE PORTFOLIOS
OF PRIMARY AND SECONDARY LENDERS, 1976-1981

	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>
<u>PRIMARY LENDERS</u>	<u>Dollars of Residential Mortgages Held in Portfolios (10⁶)</u>					
<u>Alaskan Financial Institutions</u>	\$515	\$579	\$605	\$558	\$520	\$505
Savings & Loan Institutions						
Commercial Banks						
Mutual Savings Bonds						
<u>SECONDARY LENDERS</u>	<u>Number of Residential Mortgages Held in Portfolios</u>					
<u>National Secondary Lenders</u>	8,346	8,279	9,718	10,187	9,280	8,637
Federal National Mort. Assoc.						
Federal Home Loan Mort. Corp.						
<u>State of Alaska</u>	6,386	9,336	13,089	17,193	22,460	30,157
State Pension Funds						
Veterans' Loan Program						
Non-Conforming Loan Programs						
Permanent Fund						
Alaska Housing Finance Corp.						
<u>Total Secondary Lenders</u>	14,732	17,615	22,807	27,380	31,740	38,794
	<u>Share of Secondary Market for Residential Mortgages in Alaska</u>					
<u>National Secondary Lenders</u>	57%	47%	43%	37%	29%	22%
<u>State of Alaska</u>	43%	53%	57%	63%	71%	78%

the Veterans Loan portfolio. These loans are about 13 percent of the residential mortgages held by state agencies (see Table 49).

AHFC holds by far the largest number of residential mortgages of any of the state agencies and is also the largest secondary mortgage purchaser in the state. At the end of the third quarter in 1981, AHFC held 19,500 mortgages valued at about \$1,400 million, representing approximately 70 percent of the residential mortgages held by the state (see Table 49).

The number of mortgages purchased by AHFC has been increasing each year since 1975, with the exception of 1978. Mortgage purchases doubled between 1976 and 1977, rose by 46 percent between 1978 and 1979; by 20 percent between 1979 and 1980; and then increased by about 120 percent between 1980 and 1981 (see Table 49).

In July 1980, the state initiated a below-market interest rate mortgage purchase program through Alaska Housing Finance Corporation which was available to all homebuyers in the state. Since only AHFC, with appropriations from the state, could buy mortgages written at below-market interest rates, AHFC effectively became the only secondary lender in the state for all qualifying mortgages. AHFC uses the Federal National Mortgage Association and Federal Home Loan Mortgage Corporation guidelines for underwriting standards, maximum loan amounts, and property qualifications. Therefore, all mortgages qualifying for the national secondary lenders also qualified for AHFC purchase, and AHFC completely took over the market formerly held by Federal National Mortgage Association (FNMAE) and Federal Home Loan Mortgage Corporation (FHLMC).

Mortgages not qualifying for purchase by AHFC, FNMAE, or FHLMC have been purchased by the State Pension Funds. For instance, mortgages for amounts greater than the \$149,000 maximum allowed by FNMAE guidelines or mortgages on nonowner-occupied homes will qualify for

TABLE 49. SOURCES OF FUNDS FOR HOMEOWNERSHIP IN STATE OF ALASKA 1976-1981

(Dollars in Thousands)

Source	1981 (1st three quarters)					1980				
	Number Mortgage Held	Dollars Mortgage Held	Number Mortgage Purchase	Dollars Mortgage Purchase	Share of Mort. Pur. in State	Number Mortgage Held	Dollars Mortgage Held	Number Mortgage Purchase	Dollars Mortgage Purchase	Share of Mort. Pur. in State
State of Alaska										
Alaska Housing Finance	19,463	1,379,311	6,537	577,006		13,370	850,634	3,582	261,317	
CRA-Nonconforming Loans	290 ^a	18,000	290	18,000						
Veterans Loans	4,030*	270,000*	0	0		4,600*	300,000*	69	4,835	
Permanent Fund	80	10,400	80	10,400						
Pension Funds	5,150	314,700	675	58,600		4,287	263,000	690	62,400	
State Mobile Home Loans	203	5,763				203	5,763	203	5,763	
Municipal Housing Bonds										
Commercial Banks										
Single Family		173,766					166,892			
Mobile Homes		54,444					64,476			
Mutual Savings Banks		64,500					64,000			
Savings and Loan	6,565	211,789				6,062	224,602			
Credit Unions							43,956			
Federal Nat'l Mortgage Assoc.	5,443		14	1,558		5,841	338,179	100	9,021	
Federal Home Loan Mort. Corp.	3,194		0	0		3,439		3*	210	
Bureau of Indian Affairs ^b								70	1,230	
Farmer's Home Administration			125	6,349				244	15,287	
Dept. Housing-Urban Develop. ^c			754	65,122				604	55,148	
Life Insurance Companies		5,300					5,300			
Total										

^aClosed and in-process loans.^bBIA Housing Grants.^cReservations for Mutual Help and Turnkey III Houses. HUD provides low-cost financing for Mutual Help and Turnkey III houses.

*Estimated

SOURCES OF FUNDS FOR HOMEOWNERSHIP IN STATE OF ALASKA 1976-1981
(Continued)

Source	1979					1978				
	Number Mortgage Held	Dollars Mortgage Held	Number Mortgage Purchase	Dollars Mortgage Purchase	Share of Mort. Pur. in State	Number Mortgage Held	Dollars Mortgage Held	Number Mortgage Purchase	Dollars Mortgage Purchase	Share of Mort. Pur. in State
State of Alaska										
Alaska Housing Finance	9,013	496,600	2,940	189,967		6,616	336,848	2,004	117,799	
CRA-Nonconforming Loans										
Veterans Loans			515	28,761				1,527	94,190	
Permanent Fund										
Pension Funds	3,480	221,000	720	61,200		2,373	178,000	694	59,000	
Municipal Housing Bonds			469	42,400						
Commercial Banks										
Single Family		175,500					201,100			
Mobile Homes		82,422					90,760			
Mutual Savings Banks		69,000					70,990			
Savings and Loan	4,656	230,735				4,259	241,988			
Credit Unions										
Federal Nat'l Mortgage Assoc.	6,302	363,965	820	70,468		5,976	319,883	1,811	142,047	
Fed. Home Loan Mort. Corp.	3,885		432*	37,171		3,742			60,355	
Bureau of Indian Affairs ^b			88	2,927				122	1,500	
Farmer's Home Administration			343	23,687				244	15,287	
Dept. Housing-Urban Develop. ^c			562	50,392				411	34,730	
Life Insurance Companies		6,200								
Total										

SOURCES OF FUNDS FOR HOMEOWNERSHIP IN STATE OF ALASKA 1976-1981
(Continued)

Source	1977					1976				
	Number Mortgage Held	Dollars Mortgage Held	Number Mortgage Purchase	Dollars Mortgage Purchase	Share of Mort. Pur. in State	Number Mortgage Held	Dollars Mortgage Held	Number Mortgage Purchase	Dollars Mortgage Purchase	Share of Mort. Pur. in State
State of Alaska										
Alaska Housing Finance	4,923	248,900	2,448	122,665		3,756	147,800	1,167	52,888	
CRA-Nonconforming Loans										
Veterans Loans			1,139	56,886				849	43,121	
Permanent Fund										
Pension Funds	1,813	136,000	687	58,400						
Municipal Housing Bonds										
Commercial Banks										
Single Family		197,500					176,200			
Mobile Homes		85,350					72,000			
Mutual Savings Banks										
Savings and Loan	5,235	237,653				4,909	204,433			
Credit Unions		58,000					62,000			
Federal Nat'l Mortgage Assoc.										
Fed. Home Loan Mort. Corp.	4,842		744	44,921		4,782		701	39,592	
	3,437			26,225		3,564				
Bureau of Indian Affairs^b										
Farmer's Home Administration ^c			89	1,291				60	2,482	
Dept. Housing-Urban Develop. ^c			219	14,464						
			323	24,108				216	17,633	
Life Insurance Companies										
Total										

SOURCES: Federal Deposit Insurance Corp.; Federal Home Loan Bank Board, Washington, D.C. and Seattle; Federal National Mortgage Assoc., Washington, D.C. and Los Angeles; Federal Home Loan Mortgage Corporation, Washington, D.C.; Department of Revenue, State of Alaska; State of Alaska Division of Loans and Veterans Affairs; Alaska Permanent Fund Corporation; National Credit Unions, Wisconsin; American Council of Life Insurance Companies; Department of Community and Regional Affairs, Housing Assistance Div.; Alaska Housing Finance Corporation; First Federal Savings and Loan Assoc.; U.S. Department of Housing and Urban Development; Bureau of Indian Affairs, and the U.S. Department of Agriculture, Farmers Home Administration.

purchase by the Pension Funds, but not by the other secondary lenders. Unlike FNMAE and FHLMC, the market for mortgages purchased by the Pension Funds was not altered by the initiation of the below-market interest rate programs.

The Department of Community and Regional Affairs Nonconforming Loan Program and the Rural and Mobile Home Loan Programs at AHFC are also mortgage purchase programs which do not use FNMAE guidelines. Mortgages purchased under these programs can be made on properties which, because of structural characteristics or location, would not qualify under FNMAE guidelines. Mortgage loans on properties such as these were, before the initiation of the loan programs, either held in the portfolio of state financial institutions, or the loans were never originated.

The state initiated a mobile home mortgage purchase program in 1980 which was turned over to AHFC with a portfolio of 200 loans worth approximately \$5,700,000. The mobile home loan program has been very active at AHFC, purchasing over 1,100 mortgages since the program began. Mobile home loans were, before the initiation of the state loan programs, held in the portfolios of the primary lenders in the state. For example, mobile home mortgages held by commercial banks in the state fell from \$82.5 million in 1979 to \$54.5 million in 1981.

Though the role of the national secondary lenders in Alaska effectively ended when the new state loan programs began in July 1980, the national share relative to the state's share of the secondary mortgage market has been decreasing for the last six years. In 1976, the two national secondary lenders held 53 percent, and the state held 47 percent of the mortgages in the secondary market. In 1980, the national lenders' share was 29 percent, and the state's share was 71 percent. The relative number of mortgages held by the state and the national lenders reversed themselves during the last six years even though the yearly number of mortgages purchased by the state and

the national secondary lenders did not change. The state, though, has been purchasing between 4,000 and 4,500 loans per year, and the national lenders have been purchasing approximately 1,200 per year (see Table 50).

While the state has been increasing its portfolio of mortgages, primary lenders in the state only increased their holdings of residential mortgages by \$43 million between 1976 and 1979. In 1976, savings and loan institutions, commercial banks, and mutual savings banks held, in residential mortgages, \$515 million, which climbed to \$605 million in 1978, then fell back to \$558 million in 1979, falling further to \$505 million in 1981.

During the same year that the below-market interest rate loan programs were initiated at AHFC, total secondary mortgage purchases by all buyers in the state fell by 20 percent, going from 5,850 in 1979 to 4,647 in 1980. Even though the new below-market interest rate programs of the state took away the market from the national secondary lenders (purchases fell from 1,250 in 1979 to 103 in 1980), the housing market was so inactive in 1980 that state purchases only rose by slightly more than 350.¹ (See Table 50.)

In 1981, however, housing markets in the state became very active (see previous section), and the number of mortgage purchases by state agencies almost doubled, going from 4,650 in 1980 to 8,850 in 1981. Although mortgage purchases by state agencies in 1981 were 112 percent greater than purchases in 1979, total mortgage purchases in Alaska by all secondary lenders increased by only 50 percent between 1979 and 1981.

¹Purchases at AHFC rose by a greater amount than total state purchases because the state's Veterans Loan Program was shifted to AHFC in 1980.

TABLE 50. NUMBER OF RESIDENTIAL MORTGAGES PURCHASED
BY SECONDARY LENDERS

	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>
National Secondary Lenders	1,200	2,600	1,250	103	0
Federal National Mortgage Association					
Federal Home Loan Mortgage Corporation					
State of Alaska	4,274	4,225	4,175	4,544	8,850
Alaska Housing Finance Corp.					
State Pension Funds					
Veterans Loan Program					
Non-Conforming Loan Program					
Permanent Fund					
Municipality of Anchorage			425		
Total Loans Purchased by Secondary Lenders	5,474	6,825	5,850	4,647	8,850

SOURCES: See sources, Table 48.

To sum up, the increase in loan purchases in 1981 by the state was due to the following factors: (a) loans were no longer purchased by national secondary lenders; (b) housing activity and total mortgage originations went from an unusually low year in 1980 to an unusually high one in 1981;² (c) AHFC loan purchases increased more rapidly than the state's involvement as a whole because the Veterans Loan Program (which had been purchasing as many as 1,500 mortgages per year) was turned over to AHFC; and (d) the state began to purchase mobile home mortgages.

The state's increasing participation in the purchase of residential mortgages has been funded by a combination of state funds and bond sales (see Table 51). During the last seven years, over one billion, two hundred and seventy million dollars of state funds have been allocated for the purpose of purchasing residential mortgages. Added to the state funds has been an additional \$1,720 million raised by the sale of bonds. The ratio of state funds to money raised by the sale of bonds has gone from 2.13 in 1976, down to 60 percent in 1979 and back to 58 percent in 1981. This ratio is expected to decrease still further to 45 percent in FY 1982 because AHFC has restructured its bond sales to be able to raise more bond dollars for each state dollar used. This increased leverage of state dollars will allow for an increase in the volume of mortgage purchases in FY 1982 for the same level of state funds.

During FY 1981, the state imported \$610 million from "out of state" sources for mortgage purchases through bond sales at AHFC. During the same period, state funds of \$353 million were directed into the purchase of residential mortgages. Of the total \$963 million, almost 92 percent was used for mortgage purchases through AHFC. The State Pension Funds, the Permanent Fund, and the Nonconforming Loan Program used the remaining \$80 million.

²Fifty percent higher than in 1979 and 30 percent higher than in 1978.

TABLE.51. STATE OF ALASKA FUNDS AND BOND SALES
FOR OWNER-OCCUPIED RESIDENTIAL MORTGAGES, 1976-1982

(millions)

	State Funds						Bond Sales	Total Funds
	Veterans Program	Persion Funds	CRA	Permanent Fund	AHFC	Total State Funds		
1976	43.0	58.0			.891	102	48	150
1977	56.9	58.4			14.41	130	80	210
1978	94.0	59.0			.995	154	182	336
1979	28.7	61.2			10.1	100	169	269
1980 ^b	4.8	62.4				7.2	39.4	106.6
1981 ^c		58.6	10 ^c	10.4	274	353	610 ^c	963
1982 (budget)		60.0 ^d	40 ^c		265	365	592 ^e	957
TOTAL	227.4	417.6	50	10.4	565.43	1,271	1,720.4	1,992.6

^a Rows may not sum due to rounding.

^b AHFC changed fiscal years from November 30th to June 30th.

^c For year ended June 30. ^d Projected for 1982.

^e 592 is bond ceiling, AHFC requesting additional 210.

The effects of the new loan programs at AHFC have been to substitute bond dollars for dollars raised through the national secondary lenders and to increase the importance of the state as a primary source of mortgage funds. Portfolios of primary lenders in the state were not altered significantly by the new loan programs; dollars invested in residential mortgages by primary lenders have been decreasing in constant value dollars for several years, however, especially with the high market interest rates of the past two years. Savings and loan institutions and mutual savings banks would probably have increased their holdings of residential mortgages during the last two years if the state purchase programs had not existed.

Homeowner equity was also substituted for state and bond dollars. Because of the reduced interest rates at AHFC during 1980 and 1981, homeowners who sold a home and bought another had an incentive to withdraw equity dollars and substitute borrowed money for their own. During the first twelve months of the program, the interest rates on the total amount borrowed were below current market interest rates, and, therefore, it would have benefited homebuyers to borrow as much as possible and use lower downpayments. Since June 1981, the interest rates at AHFC on amounts borrowed over \$90,000 have been higher than market rates, and, therefore, homeowners no longer have any added incentive to borrow more than \$90,000.

To estimate equity withdrawal, we took a sample from the Multiple Listings Service, Inc., of homes sold in Anchorage in the first three quarters of 1981. The average sales price was \$105,000, and the median homeowner equity was \$40,000. During this period, the median downpayment of persons financing homes through AHFC, who were also previous homeowners, was \$6,000. After allowing for selling and buying costs, the median withdrawal of equity per previous homeowner in Anchorage was \$24,000.

Slightly more than 4,000 previous homeowners financed homes through AHFC during the period from July 1980 through October 1981, and by using a more conservative figure of \$15,000 instead of \$24,000 to allow for lesser equity of homeowners outside of Anchorage, total withdrawal of owner equity equaled at least \$60 million.

The new loan programs caused substitution of state and bond dollars for dollars from FNMAE, FHLMC, and financial institutions in the state, and for equity dollars of homeowners. However, total mortgage demand would perhaps have been reduced by as much as one-half without the lower interest rates provided by the state loan programs.

Total home sales would have been reduced by approximately one-third (see previous section); assumptions would have increased to perhaps 20 percent of sales; and homeowners would have increased their equity financing, thereby reducing the total demand for mortgages.

CHAPTER SEVEN
COSTS TO STATE GOVERNMENT

During the sixteen-month period, July 1980 through October 1981, the State of Alaska appropriated approximately \$667.1 million in support of its mortgage loan programs. Of this total, approximately 43 percent (\$286.0 million) was in the form of transferred portfolio assets (primarily the Veterans Program mortgage portfolio), with the remaining 57 percent (\$381.12 million) in the form of appropriated funds (Table 52).

TABLE 52. ALASKA STATE GOVERNMENT APPROPRIATIONS
IN SUPPORT OF MORTGAGE LOAN PROGRAMS
JULY 1980 - OCTOBER 1981^a

	Total Appropriations (millions of dollars)		
	<u>Cash</u>	<u>Portfolio of Assets</u>	<u>Total</u>
<u>AHFC Programs</u>			
State Assisted Mortgage ^b	\$312.0	\$236.0	\$548.0
Home Ownership Assistance ^b	2.5 ^d	50.0	52.5
Rural	23.7		23.7
Mobile Home	18.5		18.5
<u>DCRA Programs</u>			
Nonconforming	24.4		24.4
TOTAL	\$381.1	\$286.0	\$667.1

^aIncludes FY 81 and one-third of FY 82 appropriations.

^bIncludes 1 percent veterans buy-down.

^cIncludes Rural Housing Mortgage Purchase and Rural Nonowner-Occupied Purchase Programs.

^dIncludes \$4.4 million in Rural Housing Bonds purchased by State of Alaska.

The State Assisted Mortgage Program received the largest share of these appropriations, approximately 82 percent, with \$236.0 million in assets and \$312 million in funds appropriated to it during the sixteen-month period. The Home Owner Assistance Program was appropriated \$52.5 million, with most of it (96 percent or \$50.0 million) being in the form of transferred portfolio assets. The two rural programs administered by AHFC and the one administered by DCRA, together, received \$48.1 million, all of it in the form of appropriated funds. (This amount includes \$4.4 million in rural housing bonds purchased by the State of Alaska.) The mobile home program was appropriated \$18.5 million, all of it in funds.

The state's appropriations in support of the mortgage loan programs, however, are not the same as the costs to the state. It is as if the state had appropriated funds to a single, special-purpose housing agency and that agency had done two things with its money. First, it used its funds to buy a collection of income-earning assets. Second, it used the value of its new assets to borrow against by going into debt (i.e., by taking out loans secured by the assets). If the agency were a profit-making organization, it would borrow at one rate and lend at a higher rate. The difference between the two rates would be its profit. This is how a commercial bank operates. It borrows at one rate (e.g., from its depositors) and lends at a higher, market rate of interest. The difference between what it pays its depositors in this example and what it receives from its loans is equal to its profit (after all operating costs are deducted).

Since our hypothetical housing agency was created to subsidize homeowner mortgages and not make a profit, it does just the reverse. It uses its appropriation to buy assets (i.e., homeowner mortgages) at a lower rate and borrows at a higher, market rate of interest. The difference between the market rate and the subsidized rate is the equivalent of a profit-making organization's "losses"; and the present value of these losses, over the lifetime of the loans, equals the cost of the hypothetical housing agency's program to the state.

The present value of the difference between the market interest rate at which the state borrows and the subsidized rate at which it lends is the minimum cost to the state of its housing programs. Actual appropriations required, however, are also affected by the efficiency with which the programs are managed. The more accurately the programs forecast their average life of loan or better control their cash flow, the smaller the appropriation required for each point of interest subsidized.

During the sixteen-month period, July 1980 to October 1981, the largest program was State Assisted Mortgages (accounting for about 85 percent of all mortgages purchases). Both its interest rate differential cost and appropriation requirements per point of interest subsidy showed significant changes. Table 53 illustrates the range of interest rate differentials experienced by this program during the sixteen-month period and how state costs were affected.

TABLE 53. STATE ASSISTED MORTGAGE PROGRAM COST
UNDER DIFFERENT INTEREST RATES
(Average Mortgage Amount of \$88,500
And Life of Ten Years)

	<u>Interest Differential</u>	<u>Average Cost to State</u>
Sixteen-Month Average	4.18	\$17,800
Sixteen-Month High	7.036	26,400
Sixteen-Month Low	.25	1,300
Long-Term Average	3.00	12,900

SOURCE: Estimated by the Institute of Social and Economic Research.

The lowest interest rate differential during the sixteen-month period occurred as a result of the July 1980 bond sale. Federal law at that time allowed the issuance of tax-exempt state bonds to support housing programs. The subsidy was set at a rate of 10 percent for the first \$90,000 and the tax-exempt bonds went at 10.25 percent. To buy down the spread of 0.25 percentage points cost the state \$1,300 on an average mortgage of \$88,500. By October 1981, the situation had totally changed. The state was no longer allowed to issue tax-exempt bonds for housing programs, and AHFC had to compete in the general bond market, at market rates of interest, for its money. At the same time, national demands for funds, coupled with a restrictive monetary policy by the Federal Reserve Board, had pushed interest rates to an all-time high. The net result was that the state had to pay a 19.41 percent rate at its last bond sale. The subsidized rate was set at 12.375 percent (by a formula adopted by the legislature), and the interest differential had climbed to 7.036 percentage points. The costs to the state of buying down those 7.036 points for the same \$88,500 mortgage discussed earlier had climbed to \$26,400.

Over the sixteen-month period of the study, the average buydown was a differential of 4.18 points, at a cost of \$17,800 for an average \$88,500 mortgage. Under the formula adopted by the legislature, the interest rate differential will be adjusted over the next several bond sales until a stable spread of 3 points is reached. At this long-term rate spread, the average cost to the state of the buydown subsidy will be \$12,900 for an average value mortgage of \$88,500.¹

While the rise in the subsidized point spread was driving up the costs to the state, AHFC was gaining experience improving its funds management and requiring lower appropriations for the buydown of each point of interest rate. Table 16, Chapter One, reports state appropriations as a percent of total funds for each percentage point buydown of the interest rate. Between the last half of 1980 and the last

¹An average loan life of ten years was used for all calculations.

half of 1981, the ratio fell by about 40 percent. This implies that AHFC can now operate at the same level, incurring the same costs and obligations as it did a year ago, with only about 60 percent of the appropriation level it then required.

Table 54 uses sixteen-month averages to compare the costs of Alaska's several mortgage purchase programs. As already discussed, the State Assisted Mortgage Program was largest in terms of both number of mortgages purchased (63 percent) and costs to the state (62 percent). The Veterans Program adds an additional point to the buydown; during the sixteen-month period, this increased state costs by about \$4,400 for each average \$88,500 mortgage purchased. This program accounted for about 19 percent of mortgages purchased and 23 percent of the total costs to the state.

The Home Owner Assistance Program is targeted toward the state's low-income population and offered the largest point buydown of any program, 9.05 percent. This resulted in the highest average cost to the state of each mortgage purchased: over \$26,000, even with an average mortgage value of only \$63,400. The size of the program, however, was small, and it accounted for only 7 percent of total mortgages purchased and 10 percent of total costs to the state.

The rural programs administered by AHFC and DCRA, together, account for about 4 percent of both total mortgages purchased and costs incurred by the state. The two agencies had different administrative procedures, however, and AHFC bought down rural mortgages by 6.3 points on the average, while DCRA bought them down by only 4.18 points. As a result, the buy-down cost of an average rural mortgage of \$68,000 was \$20,100 in the AHFC administered programs and \$13,600 in the DCRA administered program.

All together, the State of Alaska incurred about \$200 million in costs buying down the interest rates (by point spreads which varied by

TABLE 54. COST OF MORTGAGE PURCHASE PROGRAMS TO STATE OF ALASKA
JULY 1980 - OCTOBER 1981

	<u>Average Loan Amount^a</u>	<u>Average Interest Differential</u>	<u>Average Cost to State^b</u>	<u>Number of Loans</u>	<u>Total Cost to State (millions of dollars)</u>
<u>AHFC Programs</u>					
State-Assisted Mortgages	\$88,500	4.18%	\$17,800	6,988	\$124.4
Veterans Loans	88,500	5.18%	22,200	2,071	46.0
Home Ownership Assistance	63,400	9.05%	26,200	733	19.3
Mobile Homes	23,500	4.18%	4,800	891	4.3
Rural Housing ^c	68,000	6.3%	20,100	213	4.3
<u>DCRA Programs</u>					
Nonconforming Loans	68,000	4.18%	13,600	200	2.7
TOTAL				11,096	\$201.0

^a Average life of mortgage assumed to be ten years.

^b Differential interest cost only. No adjustment made for different residual principal values at end of mortgage life.

^c Includes both Rural Housing Mortgage Purchase and Rural Nonowner-Occupied Purchase Programs.

SOURCE: Estimated by the Institute of Social and Economic Research.

program) over the sixteen month study period. As a result, approximately 11,000 households in the state purchased homes at less than market rate mortgage interest costs.

The present value of the interest subsidy to the homebuyer varied not with the size of the state's interest buydown, however, but with the differential between his mortgage rate and the mortgage rate available through private lending institutions. These values are given in Table 55.

The value to the homeowner of the interest subsidy under the State Assisted Mortgage Program during July 1980 was \$12,150; by June of 1981, the subsidy's value had climbed to \$25,600, after which it began declining under the formula adopted by the legislature. The present value of the subsidy to homebuyers is currently about \$17,000 (for an average mortgage amount of \$88,500) and will decline to a value of about \$13,000 when the stable buydown of three points mandated by the legislative formula is reached.

The cost to the state in July 1980 was only about \$1,300 for a homeowner's subsidy value of around \$12,150 on an average mortgage amount of \$88,500. The difference between the state's costs and the homebuyer's subsidy was the cost incurred by the federal government in giving tax-exempt status to the state's housing bonds. By the end of the study period, the tax-exempt status of housing bonds under federal law had been eliminated, and it cost the state about \$26,400 to produce a subsidy to homebuyers of about \$16,950. This occurred for several reasons. The removal of federal tax-exempt status from housing bonds increased state costs enormously since the state had to absorb the total costs of the interest rate buydown. At the same time, interest rates in national bond markets, where AHFC was obtaining its money, were reaching new highs.

TABLE 55. PRESENT VALUE OF INTEREST SUBSIDY TO HOMEBUYER^a

	<u>Average Loan Amount</u>	<u>Sixteen- Month Low</u>	<u>Sixteen- Month High</u>	<u>Sixteen- Month Avg.</u>
<u>AHFC</u>				
State Assisted Mortgage and Pledged Account Program	\$88,500	\$12,150	\$25,600	\$19,000
Veterans Loan Program	88,500	17,150	29,400	23,200
Home Ownership	63,400	21,050	28,850	26,900
Mobile Home	23,500	3,400	6,850	5,000
Rural Housing	68,000	14,000	23,400	21,000
<u>CRA</u>				
Nonconforming Loan	68,000	9,850	19,900	14,400

^aCalculated from the following:

- (1) Ten year mortgage
- (2) 7/80 FNMAE Rate - 12.807; AHFC Rate 10.0
- (3) 6/81 FNMAE Rate - 16.3; AHFC Rate 10.0
- (4) 10/81 FNMAE Rate - 16.5; AHFC Rate 12.375
- (5) 7/80 - 10/81 Average FNMAE Rate - 15.4; Average AHFC Rate - 10.88

SOURCE: Calculated by ISER.

This was a short-term phenomenon and could not persist. Subsequently, bond sales by AHFC under the new legislative formula began moving the State Assisted Mortgage Program to a stable buydown of three interest rate points. At that time, the value of the subsidy to homebuyers and the costs to the state should be about the same.

However, the cost to the state will always be determined by its cost of borrowing money, while the homeowners' subsidy will always be determined by the cost of borrowing money by other secondary mortgage institutions such as FNMAE. Because the national institutions have portfolios which are both larger and less geographically concentrated, they will probably be able to obtain funds at approximately three-quarters to a point lower than AHFC. This would imply a permanent difference of the cost of buying down three-quarters to one point between the present value of the subsidy to homebuyers and the program's cost to the state. If this occurs, it may become more efficient for the state to buydown the FNMAE rate than to intervene in the state's secondary markets directly.

4. The fourth part of the document discusses the consequences of failing to maintain accurate records. It states that individuals or organizations that fail to comply with the requirements may be subject to fines, penalties, and even criminal prosecution.

The purpose of Part 4 is to assess future fiscal impacts in terms of the number and value of state mortgages and their implications for appropriations. This is done by using population, income, interest rate, and household size trends to project total future home sales and state mortgages for 1986 and 1980. After using these projections to illustrate potential state appropriation requirements, the volatility of the forecast to unforeseen national market shifts is discussed in terms of forecast ranges of probability. The analyses and findings are presented in the following chapter:

Chapter 8: The Fiscal Impact of Alaska's Housing Programs

CHAPTER EIGHT

THE LONG TERM FISCAL IMPACT OF ALASKA'S HOUSING PROGRAMS

Introduction

This chapter focuses on the long-term fiscal impacts of the state's housing programs. Up to this point in our study, we have described how the housing programs work and have assessed their effectiveness and how they directly and indirectly impact both the housing market and the financial markets which finance housing in Alaska. The chapter immediately preceding ascertained the costs the state bears as a result of operating these programs. Our task in this chapter is to draw upon this knowledge of how the state's housing programs currently affect the Alaska housing market and to project the fiscal demands the programs will impose upon the state over the next ten years should the programs continue as currently structured.

To prepare such a projection or even a range of projections is a most ambitious undertaking. It involves projecting not only future levels of economic activity in Alaska and the resulting population growth but also the formation of new households in Alaska, the future mix of housing choices (i.e., to rent or own a house, condominium, duplex, etc.), the future price and supply of housing, the abilities of people to buy the housing of their choice, and the share of the Alaska housing market the state's programs will finance. Obviously, substantial uncertainty afflicts each of these required projections and the results of our projections can only be interpreted with a full appreciation of these uncertainties. We make every effort to subject each projection to rigorous statistical tests and professional judgments. Nonetheless, the projections which follow can only be viewed as approximations of the magnitude and range of possible fiscal impacts the programs will impose upon the state over the next ten years.

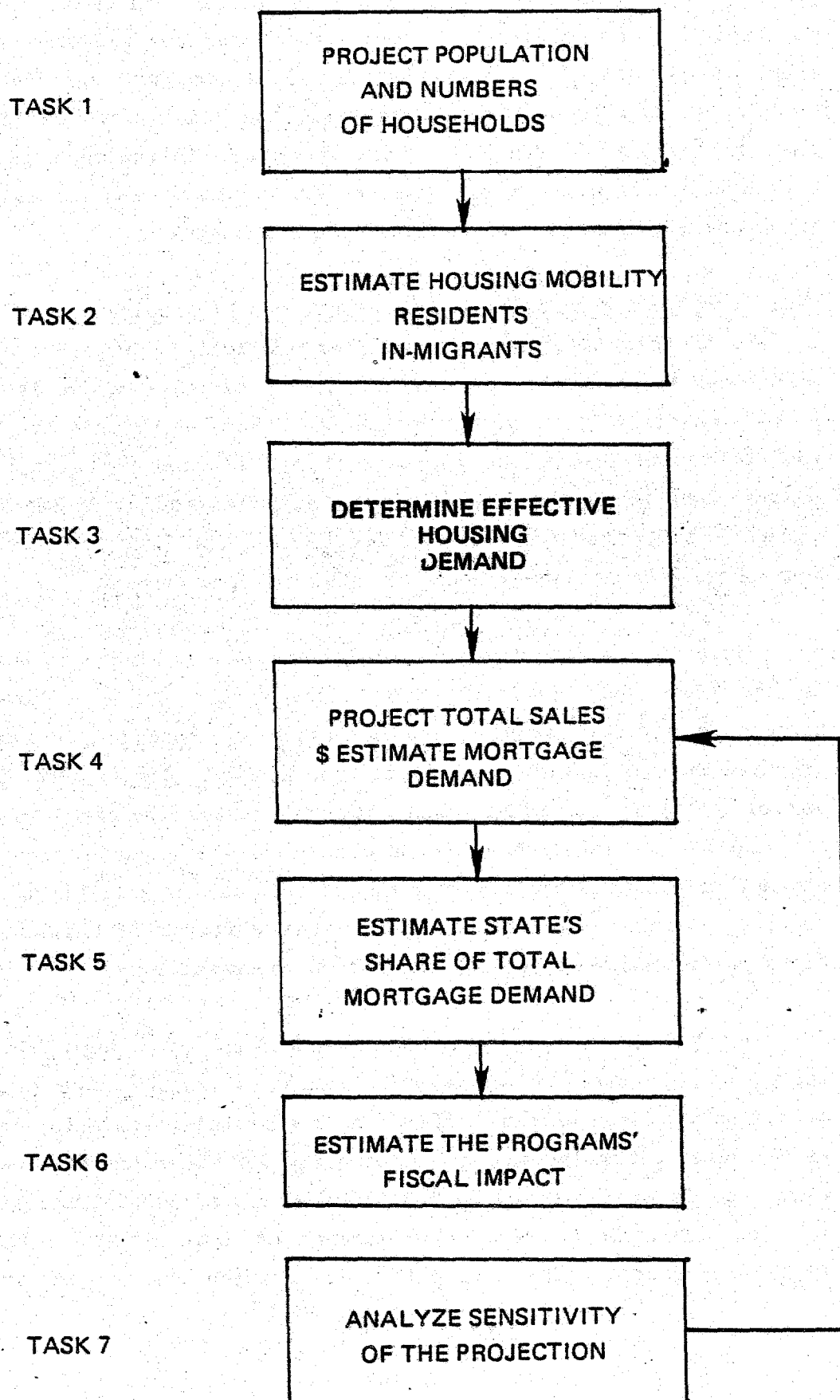
This admonition of precaution is not to suggest that the projections which follow are of no value. Quite to the contrary, we regard the approach employed as the most appropriate way the state can assess its financial liabilities. The methodology designed produces projections which systematically incorporate checks and balances and explicitly identifies each major variable and the assumptions on which it was constructed. If experience or better information proves these assumptions to be in error, the effect of the error on the final housing demand projection can be systematically traced and adjusted and a revised projection prepared.

Methodology

The principal task at hand is to project total mortgage demand in Alaska to 1990 and to estimate the market share state housing programs will finance and at what total cost to the state. Although the details of preparing the mortgage demand forecast and the fiscal impact assessment become somewhat technical, the logic required to produce them can be simplified and explained in a step-by-step sequence. Figure 6 displays the seven major tasks we have undertaken to produce our assessment of the fiscal impacts of the state's housing programs.

The first four tasks are essentially interdependent. For each year of the forecast, they address the questions: how many households are in Alaska; of those households, how many are likely to move or change their housing; what determines people's housing choices; and can people afford the housing of their choice. The fifth task examines the current condition of Alaska's housing market and the sources of housing finance and estimates (assuming current program policies persist) the market share the state's housing programs will underwrite. Based on the analysis of costs the program imposes on the state conducted in Chapter Seven, an estimate of the housing programs' total fiscal impact is then estimated. The final task analyzes how the projections would change if interest rates were to fluctuate.

FIGURE 6. A METHOD OF PROJECTING MORTGAGE DEMAND



Unfortunately, for us as researchers, the work required to perform each task shown in Figure 3 is not as simple as the above description might suggest. Unfortunately, for the reader, to understand the results of our analysis requires a more thorough explanation of how we actually performed each task, the assumptions we made, and the conclusions we reached. Hopefully, the following pages, once carefully read, will enable the reader to understand and critically judge our methods and the results we have produced.

Task 1: Project Population and the Number of Households

To be able to get to the point of projecting mortgage demand, we first need to be able to project the demand for housing, be it single-family, multifamily, a duplex, or mobile home. We do this by projecting population growth and composition and household formations. We assume each household needs shelter and, thereby, represents additional housing requirements. Subsequently, in Task 2, we separate housing demand into the demand for owner-occupied housing.

Table 56 presents two sets of projections of Alaska's population to the year 1990, each of which includes the projected number of households and the average household size. These projections were prepared by the Institute of Social and Economic Research through the use of its computer model of the Alaska economy, referred to as the MAP model. We selected a high and a low development scenario in an attempt to estimate the likely range of economic development which may occur in Alaska. Appendix A details the different economic assumptions which went into our low and high development cases.

The MAP model generates both economic and demographic data. Increases in economic activity in Alaska stimulate population immigration with concomitant effects on the state's population composition. Thus, Alaska's total population in 1990 under the high development case is projected to be 562,488 compared to 503,232 residents in the low development case, a difference of some 59,000 people and 20,000 households. The main difference between the two scenarios is

that the high development case assumes the construction of a natural gas pipeline, which explains the rapid increase in population growth from 1985 to 1987.

TABLE 56. PROJECTIONS OF ALASKA'S POPULATION AND
NUMBER OF HOUSEHOLDS^a
1980-1990

	High Development Case			Low Development Case		
	Population	Households ^b	HH Size ^c	Population	Households ^b	HH Size ^c
1980	400,457	131,463	2.933	400,457	131,463	2.933
1981	412,395	135,789	2.926	410,320	135,229	2.924
1982	428,825	141,264	2.923	425,440	140,472	2.920
1983	444,492	147,015	2.918	436,268	144,728	2.908
1984	463,274	153,670	2.911	446,033	148,731	2.894
1985	498,151	164,912	2.921	460,344	153,936	2.886
1986	531,933	176,387	2.919	474,491	159,265	2.875
1987	545,304	182,636	2.892	482,066	163,074	2.854
1988	547,669	185,727	2.857	491,274	167,469	2.835
1989	558,208	190,980	2.833	498,962	171,419	2.815
1990	562,438	194,444	2.804	503,232	174,458	2.790

^aThe low case is created by subtracting an assumed Northwest Gasline impact from the railbelt low case. The high case is based on the moderate case in the railbelt study.

^bHousehold estimates are adjusted to reflect 1980 census results.

^cPeople in households per housing unit. Excludes persons in group quarters.

SOURCE: Alaska Economic Projections for Estimating Electricity Requirements for the Railbelt, Goldsmith and Porter, 1981.

In the high development case, housing demand increases on the average about 6,300 units per year in contrast to the low development case in which housing demand grows at approximately 4,300 units per year. Thus, while it is apparent that actual rate of economic growth will significantly affect housing demand in Alaska, we project housing demands to increase some 4,000 to 6,000 units per year.

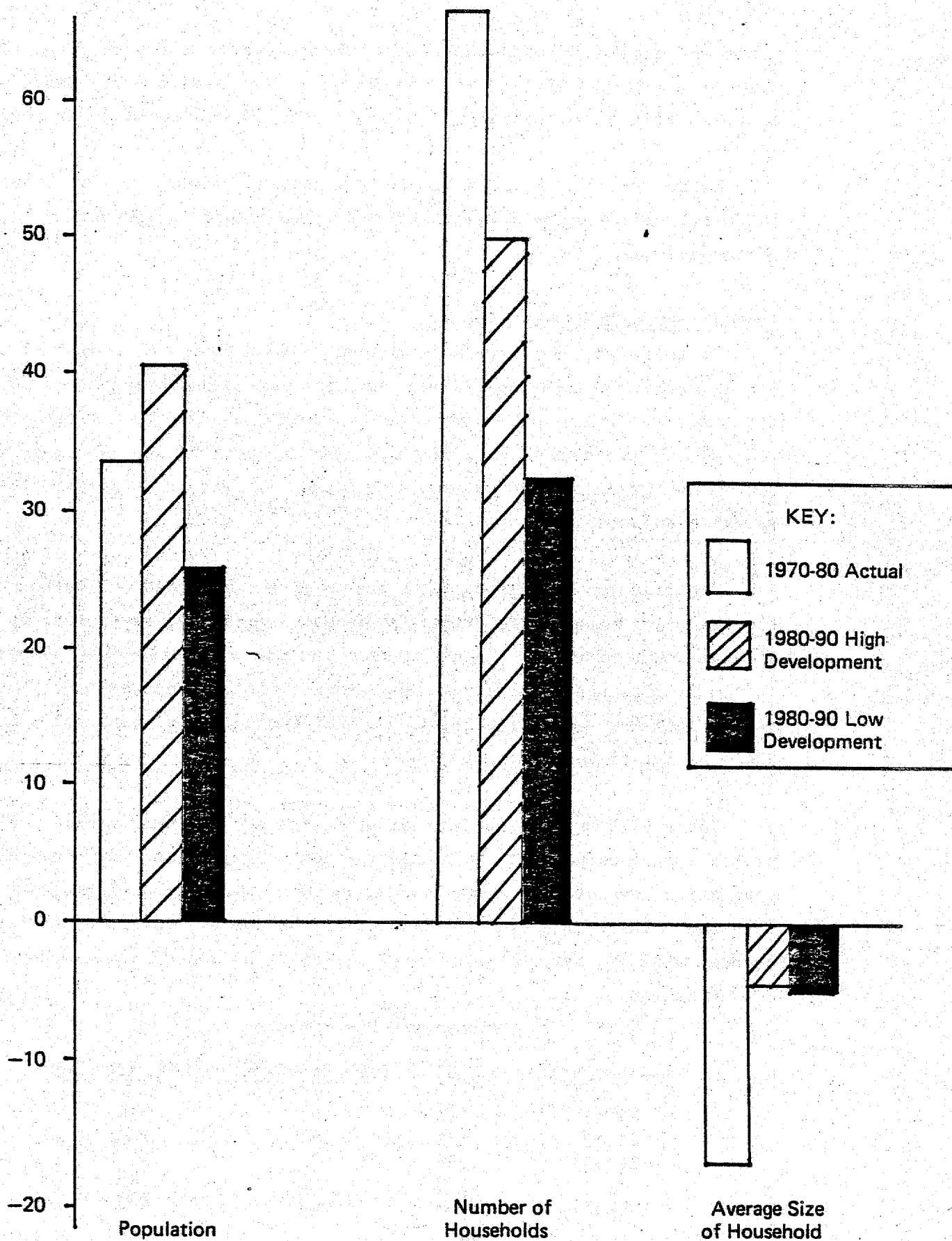
To provide a point of comparison, Figure 7 contrasts our two sets of projections for the 1980s to the actual changes which occurred in Alaska in the 1970s. In summary, in our high development case, total population grows at a faster rate than it did in the 1970s, while in the low development case, the rate of growth is somewhat slower, although still substantial.

Figure 4 also illustrates an often overlooked change which occurred in Alaska throughout the past decade, which dramatically affected the demand for housing--that is, that the number of households in Alaska increased at twice the rate that the population increased. The influx of young adults with no or small families, rising divorce rates which divided one household into two, and continuing the decline in birth rates, all combined to generate a rapid rate of growth in household formations.

Although we project the rate of household formations in the 1980s to continue to exceed the overall rate of population, we do not expect the difference between the two rates to be as great as they have been. The explanation for the narrowing of the different growth rates is twofold. One reason has to do with the size of the population by age group, and the second has to do with changes that affect household formations within a particular age group.

Without going into lengthy detail, the effect young immigrants have on the overall population declines in relative importance (statistically) as the resident base of the population increases. Also,

FIGURE 7. A COMPARISON OF THE RATE OF CHANGE IN POPULATION, NUMBER OF HOUSEHOLDS, AND AVERAGE HOUSEHOLD SIZE, 1970-80 AND 1980-90



there are limits to such things as the decline in birth rate and the rise in divorce rates, and we have incorporated these limits, based on national trends and research into our model of household formations.

Having projected net increases in housing demand, the next task is to estimate housing mobility or the total number of households that change housing.

Task 2: Estimate Housing Mobility

In this task, we estimate the number of households that will be in the market for housing. These include households moving to different housing within the state, newly formed households looking for housing for the first time, and in-migrating households. We classify the first group as movers and the other two groups as new-to-the-market households.

The size of each group is a function of the age distribution of the heads of households, primarily because age serves as an indicator of life cycle changes. These changes include such things as changes in family size and composition, employment, income, and wealth. Thus, it becomes essential to project not only the number of households but also the age of heads of households.

Table 57 projects the age distribution of household heads. The projection incorporates both the effect of aging of the resident population and of age shifts resulting from the out-and-in-migration exchange. The effects of development on the age of household heads is demonstrated by comparing the 1990 age distribution of the two development cases.

Percentage Distribution

<u>Age of Head</u>	<u>1980</u>	<u>1990 Low Case</u>	<u>1990 High Case</u>
< 24	.114	.108	.115
25-29	.179	.141	.160
30-55	.555	.583	.573
.55 <	.153	.168	.151
Total	1.000	1.000	1.000

TABLE 57. PROJECTED NUMBERS OF ALASKA HOUSEHOLD HEADS BY AGE
1980-1990

Year	Age of Household Heads				Total(s)
	< 24	25 - 29	30 - 55	55 <	
<u>High Development Case</u>					
1980	15,011	23,300	73,001	20,151	131,463
1981	15,666	22,999	76,113	21,009	135,789
1982	16,811	23,239	79,350	21,862	141,264
1983	17,907	23,756	82,635	22,715	147,015
1984	19,283	24,680	86,131	23,575	153,670
1985	22,648	27,042	90,689	24,449	164,912
1986	25,648	29,798	95,594	25,347	176,387
1987	25,405	31,167	99,786	26,277	182,636
1988	23,686	31,265	103,525	27,250	185,727
1989	23,467	31,527	107,710	28,276	190,980
1990	22,470	31,137	111,471	29,364	194,444
<u>Low Development Case</u>					
1980	15,011	23,300	73,001	20,151	131,463
1981	15,386	22,839	75,993	21,009	135,229
1982	16,472	22,970	79,167	21,862	140,472
1983	16,888	23,039	82,085	22,715	144,728
1984	17,143	23,105	84,907	23,575	148,731
1985	18,002	23,545	87,939	24,449	153,936
1986	18,804	24,119	90,995	25,346	159,265
1987	18,738	24,312	93,747	26,276	163,074
1988	19,039	24,599	96,584	27,248	167,469
1989	19,119	24,751	99,280	28,270	171,419
1990	18,794	24,610	101,710	29,351	174,458

SOURCE: Based on moderate and low scenarios in Goldsmith and Porter (1981). 1980 figures are estimates derived from the census and are used to adjust scenarios.

To estimate the total flow of in-migrating households, we first estimate the number of households migrating from Alaska and add this number of households to the net increase in households. Again, because of the importance of the age of the household head, we make all of our projections by age group.

Table 58 estimates the annual out-migration rates for Alaska between 1970 and 1978, and compares these rates to a study conducted in Anchorage and to other selected national rates. Although the out-migration rate we have estimated is lower than the Anchorage study, it appears to be within the range of the country's overall mobility experience.

TABLE 58. ESTIMATED RATES OF ANNUAL OUT-MIGRATION
FOR ALASKA AND THE UNITED STATES
BY AGE OF HOUSEHOLD HEAD

Age of Household Head	Annual Rate of Out-Migration			
	Alaska Estimates		U.S. Actual ^c	
	1978 ^a	Survey ^b	High	Low
18 - 24	.11	.25	.16	.08
25 - 29	.07	.18	.13	.07
30 - 55	.05	.11	.05	.03
55 <	.06	.10	.02	.01

^aThe 1978 estimate is the 1970 population survived to 1978 minus the 1978 population living in Southcentral Alaska in 1978 (Alaska Public Survey) who lived in Alaska in 1970, divided by the eight years, the dividend of which is expressed as a percent of the 1970 survived population.

^bThe "Ender Survey" of 1978 reported the share of household heads with plans to move in 1978. The Opinions of the Anchorage Citizens on Local Public Policy Issues, 1977.

^cThe rate reflects the proportion of total households which moved in 1979. The high estimates include all movers, except for those moving within the same SMSA. The low estimates exclude movers whose origin and destination are outside an SMSA. From U.S. Dept. of Commerce, Geographical Mobility: March 1975 to 1979, 1980.

By applying these rates of out-migration to the projected numbers of Alaska household heads by age in Table 57, we can estimate the total number of out-migrating household heads by age. Similarly, by deducting this number of migrants from the preceding year's projections, we, in effect, estimate the number of in-migrating households by the age of the head of the household. These estimates are shown in Table 59.

The major determinants of mortgage demand are the demand for housing and the household's housing choice decision, i.e., the type of housing--single-family, multifamily, duplex, or mobile home--chosen and whether to own or rent.

It is important to remember that mortgage demand is influenced by the total demand for housing, not simply the demand for new housing units. While the increase in the housing stock is an important concern, total demand includes not only the increased demand generated by increased population but also by the turnover of existing owner-occupied housing.

Although the growth in total population and the demand for new housing receive the greatest attention, as mentioned earlier, there are other equally important changes which affect the demand for housing. Even in a region with a stable level of population, the population is not static. Children age and form their own households; families grow and require more living space; and adults age and move in with families or into nursing homes. These changes are often referred to as life-cycle changes. Table 60 illustrates the effect of life-cycle changes on the probability of owning a home. Each of the variables shown in the table reflects a significant element of life-cycle change. As the demographic characteristics of our projected population changes over the decades, the probabilities of homeownership shown in Table 60 enable us to estimate the incidence of homeownership in each year.

TABLE 59. ESTIMATES OF THE TOTAL NUMBER OF HOUSEHOLDS
MIGRATING TO ALASKA BY AGE OF THE HOUSEHOLD HEAD
1981-1990^a

Year	Age of Household Heads			
	< 24	25 - 29	30 - 55	55 <
<u>High Development Case</u>				
1981	1,884	1,777	3,912	1,168
1982	2,272	2,047	4,283	1,218
1983	2,382	2,068	4,446	1,267
1984	2,690	2,281	5,129	1,317
1985	4,181	3,523	6,691	1,366
1986	4,310	3,506	5,936	1,417
1987	2,720	2,043	4,934	1,469
1988	1,708	1,257	4,478	1,523
1989	2,318	1,927	5,168	1,579
1990	1,750	1,465	5,464	1,639
<u>Low Development Case</u>				
1981	1,695	1,618	3,817	1,168
1982	2,186	1,990	4,268	1,218
1983	1,883	1,649	4,157	1,267
1984	1,806	1,553	4,224	1,317
1985	2,190	1,873	4,604	1,367
1986	2,243	1,877	4,737	1,418
1987	1,776	1,440	4,526	1,470
1988	1,950	1,607	4,782	1,524
1989	1,813	1,481	4,812	1,580
1990	1,533	1,238	4,751	1,639

^aThe estimates are based on the replacement of out-migrants plus net migration.

TABLE 60. HOMEOWNERSHIP EQUATIONS

		F
Constant	.545	
<u>Female Household Head</u>	-.218	(13.295)
<u>Family Size</u>		
3 - 5 members	.079	(3.986)
6 or more members	.191	(4.840)
<u>Age</u>		
≤ 24	-.230	(20.571)
30 - 55	.121	(6.986)
55 <	.087	(.771)
<u>Tenure</u>		
Less than one year residency	-.272	(40.323)
= Number of owner occupied households		
R ²	19.9	

Ender's 1978 Anchorage Survey.

Having separated our projected households into two groups--in-migrating households and resident households--both by the age of the household head, we can estimate the incidence of homeownership by the length of residency and age of household head. These probabilities are based on the equations in Table 60. They isolate the effect of residency and age by assuming the other characteristics remain at their 1980 levels. Table 61 reports our findings. In all age categories, the incidence of homeownership is greater among residents than in-migrants, particularly in the younger and older age categories. Table 61 confirms and clearly demonstrates the importance of distributing household heads by age and of separating in-migrants from residents.

By applying the incidence of homeownership by age of household head to our projections of the total number of in-migrating households (Table 59) and to the projections of the resident households (the difference between Table 59 and Table 57), we can project the increase in the number of homeowners and first-time homeowners who are new to Alaska's housing market (Table 62).

You will note in reviewing Table 62 that even in the low development case, the number of additional homeowners increases by over 2,200 households each year. Reviewing survey research results over the past few years, combined with our knowledge of the incidence of homeownership by length of residency, we estimate that approximately .44 percent of all household heads who leave Alaska owned a home. Thus, Table 62 also shows the estimated flow of homeowners leaving Alaska over the next ten years.

As mentioned earlier, because in-migrating households have a lower probability of being homeowners than out-migrants, the net exchange in many years results in fewer homeowners coming in than leaving. This occurs despite the fact that the actual number of people projected to move to Alaska is greater than the number leaving

TABLE 61. AN ESTIMATE OF THE INCIDENCE OF HOMEOWNERSHIP
IN ALASKA BY LENGTH OF RESIDENCY

Age of Head of Household	Length of Residency in Alaska	
	More than One Year (residents)	Less than One Year (in-migrants)
< 24	.285	.013
25 - 29	.540	.268
30 - 55	.687	.415
55 <	.594	.322

TABLE 62 PROJECTED INCREASES IN THE NUMBER OF HOMEOWNERS
AND FIRST-TIME HOMEOWNERS 1981-1990^a

<u>Year</u>	<u>Add'l No. Homeowners</u>	<u>No. Out- Migrating, Homeowners^b</u>	<u>No. In Migrating Homebuyers</u>	<u>No. Discont'd Homeowners^c</u>	<u>No. Resident 1st Time Homebuyers</u>	<u>Total No. 1st Time Homebuyers^d</u>
<u>High Development Case</u>						
1981	2,701	3,238	2,499	600	4,040	4,832
1982	2,895	3,344	2,748	626	4,117	4,988
1983	3,261	3,487	2,838	653	4,563	5,463
1984	3,461	3,634	3,199	678	4,574	5,588
1985	4,704 ^e	3,807	4,215	705	5,001 ^e	6,337 ^e
1986	6,403 ^e	4,117	3,915	734	7,340 ^e	8,581 ^e
1987	5,792 ^e	4,431	3,104	766	7,885 ^e	8,869 ^e
1988	3,307	4,568	2,701	795	5,969	6,825
1989	3,012	4,608	3,199	825	5,246	6,260
1990	2,922	4,721	3,212	856	5,287	6,305
<u>Low Development Case</u>						
1981	2,481	3,250	2,416	597	3,912	4,677
1982	2,700	3,340	2,724	622	3,938	4,802
1983	2,858	3,476	2,598	697	4,383	5,207
1984	2,572	3,578	2,615	673	4,208	5,037
1985	2,778	3,673	2,881	697	4,267	5,180
1986	3,106	3,805	2,955	723	4,679	5,616
1987	2,817	3,939	2,760	798	4,744	5,619
1988	2,591	4,020	2,932	774	4,453	5,382
1989	2,613	4,129	2,927	801	4,616	5,544
1990	2,285	4,220	2,852	829	4,482	5,386

^aTechnical Note: The number of additional homeowners (column 1) is equal to the number of in-migrant homebuyers (column 3) plus the number of residents, first-time homebuyers (column 5) minus the number of out-migrating homeowners (column 2) and minus the number of discontinued homeowners (column 4).

^bThe number of out-migrating homeowners is computed @.44 of all migrating.

^cDiscontinued homeowners include homeowners who die and those who transfer to other housing such as nursing home.

^dTotal number of first-time homebuyers includes resident first-time homebuyers plus .317 of the in-migrating homebuyers. This ratio is derived from AHFC records.

^eIn our judgment, this surge in first-time home purchases, triggered by the potential construction of a natural gas pipeline, will be significantly reduced by supply constraints which could limit the growth by as much as 30 percent of the prior year's experience.

the state. How is it then that we project substantial annual increase in homeowners each year? The answer is that we have a sizable number of resident Alaskans who will be forming households and seeking to own a home for the first time. Referred to as resident, first-time homebuyers, column 6 of Table 62 shows that the projected number of these resident, first-time homebuyers constitute a larger group than either the incoming homebuyers or the total net increase in homebuyers. The last column adds to our resident, first-time homebuyers the proportion of in-migrants who will also be buying a home for the first time.

Task 3: Determine Effective Housing Demand

The reason we go to such lengths to identify first-time homebuyers is that our research suggests that existing homeowners have enough equity in their homes to be able to qualify for buying a different home; whereas first-time homebuyers do not have the "home equity" equivalent and cannot be assumed to be able to afford a home. Therefore, we assume that all households who already own a home either as a resident or as an in-migrant household will be able to secure a mortgage; whereas first-time homebuyers may not have sufficient equity or income to afford a home. In the following pages, we examine the conditions under which potential first-time homebuyers actually would be able to afford to own a home and should, therefore, be regarded as part of the effective mortgage demand.

Table 63 takes the total number of potential first-time homebuyers projected in the preceding table and divides them into two geographic groups, urban and rural. We assumed that the urban-rural split of in-migrants would remain constant at a 91-to-9 allocation and of new homeowners would remain constant at a 95-5 allocation. The projected share of employment growth in rural areas is higher. This allocation assumes (1) a large share of these jobs allow workers to live away from their jobs, such as at Prudhoe Bay; (2) fewer new rural households are homeowners; and (3) a portion of the increase in jobs are taken by existing population. For our purposes, we have defined

TABLE 63. AN ESTIMATE OF THE POTENTIAL NUMBER OF
HOMEBUYERS WHO ARE NEW TO THE ALASKA MARKET,
1981 - 1990

Year	Number First Time Homebuyers			Number In-Migrant Prior Homeowners ^a		
	Total	Urban ^b	Rural ^b	Total	Urban ^c	Rural ^c
<u>High Development Case</u>						
1981	4,832	4,590	242	1,707	1,553	154
1982	4,988	4,539	249	1,877	1,708	169
1983	5,463	5,190	273	1,938	1,764	174
1984	5,588	5,390	279	2,185	1,988	197
1985	6,337 ^d	6,020 ^d	317	2,879	2,120	259
1986	8,581 ^d	8,152 ^d	429	2,674	2,438	241
1987	8,869 ^d	8,426 ^d	443	2,120	1,929	191
1988	6,825	6,484	341	1,845	1,679	166
1989	6,260	5,947	313	2,185	1,988	197
1990	6,305	5,990	315	2,194	1,997	197
<u>Low Development Case</u>						
1981	4,677	4,443	234	1,650	1,502	149
1982	4,802	4,562	240	1,860	1,694	167
1983	5,207	4,947	260	1,774	1,614	160
1984	5,037	4,785	252	1,786	1,625	161
1985	5,180	4,921	259	1,968	1,791	177
1986	5,616	5,335	281	2,018	1,836	182
1987	5,619	5,338	281	1,885	1,715	170
1988	5,382	5,113	269	2,003	1,823	180
1989	5,544	5,267	277	1,999	1,819	180
1990	5,386	5,117	269	1,948	1,773	175

^aFigures include in-migrants who previously owned a home prior to moving to Alaska.

^bThe allocation of first-time homebuyers between rural and urban Alaska remains constant at the 1981 experience of 95 percent urban and 5 percent rural. 15 percent of urban first-time homebuyers purchased mobile homes in 1981.

^cThe allocation of in-migrant prior homeowners to rural and urban Alaska remains constant at the 1981 experience of 91 percent urban and 9 percent rural.

^dIn our judgment, this surge in first-time homebuyers, associated with the potential construction of a natural gas pipeline, will be significantly reduced by supply constraints which would limit the growth to 30 percent of the prior year's experience.

urban as the census divisions which include Anchorage, Fairbanks, Kenai, Seward, Valdez, Kodiak, Matanuska-Susitna, Southeast Fairbanks, Sitka, Ketchikan, and Juneau.

We recognize that not everyone who works to purchase a home can afford to do so. Thus, the effective demand for housing is a function of both the type of housing wanted and the ability to purchase it. Simply stated, the ability to buy a house depends on the price of the house and one's income and/or wealth.

Tables 64 and 65 report both the actual incomes of homebuyers in 1981 and a summary distribution of housing prices. Both the Special Mortgage Purchase Program and the rural program serve similar income groups with the majority of mortgagees falling in the \$30-50,000 range. In contrast, the Home Ownership Fund Program serves principally homebuyers in the \$10-30,000 income groups, as does the mobile home program.

TABLE 64. THE DISTRIBUTION OF FIRST-TIME
HOMEOWNER'S INCOME BY TYPE OF PROGRAM

<u>Income</u>	<u>Special Mortgage Purchase Program</u>	<u>Home Ownership Program</u>	<u>Rural</u>	<u>Mobile Home</u>
\$10,000 >	-	.027	-	-
10,000-20,000	.008	.319	.050	.194
20,000-30,000	.142	.654	.175	.474
30,000-40,000	.346	0	.258	.242
40,000-50,000	.273	0	.225	.067
50,000-60,000	.144	0	.192	.017
60,000-70,000	.060	0	.058	.003
70,000 <	.027	0	.042	.003
TOTAL(S)	1.00	1.00	1.00	1.00

SOURCE: AHFC files, 1980 - 1981.

Very little information is available on the price dimension of supply. Our assumed price distribution is based on records of participation in the state's housing programs. As Table 65 shows, the price of almost half of new single-family homes in Anchorage exceeded \$120,000; whereas, the modal price for similar units in other places was in the \$90-100,000 range. Absent other comprehensive data sources on the price of the existing supply of housing, we use this price distribution to represent prices of the existing supply of housing.

Equipped with both price and income data, we can now move to the task of estimating effective demand; i.e., the number of potential homebuyers who can actually afford to buy a house. Before doing so, however, we introduce alternative assumptions about three critical variables, each of which affects a person's ability to buy a home. These are mortgage interest rates, changes in personal income, and change in the price of housing over the projection period. The purpose of these alternatives is to assess how sensitive mortgage demand is to changes in these three assumptions. Referred to as a sensitivity analysis and shown as Task 7, we actually used these scenarios to generate sets of alternative volumes of home sales.

Table 66 summarizes the assumptions built into each of the three alternative scenarios. The assumptions made in the high interest case essentially lower effective demand. Fewer people can afford to buy homes under this case. In contrast, the low interest case enables more homeowners to buy because the lower interest rates effectively lower the cost of housing, thereby making homes relatively more affordable.

Drawing upon the above-described price and income information, we can estimate the incomes required to purchase a minimum-priced home. Table 67 presents the threshold incomes, based on the state housing program's current lending standards, required to buy a \$60,000 home. Projected increases in both incomes and housing prices are based on national rates of inflation, with costs for new housing construction

TABLE 65. THE DISTRIBUTION OF HOUSING PRICES
IN ALASKA BY TYPE OF HOUSING, 1981

<u>Price</u>	<u>Type of Housing</u>			
	<u>Single Family</u>		<u>Condominium</u>	
	<u>New</u>	<u>Existing</u>	<u>New</u>	<u>Existing</u>
	<u>Anchorage</u>			
\$120,000 <	49.7	25.6	15.2	3.4
110-120,000	14.0	12.5	1.3	2.5
100-110,000	12.6	14.2	7.6	4.6
90-100,000	10.5	13.4	13.9	7.4
80-90,000	5.6	14.0	8.9	4.3
70-80,000	7.0	13.6	8.9	18.9
60-70,000	.6	5.0	25.3	25.1
50-60,000	-	1.3	15.2	21.4
< 50,000	-	.4	3.8	12.4
	<u>Other Places</u>			
\$120,000 <	20.9	10.2	-	-
110-120,000	6.7	8.0	-	-
100-110,000	12.1	8.0	20.0	12.8
90-100,000	20.5	13.3	10.0	7.7
80-90,000	15.1	17.1	-	2.6
70-80,000	18.0	18.6	40.0	12.8
60-70,000	4.2	14.4	20.0	30.8
50-60,000	2.1	7.1	-	17.9
< 50,000	.4	3.3	10.0	15.4

TABLE 66. THREE ALTERNATIVE SCENARIOS OF CHANGES
IN MORTGAGE RATES, PERSONAL INCOMES,
AND HOME SALES PRICES

	<u>Rate</u> ^a	<u>Income</u> ^b	<u>Price</u> ^c
1. Base	AHFC borrowing costs fall to 16.4 by 1986. Subsidized rate remains at 12.4. Remains constant for remainder of the period.	Household incomes grow at an annual rate of 1.78 over the period.	The minimum price of units rises at a rate of 1.08 over the period.
2. Low Interest Case	AHFC borrowing costs fall to 13.4 by 1986. Subsidized rate falls to 10.4 by 1986. Remains constant for remainder of period.	Same as base case.	Same as base case.
3. High Interest Case	AHFC borrowing costs rise to 18.4 by 1986. Subsidized rate remains at 12.4. Both rates increase by 1.5 by 1990.	Same as base case.	The minimum price of units rises at a rate of 1.09 over the period.

^aBased on interest rate projections for AA Corporate bonds found in Data Resources, Inc., U.S. Long Term Review, 1981. Base case is base of trend projection, high on optimistic and low on pessimistic.

^bIncome growth is that projected in moderate case in Goldsmith and Porter (1981).

^cMinimum price of new housing is assumed to increase two percent faster than increase in prices in the base and high scenarios, and four percent faster in the low scenario. The two percent spread between consumer price increases and the price of new construction is based on (DRI 1981) trend projections.

adjusted to Alaska. The minimum incomes are determined by the lending criteria of the state programs.

Under the base (current interest) and low interest cases, the cost of the minimum-priced house increases 46.9 percent by 1986 and 100 percent by 1990. In our high interest case, the cost of housing increases at a faster rate, 53.9 percent by 1986 and 117.2 percent by 1990.

TABLE 67. PROJECTIONS OF INCOMES REQUIRED TO PURCHASE MINIMUM PRICED HOMES^a

<u>Year</u>	<u>Current Interest Rates</u>	<u>Rising Interest Rates</u>	<u>Declining Interest Rates</u>
1981			
Income required	\$26,900	N/A	N/A
Min. housing price	60,000	60,000	60,000
1986			
Income required	\$38,728	40,554	33,225
Min. housing price	88,160	92,317	88,160
1990			
Income required	\$52,690	63,709	45,202
Min. housing price	119,941	130,313	119,991

^aThe cost of new home construction for 1986 and 1990 is based on national projections prepared by Data Resources, Inc. (DRI), and income requirements are computed according to prevailing policies of AHFC.

Task 4: Project Total Sales and Mortgage Demand

Before estimating total mortgage demand, we first have to estimate the total volume of housing sales. Table 68 presents four sets of projections. Two sets of projections were prepared for both the high and low development cases. For the high development case, we selected our low interest case and the base case; whereas, for the low development case, we selected our high interest case and the base rate. Thus, the high development-low interest case establishes the upper range of our projections and the low development-high interest scenario forms the lower range of our projections.

Having previously computed both first-time homebuyers and in-migrants who previously owned a home, we can, by the use of a multiplier, project total sales. Table 69 presents the total sales multiplier found in the AHFC data. The stability of this figure across areas provides the support for assuming the 1.95 urban multiplier. For example, each time a new-to-the-market homebuyer buys a home in the urban area, another home is also being bought by an existing homeowner, resulting in an urban sales multiplier of 1.95.

The range of urban sales spans 16,511 in the high development-low interest rate scenario to a low of 10,087 in the low development-high interest case. This spread of 6,500 sales exemplifies the difficulties and uncertainties which plague such forecasts. Unable to predict with precision either economic development and population patterns or housing prices and interest rates, the best we can do is to establish a reasonable range, which in 1980 is a broad one. Thus, considerable precautions are required in interpreting these projections to allow for the potential volatility of the Alaska housing market.

Figure 8 graphs the data shown in Table 68 and enables the reader to get a visual image of the four sets of projections. As the graph shows under the low development case with current interest rates, housing sales remain steady at about 10,000 sales throughout the decade. When interest rates rise, total sales drop on the average of about five percent per year over the projection period. In the high

TABLE 68. COMPARATIVE PROJECTIONS OF TOTAL HOUSING SALES IN ALASKA,
UNDER ALTERNATIVE ECONOMIC DEVELOPMENT CASES AND ALTERNATIVE
CHANGES IN THE BOND MARKET INTEREST RATES, 1981-1990

High Development Case							Low Development Case					
Year	Decreasing Interest Rates ^a			Current Interest Rates ^a			Current Interest Rates ^a			Rising Interest Rates ^a		
	Number 1st Time Home Buyers	Number In-Migrating Prior Home Owners	Total b	Number 1st Time Home Buyers	Number In-Migrating Prior Home Owners	Total b	Number 1st Time Home Buyers	Number In-Migrating Prior Home Owners	Total b	Number 1st Time Home Buyers	Number In-Migrating Prior Home Owners	Total b
Urban Units												
1981	3,947	1,398	10,423 ^b	3,947	1,398	10,423 ^b	3,821	1,352	10,087	3,821	1,352	10,087
1982	3,813	1,537	10,433	3,767	1,537	10,343	3,786	1,525	10,356	3,741	1,525	10,269
1983	4,308	1,588	11,497	4,100	1,588	11,092	3,908	1,453	10,454	3,809	1,453	10,261
1984	4,300	1,789	11,874	4,035	1,789	11,357	3,637	1,463	9,945	3,493	1,463	9,664
1985	4,756 ^e	1,905	12,995 ^e	4,334 ^e	1,908	12,172 ^e	3,543	1,612	10,052	3,395	1,612	9,764
1986	6,277 ^e	2,190	16,511 ^e	5,788 ^e	2,190	15,557 ^e	3,788	1,652	10,608	3,521	1,652	10,087
1987	6,488 ^e	1,736	16,037 ^e	5,982 ^e	1,736	15,050 ^e	3,788	1,544	10,397	3,469	1,544	9,775
1988	4,993	1,511	12,683	4,604	1,511	11,924	3,630	1,641	10,278	3,170	1,641	9,381
1989	4,579	1,789	12,418	4,222	1,789	11,721	3,740	1,637	10,485	3,160	1,637	9,354
1990	4,612	1,797	12,498	4,253	1,797	11,798	3,633	1,596	10,197	2,968	1,596	8,900
Mobile Home Units			c			c			c			c
1981	643	155	1,277	643	155	1,277	622	150	1,235	622	150	1,235
1982	667	171	1,341	694	171	1,384	698	169	1,387	716	169	1,416
1983	794	176	1,552	862	176	1,661	821	161	1,571	856	161	1,628
1984	849	189	1,677	956	199	1,848	861	163	1,638	909	163	1,715
1985	999 ^e	212	1,938 ^e	1,162 ^e	212	2,198 ^e	950	179	1,806	1,019	179	1,917
1986	1,410 ^e	243	2,645 ^e	1,630 ^e	243	2,997 ^e	1,067	184	2,002	1,158	184	2,147
1987	1,458 ^e	193	2,642 ^e	1,685 ^e	193	3,005 ^e	1,067	172	1,982	1,201	172	2,197
1988	1,122	168	2,064	1,297	168	2,344	1,023	182	1,928	1,192	182	2,199
1989	1,029	199	1,965	1,189	199	2,221	1,053	182	1,976	1,264	182	2,314
1990	1,036	200	1,978	1,198	200	2,237	1,023	177	1,920	1,279	177	2,330
Rural Units			d			d			d			
1981				242	154	574	234	149	555			
1982				249	169	606	240	167	590			
1983				273	174	648	260	160	609			
1984				279	197	690	252	161	599			
1985				317 ^e	259	835 ^e	259	177	632			
1986				429 ^e	241	972 ^e	281	182	671			
1987				443 ^e	191	919 ^e	281	170	654			
1988				341	166	735	269	180	651			
1989				313	197	740	277	180	663			
1990				315	197	742	269	175	644			

^a See Table IX.8 for details on assumptions used.

^b The total sales of urban units equals the sum of Columns 1 and 2 times the multiplier of 1.95.

^c The total sales of mobile home units equals the sum of Columns 1 and 2 times the multiplier of 1.60.

^d The total sales of rural units equals the sum of Columns 1 and 2 times the multiplier of 1.45. Interest rate changes were not assumed to affect rural demand.

^e In our judgment, this surge in first-time homebuyers, associated with the potential construction of a natural gas pipeline,

be [] ific [] red [] by s [] cor [] ints [] wor [] limit [] grow [] 30 [] int o [] the pri [] year's experience []

TABLE 69. SALES MULTIPLIER (SALES/NEW ENTRANTS)^a

<u>Region</u>	<u>SMPD</u>	<u>Mobile Home</u>
Anchorage	1.96	1.43
Fairbanks	1.93	1.55
Juneau	2.11	1.44
Ketchikan	1.90	1.72
Kodiak	2.01	1.68
Matanuska-Susitna	1.91	3.0
Road Connected South Central	2.13	1.83
Rural Southeast	2.08	1.90
Assumptions	Urban	1.95
	Rural	1.45
	Mobile Home	1.60

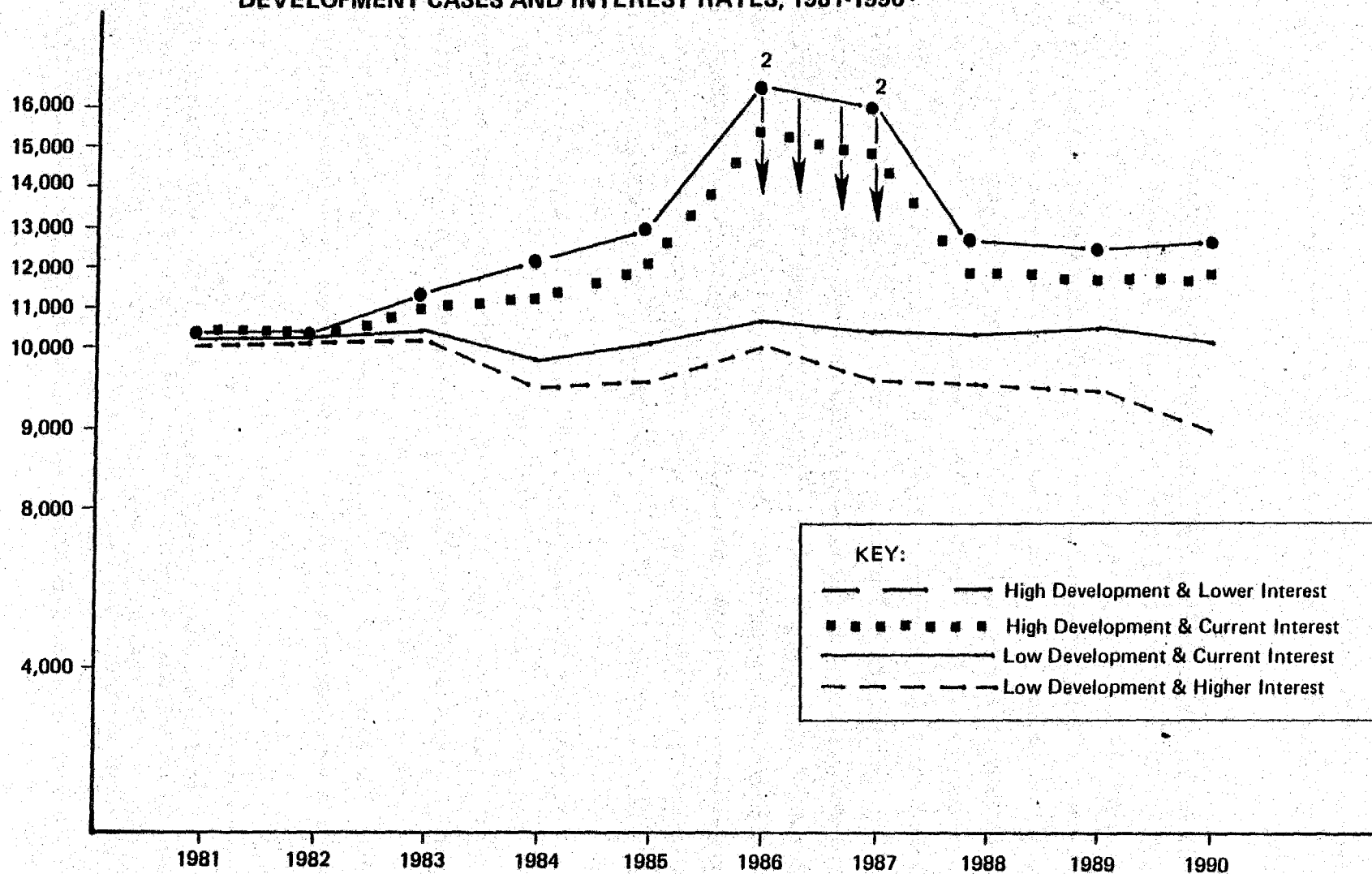
^aNew entrants equals first-time homeowners and other migrants for SMPP. New entrants consists only of first-time homeowners for mobile home.

SOURCE: AHFC Files 1980-81.

FIGURE 8. A COMPARISON OF ANNUAL URBAN HOUSING SALES IN ALASKA UNDER ALTERNATIVE DEVELOPMENT CASES AND INTEREST RATES, 1981-1990¹

Annual
Urban
Housing
Sales

231



¹See Table IX.11 for specific figures and Appendix A and Table IX.8 for specifications of assumptions under each alternative.

²In our judgment, the surge in the number of first-time home buyers (and the concomitant multiplier effect) is associated with the construction of a natural gas pipeline and will be significantly reduced by supply constraints on the order of 30 percent of the prior year's experience.

development case, the reverse is the case; i.e., on the average, total sales increased about 5 percent per year, but total sales are substantially higher in the high development case than in the low development case.

Task 5: Estimate State's Share of Total Mortgage Demand

The distribution of state government's share of Alaska's total primary and secondary mortgages will undoubtedly vary over the next decade. Although the state programs are likely to continue to dominate the market for state housing funds, we expect AHFC's share of total home sales to fall from its 1981 level of about two-thirds down to about one-half by 1990.¹ The reasons for this projected fall in market share are several. First, as average housing prices increase, AHFC's current \$147,000 total loan limit, of which \$90,000 is subsidized, will become exceedingly restrictive. Further, as the differential between the subsidized and the market interest rates falls to 3 percent, the relative attractiveness of funds from other secondary lenders will also increase. This will be particularly true if long-term rates should spurt ahead of those available through national secondary markets or if other loan-qualifying standards are used.

In contrast to the above, we expect AHFC's share of the market for mobile home funds will increase from its 1981 level of 50 percent of total sales to about 90 percent by 1990. Similarly, we expect the state's share (including DCRA) of the market for rural home funds will grow from about 60 percent of sales in 1981 to about 90 percent by 1990. Both of those programs are relatively new and the advantageous rates they offer should make them the dominant secondary lender in the state.

¹Total home sales are different than total primary mortgages by the number of assumptions and contract sales. Primary mortgages are different than secondary mortgage sales by the amount of mortgages that savings and loan institutions or other primary lenders keep in their portfolios. For examples, in 1981 AHFC operations equaled about 85 percent of secondary mortgage sales and 67 percent of total home sales in Alaska.

Task 6: Estimate the Programs' Fiscal Impact

Using these market share projections (and the projections of total sales discussed above), the estimated state appropriations required and bonded indebtedness incurred were derived. These estimates are based on our high development current interest rate case, and are given in Table 70.

TABLE 70. FISCAL IMPACTS OF STATE HOUSING PROGRAMS

(millions of dollars)

	Appropriations				Bonded Indebtedness Accrued
	<u>Total</u>	<u>Urban</u>	<u>Mobile Home</u>	<u>Rural</u> ^a	
1986	\$280.8	\$127.8	\$75.5	\$77.5	\$1,165.2
1990	293.3	88.4	106.7	98.2	875.8

^aAssumed to be half AHFC and half DCRA appropriations.

SOURCE: ISER Projections

The mortgage subsidy program for urban areas reflects the population and employment changes in the state, which are expected to grow relatively fast for the first half of the 1980s and then slow down somewhat. Most of the early 1980's growth is expected to occur in the Anchorage and Fairbanks areas and produce 1986's high level of urban program activity (\$128 million in appropriations). The slow down in population growth during the late 1980s will also be most noticeable in the urban areas, causing required appropriations for this program to decline by about one-third. Also contributing to this decline will be the rise in average home prices to a level of about \$200,000.² Under current program standards, this will disqualify many home mortgages from the AHFC guideline of a \$147,000 total loan amount, unless substantial downpayments are made.

²Increases in average home prices were projected using the DRI index of future costs of new home construction.

Assuming that the interest subsidy differential is at 3 percent and that AHFC maintains the operating efficiencies exhibited during its last bond sale, appropriations will be supplemented by an increase in the state program's bonded indebtedness accrued of about \$1.2 billion in 1986 and \$0.9 billion in 1990.³

The mobile home program, which is totally funded by state appropriations, is expected to increase rapidly throughout the 1980s. This is caused both by the state's increased share of total sales and because the program's maximum loan amount eligibility requirements will continue to be above projected average sales prices. As a result, required appropriations are expected to grow from less than \$20.0 million to \$106 million in 1990. By the end of the decade, the mobile home program could have the highest appropriation requirements of any of the state housing programs now operating.

The rural housing programs are now split about equally between AHFC and DCRA, and both are entirely funded by state appropriations. The state's increasing share of this market combined with the rising average sales price of rural homes will cause this program's appropriation requirement to rise from a 1981 level of around \$25.0 million to about \$78.0 million in 1986. Thereafter, the slowdown in demographic trends will combine with the program's maximum loan amount limits to slow the program's rate of growth, with appropriation requirements growing to about \$98.0 million by 1990.

Overall, state appropriations for housing programs, as they now are structured and operating, are expected to be in the range of \$280.0 million in 1986 and \$295.0 million in 1990. The state's total in 1981, adjusted to reflect the "bonded indebtedness accrued" concept discussed above, was less than \$200.0 million. And finally, the most

³Bond indebtedness accrued is determined by the volume and average value of secondary mortgage transactions engaged in by AHFC during a year. Actual bond sales will differ from this depending upon the timing of demand in the state's secondary market and conditions in national long-term money markets.

rapid growth in appropriations required will occur in the mobile home program which will account for about 36 percent of total requirements by 1990 (up from less than 10 percent in 1981), the largest share of any of the housing programs.

Task 7: Analyze Sensitivity of the Projection

As shown above, the change in interest rates has a direct effect on housing sales. It does so by changing the cost of housing to the purchaser. As housing costs rise relative to incomes, fewer people can afford to buy. In Tables 71 and 72, we report how interest rate changes could affect participation in the state's housing programs.

Table 71 shows both the income distribution of first-time homebuyers and the projected minimum incomes required to purchase a home in 1986 and in 1990. The real income requirements under current interest rates would be \$27,000 in 1986 and 1990. However, as interest rates rise under our scenario, the minimum income requirements also rise to \$28,000. Should the interest rates fall, as in our low interest case, the income requirement would fall to \$23,000.

Table 72 transposes the projected minimum income required to buy a house onto Table 71's schedule of income distribution for first-time homebuyers. Under our base case scenario, 20.8 percent of the potential first-time homebuyers would fail to meet the income requirements of the state's program. Under our high interest case, the percentage increases to 23 percent, but under the low interest case, it falls to 12 percent. However, as the footnote to Table 72 states, we estimate that approximately 15 percent of the first-time homebuyers who were ineligible to participate in the special mortgage program would be eligible to participate in the Home Ownership Fund program. This would reduce the ineligible first-time homebuyers to 18 percent in our base case; 20 percent, in our high interest case; and 10 percent, in our low interest case.

TABLE 71. THE INCOME DISTRIBUTION OF FIRST-TIME
HOMEBUYERS AND THE MINIMUM INCOMES REQUIRED
TO BUY A HOME IN 1986 (REAL 1981 DOLLARS)

<u>Incomes of First-Time Homebuyers</u>	<u>Percent of First-Time Homebuyers</u>	<u>Minimum Incomes to Buy Homes</u>		
		<u>With Current Interest Rate</u>	<u>With Rising Interest Rate</u>	<u>With Falling Interest Rate</u>
> \$10,000	.004			
10-20,000	.053			
20-30,000	.216	\$27,000	\$28,000	\$23,000
30-40,000	.296			
40-50,000	.234			
50-60,000	.123			
60-70,000	.051			
70,000 or more	.023			
Total	<u>1.000</u>			

TABLE 72. PERCENT OF POTENTIAL FIRST-TIME HOMEBUYERS EXCLUDED
BECAUSE INCOMES FALL BELOW THRESHOLD REQUIREMENTS

<u>Year</u>	<u>Percent Below Minimum Income Requirements^a</u>		
	<u>With Current Interest Rates</u>	<u>With Rising Interest Rates</u>	<u>With Falling Interest Rates</u>
1986	.208	.23	.12
1990	.208	.33	.12

^aPotentially 15 percent of the homebuyers falling below the minimum income would be eligible for AHFC's Home Ownership Program, reducing the percentages to 18, 20 and 10 in 1986 and 18, 28 and 10 in 1990.

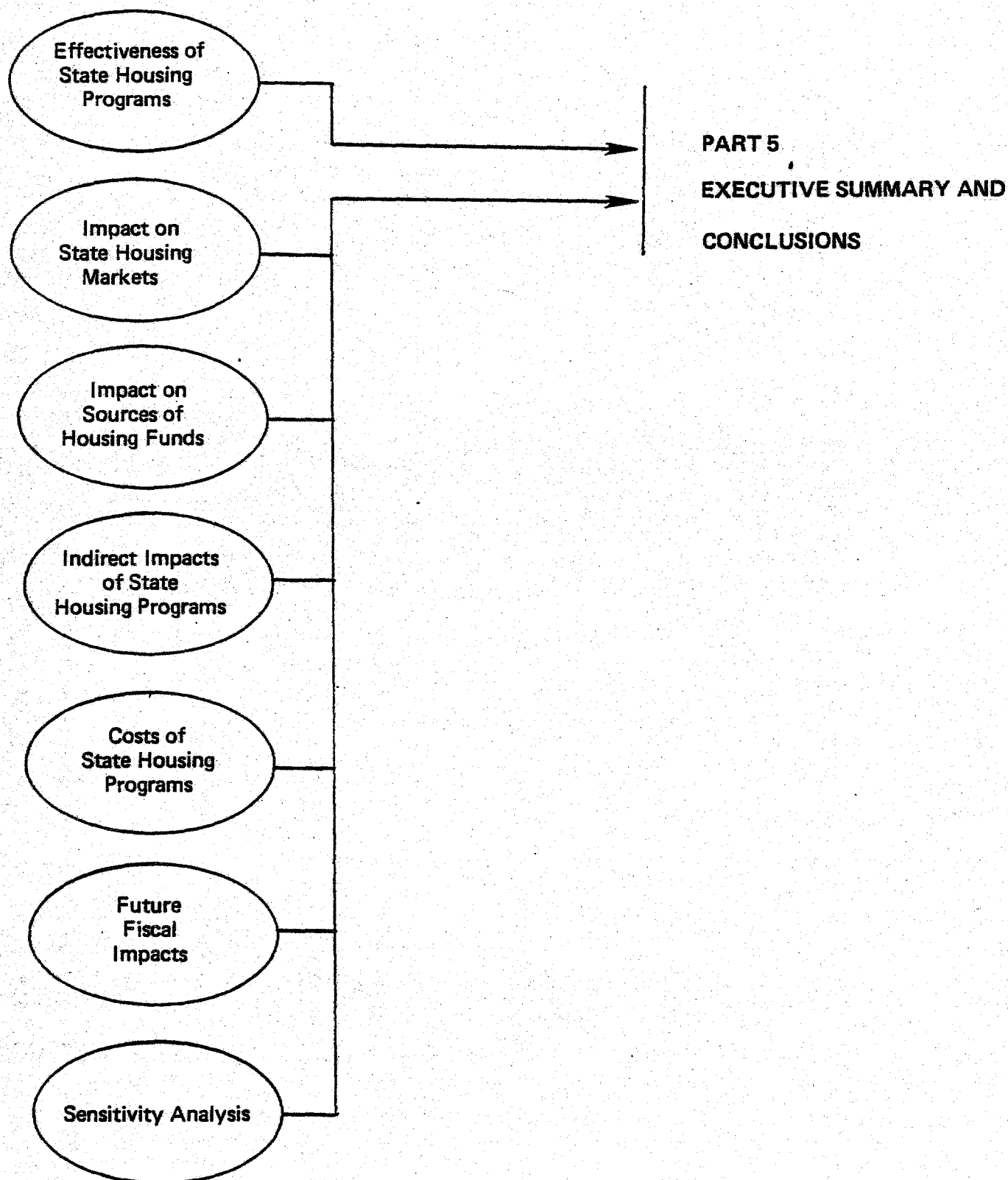
A STUDY OF ALASKA'S HOUSING PROGRAMS

EXECUTIVE SUMMARY

**Prepared for: Legislative Budget and Audit Committee
Alaska State Legislature**

**Prepared by: Institute of Social and Economic Research
University of Alaska**

March 1982



CHAPTER NINE

AN EXECUTIVE SUMMARY

On August 21, 1981, the Alaska Legislature's Legislative Budget and Audit Committee, following a competitive solicitation of proposals, formally entered into a contract with the University of Alaska's Institute of Social and Economic Research (ISER) to conduct a study of the State of Alaska's major housing programs. The purposes of the study, identified as seven major tasks, are summarized on the preceding page. ISER was essentially to furnish the Committee with an overview of the state's housing program impacts on housing markets, and to assess their cost to the state. ISER was also to estimate the future fiscal impact of the housing programs upon the state.

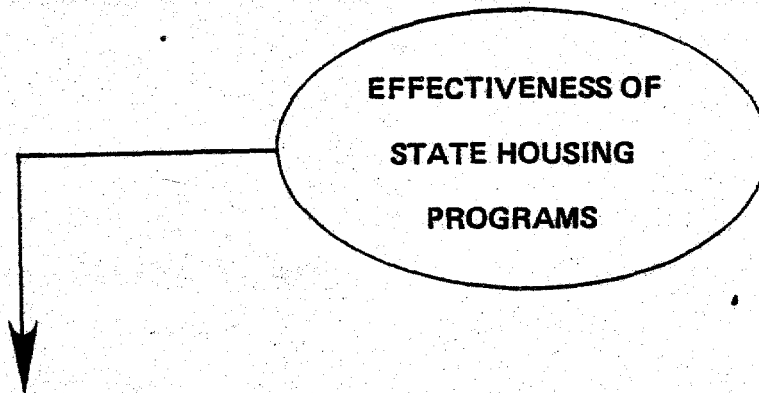
The major state housing programs examined include the Alaska Housing Finance Corporation's (AHFC) programs--the Special Mortgage Loan Purchase Program, the Home Ownership Assistance Program, the Mobile Home Loan Mortgage Purchase Program, the Rural Housing Mortgage Purchase Program and the Rural Nonowner Occupied Mortgage Purchase Program, the Alaska Department of Community and Regional Affairs (CRA) programs--the Nonconforming Housing Loan Program and Senior Citizens Housing Development Program, and the federally funded programs of the Alaska State Housing Authority. (In 1980 the Veterans Home Loan Program was transferred to the AHFC.)

To avoid repeating the various assumptions and methods we employed to perform each task, the reader is referred to the full study report. For ease of reference, each chapter of the study report pertains to one of the seven major tasks identified. Similarly, the findings and conclusions we have reached as a result of research are also presented below by major task.

Before proceeding to the findings, a few precautions are worth repeating. First, the study assesses the state's housing programs as they currently exist. No effort was requested or made to play the "what if we changed this policy" game. Thus, our projections of future fiscal impacts assume that the current programs remain unchanged, including such things as loan limits and interest subsidies.

Second, limited reliable data is available on Alaska's housing stock or market. Even results from the 1980 Census of Population and Housing are not yet available. Fortunately, thanks to the full cooperation of the state's housing agencies, we were able to approximate most of the missing information. Nonetheless, much of the data we used in our analysis are approximations of the past and present, not hard facts collected over time.

And finally, regarding our projections of fiscal impacts to 1986 and 1990: to get from 1981 to 1986 or 1990 requires, among other things, a knowledge of changes in Alaska's future employment opportunities, shifts in demographic trends and social patterns, and fluctuations in housing prices and financial markets. Because our knowledge of these issues is imperfect, we substitute judgment, in the form of assumptions, as our way of dealing with many implicit uncertainties. Thus, our projections are inextricably tied to our assumptions, and can most appropriately be interpreted with an understanding of the assumptions and methods from which they were derived. By no means can the projections be appropriately viewed as our prediction of the future.



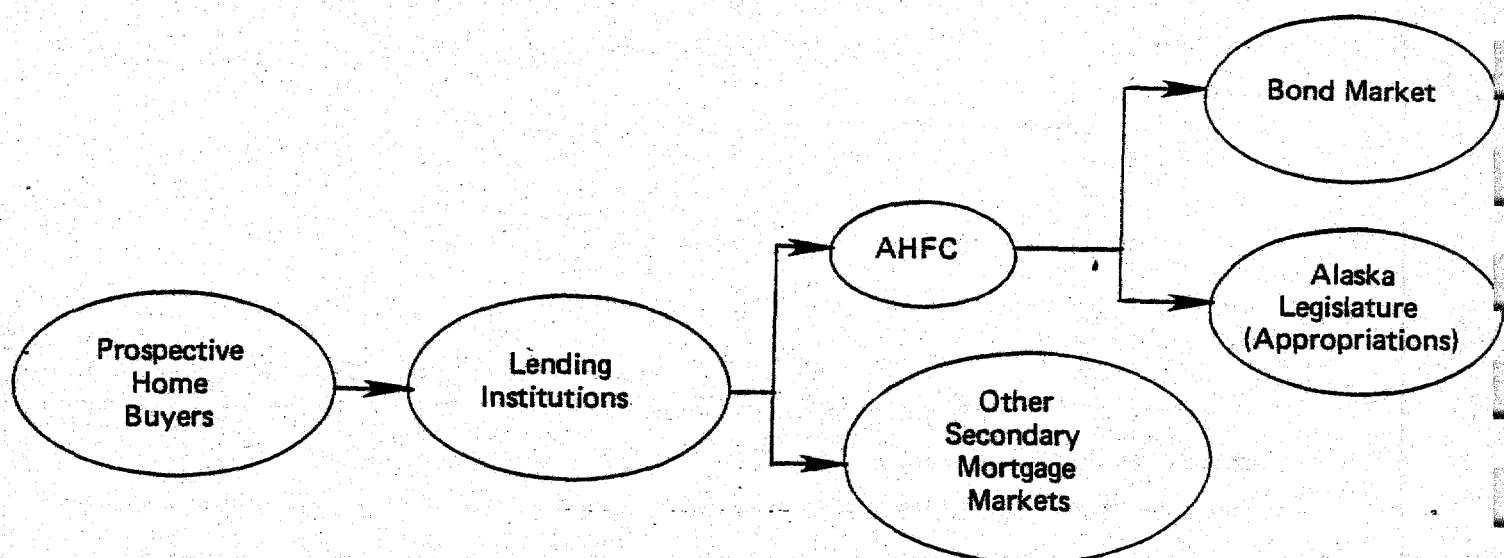
For each of the programs included in our study, we examined the operations and outcomes of the program in the context of its goals as means of assessing its effectiveness. Each of the following summaries correspond to a chapter of the study report. Elsewhere in the summary and in the report, we deal separately and explicitly with such concerns as the direct and indirect impacts of the programs and their present and projected costs.

The Alaska Housing Finance Corporation

The Alaska Housing Finance Corporation (AHFC) administers several housing programs which aid different segments of the housing market. These include the Special Mortgage Loan Purchase, the Mobile Home Loan Purchase, the Rural Housing Mortgage Purchase, and the Rural Nonowner Occupied Mortgage Purchase programs, each of which have different interest rates and loan terms. AHFC's basic goal is to provide residential housing at the lowest possible interest rate. State intervention in the housing market has been previously justified as a means of improving the economic welfare and growth of the state, and of correcting deficiencies in Alaska's housing market.

In all instances, AHFC operates as a secondary lender. It has no direct dealings with prospective homebuyers. Figure 6 illustrates the role AHFC plays in Alaska's housing market. All prospective buyers go

FIGURE 9. THE ROLE OF AHFC IN ALASKA'S HOUSING MARKET



to lending institutions, primarily banks, to apply for home mortgage loans. The lending institutions process the loan and, if accepted, service it, all in exchange for a fee. AHFC's role is to underwrite each loan application for approval of property and credit, and to purchase the loan after it is closed. Its abilities to do so are constrained by the combined circumstances of the bond market and the legislative appropriations which serve as the state's subsidy of the mortgage or, as in the case of HOF, Mobile Home and Rural programs, the primary source of mortgage funds.

1. AHFC has had a substantial impact on home mortgage interest rates. Under the Special Mortgage Loan Purchase (SMLPP) program which began in July 1980, AHFC interest rates on the first \$90,000 of a loan balance were 2.5 percentage points below the market rate, which stood at 12.5 percent. By December of 1981, the market rate had climbed to 16.5 percent, and the interest subsidy was equivalent to slightly over 4 percentage points (AHFC's base interest rate was 12.375 percent).
2. AHFC's volume of home mortgage activity has swelled since June of 1980 when the SMLPP Program was enacted. AHFC's commitments, which averaged \$15.5 million per month in 1979, averaged \$77.4 million per month for the first nine months in 1981, a five-fold

increase. Correspondingly, from July 1980 to October 1981, AHFC purchased over 10,000 loans which represented approximately 85 percent of all home loans made in Alaska during this period.

3. The primary beneficiary from AHFC's mortgage interest subsidies are obviously homebuyers, the vast majority of whom would (in the case of SMLPP) have been in the housing market anyway. Indeed, 62 percent of the SMLPP participants previously owned a home.
 - a. Sixty-one percent of the homebuyers participating in the SMLPP had incomes exceeding \$40,000 per year.
 - b. Twenty percent of the participants in AHFC's Home Ownership Assistance (HOF) program had incomes less than \$20,000, with the other 80 percent concentrating in the low \$20,000 per year range. HOF participants represented 46 percent of all SMLPP homebuyers with incomes less than \$30,000. In all likelihood, these participants would not have been able to afford a house without this state program.
 - c. Similarly, 60 percent of AHFC's mobile home buyers (891 mortgages through October 31, 1981) had incomes less than \$30,000 per year.
 - d. In contrast to the HOF and Mobile Home Program participants, the incomes of AHFC's Rural Housing Mortgage Purchase program participants closely paralleled those of SMLPP, with less than 20 percent of the first-time homebuyers having incomes less than \$30,000 per year.
4. The geographic distribution of benefits resulting from AHFC's housing programs reflect Alaska's housing market and the overall distribution of housing sales in Alaska.

- a. Sixty-eight percent of SMLPP participants reside in the Anchorage area where the housing market has been very active.
 - b. Participants in AHFC's rural program are concentrated in regional centers where incomes are relatively higher and where Regional Housing Authorities and lending institutions have offices.
5. AHFC's SMLPP program did not disproportionately serve prospective homebuyers moving to Alaska. Approximately 18 percent of the SMLPP participants lived in Alaska for less than one year, whereas we estimate approximately 23 percent of all homebuyers are recent arrivals to Alaska.
 6. Because AHFC is a secondary lender, its programs do not appear to have had any significant impact on increasing the access of lending to prospective homebuyers. The value of the program to primary lending institutions is insufficient to justify their opening up new branch institutions. Similarly, service fees collected are unlikely to cover the expense of servicing loans outside the service area of a branch bank. Thus, access to the state's housing programs are a function of the geographic location of the primary lending institutions. Even in AHFC's HOF Program, which is designed for low and moderate income households, 82 percent of the mortgages concentrated in the Anchorage area.

The Alaska State Housing Authority

The Alaska State Housing Authority (ASHA) and various Regional Housing Authorities (RHAs) administer the low income

housing programs sponsored by the U.S. Department of Housing and Urban Development (HUD) programs. These programs provide housing and housing subsidies for low income people. HUD finances all of the capital costs of housing constructed under the Public Housing and Mutual Help for Indians Housing programs. In the former, HUD has also provided operating subsidies, while in the latter, all operating costs are paid by the homebuyer. Under either Section 8 program, it is impossible to determine the portion of the total subsidy that pays for operating costs, as distinguished from capital costs.

Currently ASHA and the RHAs manage about 6,000 units, of which 3,500 were built over the 1970s. Regionally, 12 percent of these units are located in southeast, 43 percent in southcentral, 28 percent in interior, and 17 percent in northwest Alaska. An estimated 620 Alaska native households receive benefits from ASHA's Public Housing and Section 8 programs, and all 1,700 of the RHA-built Mutual Help homes are owned by Alaska native families.

Although the complexity of HUD financing precluded us from determining the total cost of HUD's units, the state did supplement HUD's Public Housing and Section 8 programs with \$1.7 million in grant funds and about \$16 million in loans.

1. Federal budget cuts will not affect HUD's commitments to ASHA's subsidized projects nor the RHA's home ownership projects that already exist, but it will affect the number of new units that are built. In FY 81 the value of new units authorized by HUD for Public Housing and Indian Mutual Help Housing was \$51.8 million.
2. Federal budget cuts may also affect the operating subsidies ASHA receives for public housing projects, which in FY 81 amounted to \$1.5 million, and represent 50 percent of operating revenues for these projects.

3. The Section 8 program, which generates about \$5 million in rental subsidies for some 1,250 households, is scheduled to be replaced by a voucher program which is still in the planning stages.
4. HUD's "Mutual Help for Indians" is likely to be the program most affected by federal cuts. In recent years, the program has financed most of the new units constructed.

The Nonconforming Housing Loan Program

Like AHFC, this program operates as a secondary lender and provides no direct loans (although the agency indicated it may offer direct loans this spring). The Nonconforming designation applies to physical characteristics of the house being bought, not to the characteristics of the loan or of the buyer. In other words, loans purchased are underwritten according to the same standards--loan amounts, down payments, and borrowers incomes--applied to conventional home loans.

Nonconforming may describe a house that does not meet minimum space requirements, has unconventional foundation or utility systems, or obsolescent design. However, if any of these nonconforming features present either health or safety hazards, the loan application will be rejected.

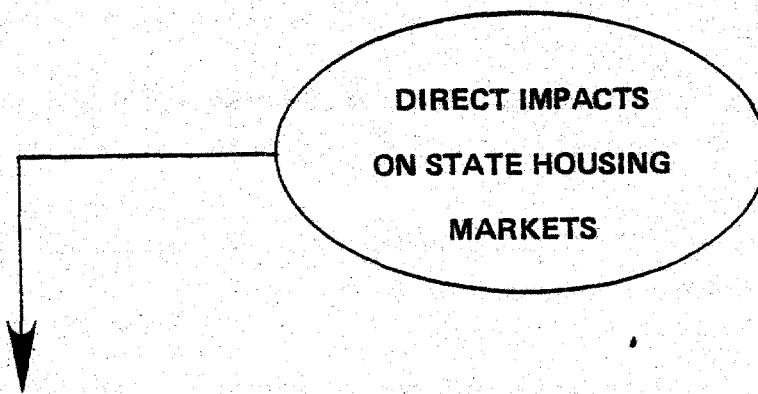
1. The vague definition of nonconforming may allow duplication of AHFC's rural owner-occupied housing program. Despite statements from participating lenders that nonconforming program applicants are unacceptable to other secondary lenders, no specific evidence of acceptability is required. Similarly, without a specific definition of "nonconforming," staff and lenders have no alternative but to exercise their judgments, which varies from person to person.

2. Despite the legislative mandate that no more than 20 percent of the principal amount of loans be made in urban areas, in the first year of the program, approximately 75 percent of the amount loaned went to urban areas, i.e., \$8.1 million of the total \$10.8 million in loans went to urban areas.
3. The scarcity of primary lenders (banks) in parts of rural Alaska makes access, both to information and loan services, difficult for many rural residents. Residents of the Aleutians and rural Southeast Alaska, for example, face this problem, and only four loans have been made in these areas. Because of these access problems, the agency is planning to become a direct lender, the details of which are still being prepared.
4. The administrative cost of the Nonconforming housing program (about \$1,100 per loan application processed) is about five and a half times that of AHFC's programs. Although the agency costs are not directly comparable, they do reflect the magnitude of the differences. Under a direct lending program, the Agency's administrative costs would increase substantially above its current costs.
5. Of the \$50 million in total loan funds available, 20 percent have been incumbered.
6. The Nonconforming loan program is not structured as a low income program. Correspondingly, only 7 of 177 home mortgages went to households with incomes under \$20,000 per year. In many rural areas of Alaska where incomes are low, this program will not benefit the majority of residents. For example, in 1976 in the NANA and North Slope region, 76 percent of the households had incomes under \$20,000 per year. Thus, although access to information and services is an important issue, it is one compounded by the fact that most rural households simply are not eligible because of low incomes.

The Senior Citizen Housing Development Program

Administered by the Division of Housing Assistance, the Senior Citizens Housing Development Program provides grants and matching funds to local sponsors. State funds are used to augment federal housing programs for the elderly and to help local sponsors pay for the preliminary work required in submitting federal applications.

1. This program completely funded the construction of 47 units at a cost of \$2.3 million, and partially funded (\$4.6 million) 303 units for which the federal agency contributed \$16.3 million. In addition, the state has awarded \$300,000 in planning grants to local sponsors, which in turn generate applications for an additional 118 new units.
2. The state has made \$24 million available for this program, \$16 million from direct appropriations, and \$7.5 million from dedicated bond revenues. Approximately \$466,000 over the past six years has also been available to cover the administrative expenses of the program.
3. As with all federally supported programs, reductions in the federal budget will result in fewer federal dollars being leveraged, and with an increased demand for the state to completely finance local applications for senior citizen housing, obviously with a fixed appropriation and fewer federal dollars, the number of new units this program can support will be directly impacted by the federal budget cuts.



1. The rise in housing prices between 1980 and 1981 appears to have been caused primarily by the state's growth of employment and population, not by the state's housing programs.

a. This growth first caused vacancies to fall rapidly and then began bidding up the price of the existing housing stock.

b. Although the price increase of a new home was not large measured over the two year period from 1979-1981, about 18 percent, because the past pipeline slowdown left an excess supply of housing in the state, the existing stock was undervalued relative to its replacement costs, and therefore, existing home prices rose by a greater proportion than prices of new homes. Price increases did not occur until vacancies reached marginal levels in the spring of 1981. At that time prices were bid up rapidly.

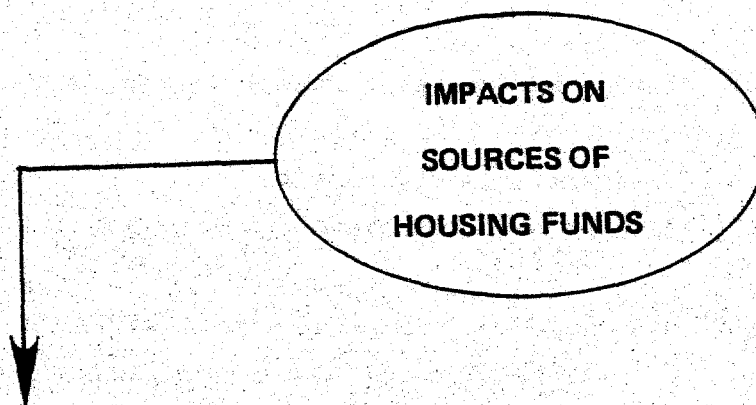
2. Population growth was sufficient to cause existing housing prices to rise up to their replacement costs by 1981, but state programs also had important effects.

a. The state's low interest loan programs appear to have caused the construction of new housing to have increased by about 33 percent, or about 1,000 units.

b. This increased demand represents homebuyers who otherwise would not have qualified for mortgages.

- c. Because of "churning," these 1,000 additional new homebuyers caused a total of about 4,000 total housing sales.
- 3. Renter households appear to have benefited from the state's low interest loan programs.
 - a. Even allowing for conversions, the programs appear to have caused net shifting from rental demand to homebuyer demand.
 - b. This reduced at least some of the pressure for rental units and helped hold rents from rising even faster than they did.
- 4. The price of new housing in Alaska rose during the 1980-1981 period, but only in proportion to the real costs of construction plus increases in the price of raw land.
 - a. Real construction costs appear to have increased by about 7 percent to 8 percent a year between 1979 and 1981.
 - b. While the price of raw land increased significantly over the period (about two and a half times), this cost is a small enough part of the total selling price of a new house that it is not particularly significant. Undeveloped land prices caused new housing prices to increase by about 2 percent to 3 percent a year.
- 5. In conclusion, the state's low interest loan programs do not appear to have had a significant impact on housing prices, but they have been important for:
 - a. Qualifying about 1,000 homebuyers who otherwise would probably not have been able to obtain mortgages;

- b. Increasing total housing sales by about 4,000 units;
- c. Increasing new housing construction by about 1,000 units;
- d. Contributing to the rapid (two and a half fold) increase in raw land values;
- e. And reducing slightly the upward pressure on rents, particularly in the Anchorage area.

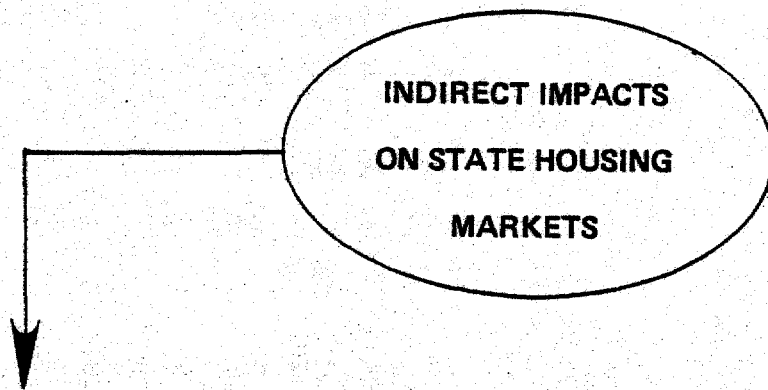


1. The state is not new to the residential mortgage market. Since 1976 it has been the largest purchaser of Alaska's residential mortgages.
 - a. National secondary lenders, on average, annually purchased about one fourth of the residential mortgages (\$100 million), while the state purchased the remainder (\$270 million) during the 1976-1979 period.
 - b. For the national secondary lenders, their 1976-1979 purchases increased their total Alaska mortgage portfolio by about eight percent.
 - c. State purchases of mortgages have been by the State Pension Fund, the Veterans Loan Fund, and the Alaska Housing Finance Corporation. The Alaska Permanent Fund and the Alaska

Department of Community and Regional Affairs purchased about 400 residential mortgages in 1981, representing three percent of the annual total.

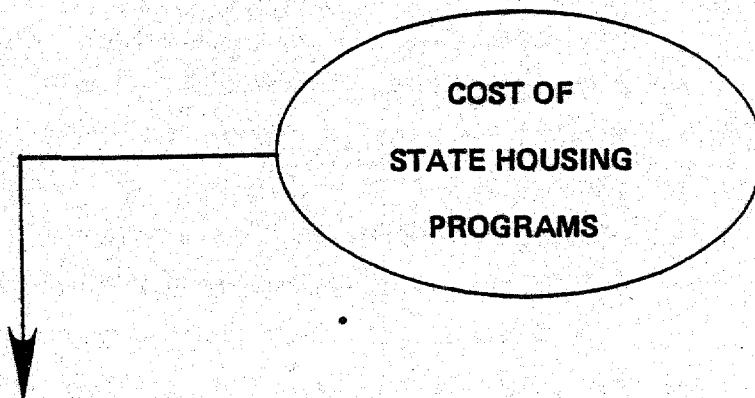
2. Since the state initiated the below market interest rate programs in July of 1980, the state's housing programs have become virtually the sole purchasers of residential mortgages. Thus in 1981, all \$780 million of residential mortgages were purchased by the state's housing programs. Those mortgages which AHFC could not purchase were bought by state pension funds.
3. Subsidized mortgage interest rates and population growth combined to double 1980's demand for residential mortgages in 1981. Residential mortgages had fallen from 6,800 in 1978 to 4,650 in 1980 before climbing to 9,000 in 1981.
 - a. In 1981, AHFC purchases increased by 250 percent over its 1980 purchases (3,600 mortgages up to 8,000), and the value of its purchases climbed from \$261.3 million in 1980 to \$700 million in 1981.
 - b. Part of AHFC's increase in purchases is attributable to its assumption of the Veterans Housing Program, which had purchased as many as 1,500 mortgages in 1978. The unusually low number of mortgages in 1980 also contributed to the apparent 1981 surge.
 - c. In essence, AHFC purchased in 1981 the equivalent of some \$200 million of residential mortgages, which in previous years had been purchased by national secondary lenders when AHFC offered no interest subsidy.
4. From July 1980 to October 1981, homeowner equity withdrawal for homebuyers who sold a home and bought another was on the order of \$60 million to \$90 million.

5. In summary, state and bond dollars were substituted for national secondary lender funds and, in smaller magnitudes, from savings and loan associations, mutual savings banks, and from homeowners' equity. However, it is important to keep in mind that the magnitude of this substitution was lessened by the fact that the state had already grown to be the dominant secondary lender.



1. The construction and sale of new homes or the resale of existing homes affect all sectors of the economy that are linked to the housing market. These include land owners, building contractors, building suppliers, realtors, appraisers, home insurance salesmen, and mortgage/loan officers, to mention the more obvious ones. In the preceding section on direct impacts, we estimated that the state's housing programs stimulated the construction and sale of 1,000 new housing units and the resale of approximately 3,000 homes. Based on these direct impacts, we can estimate the order of the magnitude of indirect impacts.
 - a. Primary lending institutions are estimated to have collected about \$3.5 million of mortgage related fees and an additional \$4.6 million in construction loan fees and interest payments.
 - b. Realtors are estimated to have collected an additional \$16.5 million in real estate commissions.

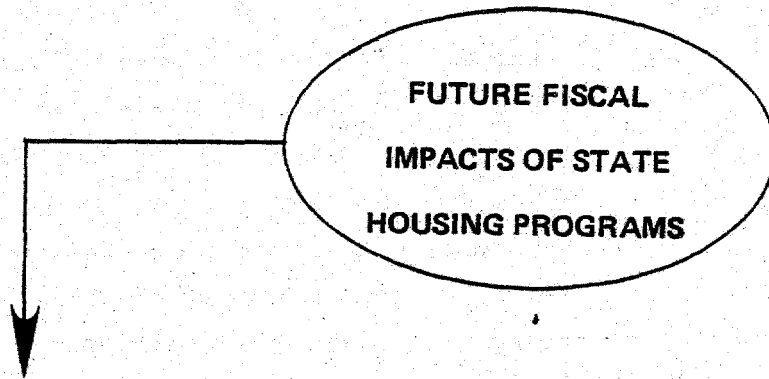
- c. Appraiser, title search, and home insurance companies generated somewhere on the order of \$3.5 to 8.5 million of additional business.
- d. The value of the additional contract construction is estimated at \$20 million, which in terms of wages and salaries, generated an additional 800-900 full-time equivalent construction jobs.
- e. Wholesalers of building supplies are estimated to have realized a gain of \$33 to 44 million in the volume of their sales.
- f. Although each of the above indirect impacts generate a second round of impacts, generally referred to as a multiplier effect, we did not attempt to estimate the multipliers for each of these indirect impacts.



- 1. During the 16-month period, July 1980 through October 1981, the State of Alaska appropriated approximately \$667.1 million in support of its mortgage loan programs.
 - a. Of this total, approximately 43 percent (\$286.0 million) was in the form of transferred portfolio assets, and 57 percent (\$381.1 million) was in the form of appropriated funds.

- b. The State Assisted Mortgage Program (including the additional percent buydown Veterans Program) received the largest share of these appropriations, approximately 82 percent. The Home Ownership Assistance Program received about 8 percent of the total, and the two Rural Programs, together, about 7 percent. The Mobile Home Program received about 3 percent.
2. The state's appropriations in support of the mortgage loan programs, however, are not the same as its costs.
 - a. Its costs are the present value of the differential between the bond market rate at which it borrows, and mortgage interest rate at which it lends over the lifetime of the mortgage loan.
3. Over the 16-month study period, changing market conditions, a new legislatively mandated formula for linking bond market rates to mortgage market rates, and the elimination of housing bonds' tax exempt status, combined to cause significant fluctuations in the State Assisted Mortgage Program's cost.
 - a. At the beginning of the 16-month study period, the value of the subsidy to homebuyers was about \$12,150 for an average mortgage of \$88,500, and loan life of 10 years; but the cost to the state was only \$1,300. The difference was the tax exempt bond status cost of lost federal revenues.
 - b. The loss of tax exempt status forced AHFC to obtain its money at higher market rates, increased the differential between the rates of which it borrows and lends, and caused the costs of the program rise sharply. At its maximum, the differential spread went over 7 percentage points, and it cost the state over \$26,000 to buy these points down for an average mortgage valued at \$88,600 with a ten year life.

- c. Averaged over the 16-month period, the average buydown for the State Assisted Mortgage Program was 4.2 percent, at a cost of \$17,800 for an average mortgage valued at \$88,500 with a ten year life.
 - d. Under the legislatively mandated formula linking bond market rates with mortgage market rates, the differential will be adjusted over the next several bond sales to a stable spread of 3 points. When this happens, the state's buydown subsidy cost will be at about \$12,900 for an average mortgage valued at \$88,500 with a ten year life.
- 3. Over the study period, AHFC gained experience in funds management, and required lower appropriations for each percentage point of interest bought down.
 - a. Comparing the last half of 1980 with the last half of 1981, AHFC could operate at the same level of costs and obligations as it did a year earlier with only about 60 percent of the appropriation level required per point of buydown.
- 4. All together, the State of Alaska incurred costs of about \$200 million buying down interest rates (at point spreads which varied program by program) over the 16-month period.
 - a. The State Mortgage Assistance Program (including the 1 percent Veterans buydown) accounted for about 84 percent of total costs.
 - b. The Home Ownership Assistance Program, which is targeted toward the low income, accounted for about 10 percent of total costs; all Rural Programs together, about 4 percent, and the Mobile Home Program, about 2 percent.



1. Population growth in the 1980s is projected to be comparable to that of the 1970's, ranging between a growth of 2.5-4.0 percent per year. The main difference between the two rates is that the higher rate assumes the construction of the NW natural gas pipeline whereas the lower rate does not.
2. Unlike the 1970s, the number of households in Alaska are not expected to increase at twice the rate of the general population in the 1980s. We project household formation rates in the range of 3.2-5.0 percent per year, with substantial variations in this annualized average during any given year, particularly between 1985-1987 should construction of the natural gas pipeline project initiate during this period.
3. The annual increase in additional homeowners, the equivalent of new housing units (excluding replacement), over our projection period ranges from about 2,700-3,800 per year, again with substantial year-to-year variations.
4. Total housing sales, which includes not only new housing sales, but also the turnover of existing homes, is projected to range on the annual average between 10,000 and 17,000 sales per year, again with large year-to-year variations.

5. Assuming AHFC's loan limits remain constant, we expect its share of the total primary and secondary market to fall from its current share of approximately 66 percent to about 50 percent by 1990. In contrast, we expect AHFC's share of both mobile home mortgages to grow from its current 50 percent share to 90 percent by 1990. Similar growth in AHFC's market share for rural home funds is also projected, i.e., from 60 percent in 1980 to 90 percent in 1990.
6. Consistent with our analysis of the state's housing program costs, we project fiscal impacts, as shown in our reprint of Table 69.

TABLE 69. FISCAL IMPACTS OF STATE HOUSING PROGRAMS

(millions of dollars)

	Appropriations				Bonded Indebtedness Accrued
	<u>Total</u>	<u>Urban</u>	<u>Mobile Home</u>	<u>Rural</u> ^a	
1986	\$280.8	\$127.8	\$75.5	\$77.5	\$1,165.2
1990	293.3	88.4	106.7	98.2	875.8

^a Assumed to be half AHFC and half DCRA appropriations.

SOURCE: ISER Projections

Concluding Remarks

One of the effects of the state's interest rate subsidy has been to make AHFC the primary decision maker in financing housing sales. Because the interest subsidy is only obtainable through AHFC (with the exception of CRA's comparatively small housing programs which also offer interest subsidies), financial institutions in the state, homebuyers, builders, and real estate developers must meet AHFC's rules and standards or forego the lower-interest money. This effectively precludes a developer who wants to build a particular kind of subdivision or a homebuyer trying to qualify for a loan from shopping at several sources (such as commercial banks, Savings and Loan Associations, Mutual Savings, FNMAE, and FHLMC).

In a competitive lending market, one lender may decide a project or homebuyer is credit worthy, while another may not. By funneling the mortgage subsidies through one organization, the state has also directed all home financing decisions into one organization.

As was discussed in Chapter Seven, the state, through its bond sales at AHFC, has been paying more for its borrowed funds than homebuyers would have paid to borrow money through FNMAE or FHLMC. This difference represents a loss to the state. A difference between FNMAE rates and the interest attainable by AHFC in the national bond markets is expected to continue; therefore, the state may wish to explore negotiating a cooperative "interest buydown" program with FNMAE and FHLMC. For example, the state could propose to buydown the interest rate paid by homebuyers by 3 percentage points for the first five or ten years of the life of the mortgage. The mortgages could then be sold to the national secondary lenders. Such an arrangement could result in lower costs to the state and to the state's homebuyers.

The mortgage interest rates of 1980 and 1981 have been at historically high levels, and these rates are expected to decline within the next two or three years to lower long-term rates. The state, by subsidizing mortgage rates, has kept interest rates closer to their expected long-term levels. By stabilizing interest rates, the state has maintained housing market activity and residential construction nearer their long-term equilibrium levels. Thus, home sales in Alaska have been sheltered from the effects caused by mercurial changes in national monetary policies and the associated escalation in interest rates.

APPENDIX A
ASSUMPTIONS USED IN 1981 ALASKA HOUSING PROGRAM STUDY

INDUSTRY

<u>PROJECT</u>	<u>EXPLANATION</u>	<u>LOW DEVELOPMENT</u>	<u>HIGH DEVELOPMENT</u>
<u>AGRICULTURE</u>			
	Various levels of development depending on State & Federal policies, combined with market conditions.	Slow decline in activity	Employment growth at 8% annual rate
<u>FISHERIES</u>			
	Constant employment in existing fishery. Development of bottom fishing to replace foreign fishing in 200 mile limit varies.	No development	50% replacement
<u>OIL, GAS, AND MINING</u>			
Trans-AK Pipeline	Construction of 4 additional pumping stations	Yes	Yes
Northwest Gas Pipeline	Construction of natural gas pipeline from Prudhoe Bay & associated facilities 1983-87		Yes
Prudhoe Bay Oil and Gas	Production from existing and newly developed fields resulting in increased permanent employment	Yes	Yes
Upper Cook Inlet Oil and Gas	Declining employment in oil production offset by employment growth in gas production	Yes	Yes
National Petroleum Reserve in AK	Development & production from 5 oil fields & construction of 525 miles of pipeline	Exploration but no development	Slow development
Outer Continental Shelf (OCS) petroleum and gas	Exploration, development & production based on current OCS lease schedule w/additional sales after 1985	Beaufort Sea production; no sales after 1985; 1 billion bbl discovered	3 lease sales after 1985; 7 billion bbl discovered & developed
Coal Development	Development of Beluga coal reserves for export & synfuel production	No	Eventual production of 4.4 million tons per year
U. S. Borax	Development of mining operation by 1993	No	No
Other Mining	Hardrock & other petroleum activities	Constant at current levels	1% annual growth of employment
<u>MANUFACTURING</u>			
Petroleum Refining	Construction of 100,000 barrel per day refinery at Valdez	No	Yes
Pacific LNG Project	Development of liquid natural gas project in the Anchorage areas between 1985-87	No	Yes
Petrochemicals	Development of a project similar in concept to the Dow-Shell proposal	No	No
Food Processing	Development based on & correspondent to growth of fisheries	Grows to accommodate growth in fishing industry.	

Timber, Lumber, Pulp	Expansion to accommodate annual cut of 960 million to 1.3 billion board feet by 2000	960 million board feet	960 million board feet
Manufacturing for Local AK Use	Expansion of existing production as well as new manufacturing as a proportion of total employment	1% of total employment	2% of total employment
<u>TOURISM</u>	Annual growth rate of tourism	2%	4%
<u>GOVERNMENT</u>			
State Capital Move	State capital move to Willow beginning in 1983	No	No
Federal Government	Increases in civilian employment; military remains constant	Growth at historical rate of 0.5	Same as Low
State Government	Spending grows with population prices and incomes	Per capita spending unchanged	Per capita spending increases at same rate as per capita income

SOURCES: Alaska Economic Projections for Estimating Electricity Requirements for the Railbelt. Scott Goldsmith and Ed Porter, Institute of Social and Economic Research, October 1981.

APPENDIX B
HUD FAIR SHARE ALLOCATION SYSTEM

The Federal Department of Housing and Urban Development distributes most--80 percent--federal housing assistance funds for newly subsidized units according to the Fair Share System. Under this system, funds are allocated by HUD's national office to different parts of the country according to the amount of housing needed in that area.

Need is measured by several variables: area population, poverty, substandard housing, overcrowding, and vacancies. Poverty is defined as the number of families with incomes below 50 percent of the median area income. Substandard housing is measured by the number of units lacking complete plumbing. Overcrowding is defined as the number of units with more than one person per room. The indicator regarding vacancies is known as the vacancy deficit; it is the number of new units needed to increase the vacancy rate in the area to 6 percent. The final variable included is the number of renter households who (1) spend more than 25 percent of their income on rent and (2) live in an overcrowded or substandard unit.

Each of these variables is given the same weight, and the amount of housing need in each area is calculated as a percentage of the national total housing need. If an area is determined to have 10 percent of the national need, that area is allocated 10 percent of the pool of housing assistance funds. There are 44 areas to which HUD Central Office allocates these funds, each having a HUD Area Office. Alaska is one of these 44 areas. Once the Anchorage HUD Area Office receives Alaska's allocation, this office allocates that money around the state.

The HUD Anchorage office designates allocation areas within the state. Each metropolitan area, as defined by the Census, is an allocation area; Anchorage is the state's only metropolitan area. The remainder of Alaska is divided into four allocation areas corresponding to the state's four judicial districts. The HUD area office determines the housing need in each area on the same basis as described above, and allocates HUD funds within the state according to need.

In any single year, however, one allocation area may receive a larger or smaller amount of assistance than its share. This occurs because the amount of funds available to Alaska in any one year may be too small to split up strictly according to need. Over the course of several years, however, HUD attempts to spend its funds around the state according to the distribution of need. The actual distribution of HUD spending also depends on the project applications received by HUD. If no acceptable applications are made by agencies in an area over the course of several years, that area will not receive its share of federal housing subsidies.

Please note that this allocation system applies to funding for units that are to be subsidized for the first time. Once that unit is contracted for or built, a continuing stream of federal subsidies is associated with it. HUD's commitment to continue the subsidies varies from five-to-forty years, depending on which program is used. The amount of money allocated to the state each year, then, does not include these continuing subsidies; it only includes funding for the first year for new units.

This description of the Fair Share System is by no means complete. More detailed information is available at HUD offices.

APPENDIX C

EARLY HOUSING PROGRAMS OF THE ALASKA STATE HOUSING AUTHORITY¹

Early Management

In the early 1940s the Federal Public Housing Administration constructed, pursuant to the Lanham Act, a total of 324 family dwelling units in Anchorage, Fairbanks, and Juneau for the purpose of housing war workers. Following its creation, the Authority assumed the management of these units although title remained with the United States Government. Besides these units, the Authority was contracted to manage veterans' housing projects by the cities of Anchorage and Fairbanks. Both the war housing--classified as temporary--and the veterans' housing projects have since been phased out of the Authority's operations.

Veterans' Housing

In the 1946 Territorial Legislature, a \$100,000 revolving fund was established for use by the Authority in making accommodations available to veterans of World War II who were enrolled in educational institutions in Alaska. Acting on this mandate, the Authority undertook construction of a 50-man dormitory for veterans at the University of Alaska. Upon completion, the Authority was responsible for its maintenance, and the University of Alaska for its management. Like the housing units, this dormitory has been phased out of the Authority's operations.

Alaska Housing Act

The Territorial Legislature directed the Housing Authority to recommend and seek passage of legislation, both territorial and federal, which would establish a program to remedy the Alaska housing shortage. Since the economics of Alaska were different from those of most states, the Authority examined the problem and in 1947 submitted

¹Adapted from the 1972 Annual Report of the Alaska State Housing Authority and Weicher, Housing Federal Policies and Programs; 1980.

suggested legislation to the U.S. Congress. With this proposal, assistance then came from the Housing and Home Finance Agency, the Department of the Interior, and other federal agencies. These agencies, with the Alaska Housing Authority, produced a plan which was introduced in Congress and the Territorial Legislature and later became the program of the Authority.

The 1949 Territorial Legislature approved legislative bills which would enable the Authority to activate provisions of a federal bill then ready for presentation to Congress. This legislation included an initial appropriation of \$250,000. When the federal legislation was approved, it included an initial appropriation of \$15,000,000 and was called the "Alaska Housing Act" (P.L. 52, 81st Congress).

The initial concept of the Alaska Housing Act recognized the limited home financing available in Alaska, the high construction costs resulting from hurried defense and war construction, and the absence of a self-sufficient construction industry. The purpose of the plan was to encourage an adequate building industry and to establish the capacity to meet the increasing need for home construction.

The program included production of more than 6,000 dwelling units, encouragement of private financing (including a secondary financial market), and adjustment of existing Federal home mortgage insurance programs to the higher costs prevailing in the Territory. The Alaska Housing Act met these problems by:

1. Creating a \$15,000,000 revolving fund for the use of the Alaska Housing Authority, of which \$1,000,000 was set aside for a Remote Dwelling Program. (Later this fund was increased by \$4,000,000.)
2. Increasing FHA mortgage insurance limits up to one-third over the established limits under the National Housing Act.
3. Liberalizing mortgage purchasing privileges for the Federal National Mortgage Association in Alaska.

4. Allowing the Alaska Housing Authority to make loans from the revolving fund where private financing was not otherwise available.
5. Allowing direct construction by the Alaska Housing Authority of necessary dwelling units for any community where private sponsors were either unwilling or unable to undertake such housing construction.
6. Liberalizing certain mortgage insurance plans.
7. Calling upon private capital and all elements of the private building industry to participate in the construction of necessary housing in Alaska. By so doing, it accomplishes a two-fold purpose: (a) supplying necessary dwelling units and (b) promoting a self-sustaining building industry for strategic Alaska.

During the life of the Public Law 52 program, the original goal of the Authority was more than met. By 1953, 7,500 units had been constructed. This new housing construction represented an investment of \$10,000,000 by private enterprise. Prior to enactment of the Law, only eight single-family units had been built in Alaska under FHA regulations.

Low-Rent Public Housing Program

Preliminary work on the Housing Authority's low-rent program began in 1949. Initially, the Authority constructed 325 units: 50 in Juneau, 50 in Ketchikan, 75 in Fairbanks, and 150 in Anchorage. By 1953, all of the units had been completed, and they have been occupied continuously since that time. The program was reactivated in 1963 with an obvious statewide need for housing designed for the low-income families in urban areas. By 1972 an additional 326 units had been constructed by private firms under contract to the Authority. The total construction cost of these units was \$9,836,215. In addition, the Authority undertook comprehensive modernization of the original units at a cost of about \$3,000,000.

Middle-Income Program

The middle-income program, authorized by the Board of Directors in 1965, produced two projects: 32 in Wrangell and 24 units in Petersburg. The housing was built under the provision of Section 221(d)(3) of the National Housing Act and is permanently financed by the FNMAE at below-market rate interest. The project in Petersburg is no longer under management by the Authority.

In 1961, this program was created in an attempt to allow lower-income families to benefit from FHA insurance on the rented apartments. The FHA-insured mortgages on apartment projects owned by nonprofit sponsors or limited dividend corporations if the mortgages carried below-market interest rates. The low rates and absence of profit were expected to reduce rents, making these apartments affordable to those too poor to take advantage of the FHA homeownership insurance program, but with incomes too high to qualify for public housing. This "moderate-income" group generally could not afford the rents in unsubsidized new apartments. The program also included dollar mortgage limits per unit to insure that the program reached the targeted population.

To induce private lenders to lend at below-market rates, the Federal National Mortgage Association (FNMA) bought the loans from the lenders at face value. The net effect of the arrangement was that FNMA lent mortgage funds at low interest rates to private sponsors to build moderate-income housing.

The 221(d)(3) program was short-lived. Its initial budget impact was very large, making it politically vulnerable, even though the end cost to the government was much smaller due to principal and interest pay back. In addition, the interest subsidy proved inadequate in reducing rents to a level affordable to the target population. The subsidy did not result in very many units being constructed, and the program was scrapped in 1968 to be replaced by another program

(Section 236) using interest subsidies and FHA insurance. (This section derived from a discussion in Weicher: 38-40.)

Remote Dwelling Program

This program was established by Public Law 52. The program was based on home improvement loans, to a limit of \$500 per person, and a 5 percent interest rate. Loans were to be repaid to the Alaska Housing Authority over a period of six years and were character loans, requiring no collateral. As originally established, the Authority acted as agent in purchase and delivery of materials, while the borrower either built or improved his own dwelling. By the end of 1952, the Alaska Housing Authority had assisted in the erection or improvement of approximately 550 housing units in 30 villages from north of the Arctic Circle to as far south as the lower mouth of the Yukon River.

Native Village Program

In 1963, the Housing Authority was granted \$180,000 by the Federal Government to conduct a low-income housing demonstration project in remote native villages. The program called for experimental housing constructed in the three ethnological areas of the State--Southeastern Indian, Athabascan Indian, and Eskimo. The most ambitious project undertaken by this grant was the relocation of an entire village to a new site on the Yukon River, commonly called the Grayling Project. The Authority administered the grant and provided materials and technical assistance to the village to build 23 new homes. The mutual-help approach to construction was utilized. This experiment provided a basis for future grants and programs for Alaska Natives.

Remote Village Housing Program

Section 1004 of the Demonstration Cities and Metropolitan Development Act of 1966 authorized \$10,000,000 for grants and loans to the State of Alaska to assist in providing housing and related facilities

to remote Alaskans in accordance with a statewide plan approved by the Secretary of the Department of Housing and Urban Development. In 1967, because of a statewide plan formulated by the Authority with the cooperation of other state agencies, the program was established by law under the Office of the Governor, who was directed to designate the agency to carry out the program.

In 1968, Governor Hickel designated the Housing Authority as the agency to administer this program. The State Legislature authorized appropriations equal to 10 percent of actual federal appropriations. Congress appropriated \$1,000,000 in fiscal 1969, and with 10 percent of the \$1,000,000 in State matching funds, 160 houses were constructed in ten villages, using Native labor working under experienced construction supervisors. Similar amounts were appropriated and made available in fiscal 1970, and 175 houses were constructed in eight villages.

Since Congress made no further appropriations for that purpose, the State Legislature appropriated \$1,000,000 in fiscal 1971 as a substitute for the federal funds so that the program might continue uninterrupted, and 111 houses were completed. The State Legislature also authorized the sale of \$3,000,000 in general obligation bonds for construction of additional housing in the remote areas. Half of the authorized bonds were issued and their proceeds made available to the Authority for use in 1971.

During 1971, the Department of Housing and Urban Development funded 200 units under a 100 percent federally funded Mutual Help Program. Ten villages were selected and the program was completed in 1974. The program operated in the same manner as the original 1969 and 1970 program, except for the method of funding.

Turnkey III

The Turnkey III program was the first homeownership program targeted specifically to low-income families. It operated the same way that the current Mutual Help for Indians program works, with the homebuyers' equity building up gradually. The major differences between the programs are in participant contributions and payments and in the fact that this program was not limited to Natives.

APPENDIX D
STATE HOUSING RELATED PROGRAMS

Pioneers Homes

The primary goal for the Alaska Pioneers Homes is to provide a comfortable living environment for elderly citizens of the state. Services provided to residents include physical and mental health care and social activities in residential care and nursing care accommodations.

Any persons who have lived in Alaska continuously for at least fifteen years immediately preceding their application are entitled to admission at little or no cost. Persons not considered destitute, but meeting the fifteen-year residency requirement, may be admitted upon payment for the cost of their care and support, currently \$275 per month. In addition, any person with a total of 30 years state residency cannot be disqualified due to absences from the state if the absences are determined to be reasonable by the Commissioner of Administration and if the applicant is otherwise qualified.

The Department of Administration operates Pioneers Homes in Sitka, Palmer, Fairbanks, and Anchorage, providing residential care for 340 persons and nursing care for 178. A new home in Ketchikan was scheduled for completion in December 1981, with 19 resident and 30 nursing facilities. A new nursing wing at the Anchorage Pioneers Home will be ready for occupancy in May 1982, providing 96 additional nursing beds. This program also funds the Kotzebue Senior Citizens Center, which is operated by a private corporation. The Center provides social, recreational, and nutritional services and has 16 beds for ambulatory residents.

Senior Citizens Tax Relief

This program was initiated to reduce the financial pressures on senior citizens of housing-related taxation. Property taxation can contribute to the unwilling relocation of their residences for the state's elderly, especially for those with fixed incomes. Exemption from local property taxes for homeowners and tax equivalency payments for renters and deferment of special water and sewer assessments are the three housing-related items under this program.¹

Eligible citizens, 65 years of age or older, apply to their local government for the exemptions and deferments. The local government is reimbursed for lost revenues by the State Assessors Office. The property tax exemption and renters equivalency amounts are totally forgiven. A special assessment deferment becomes a lien on the property which is due and payable when the property comes into the ownership of an ineligible taxpayer.

Veterans Loan Fund

The State of Alaska had a direct loan program for veterans and national guardsmen, administered by the now-defunct Division of Veterans Affairs. The program was funded by direct state appropriations. Most of the loans made were for residential mortgages, but they could also be used to finance farms, businesses, education, fishing, mining, personal use, or for investment in rental property.

From fiscal year 1977 to fiscal year 1980, \$213,869,600 was loaned for single-family mortgages. In 1978, the Department of Revenue purchased most of the loans made by the Division of Veterans Affairs. No new applications were accepted, and the program was discontinued because of its large impact on the state budget. The Department of Revenue continues to service outstanding veterans loans, most of which were purchased by the Alaska Housing Finance Corporation.

¹Motor vehicle tax exemption is the only nonhousing tax relief provided under this program.

Residential Energy Conservation Program

This program, administered by the Division of Power and Energy Development, was initiated in October 1980. Program goals are two-fold: to conserve energy and to reduce housing costs by reducing home heating costs. There are no program eligibility restrictions; both renters and homeowners can benefit. All program costs are funded by direct state appropriations.

State funds are used for several purposes. The state trains and contracts with home energy auditors, who inspect homes to determine their energy characteristics. State funds are used to pay for all but \$10 of the cost of an audit; the resident pays that \$10. The state makes grants or refunds to the home resident for the cost of taking energy conservation measures that are recommended by the auditor, for amounts up to \$300 for single-family, detached homes, or \$200 for homes in multifamily structures. In addition to grants and refunds, the Division of Business Loans offers loans up to \$5,000 at five percent interest for energy improvements recommended by the audit.

In the first year of the program, 8,000 homes were audited in 24 communities. More than 2,700 residents received grants and refunds, totaling \$798,308. It is estimated that about 98 billion BTUs will be saved the first year because of energy conservation measures the program financed. This is equivalent to 710,000 gallons of fuel oil; and at an estimated cost of \$1.25 per gallon, this would equal \$887,000 saved over the first year after the measures have been installed (Appropriate Energections, October 1981). Program administrators anticipated conducting 24,054 audits between September 1981 and January 1982.

State Mobile Home Loan Program

From May to October 1980, the state had a Mobile Home Loan Program, administered by the Department of Revenue. Loans were made for

a 25-year term at 11.75 percent interest, with a 10 percent down-payment required. In the six months of activity, 203 loans were made totaling \$5,763,000. This program was discontinued when the Alaska Housing Finance Corporation initiated its Mobile Home Loan Program (Alexander).

Housing Program Debt Service

The state has a continuing obligation to pay off the bonds it issued to finance certain housing programs. The Pioneers Home and Senior Citizen Housing Development programs are current programs with ongoing debt service costs. There was also a Remote Housing Program in the early 1970s for which payments are still being made.

State Institutional Investors

The State of Alaska has also invested significant amounts in housing through institutional investors such as state pension funds and the Permanent Fund. These investors act much like national secondary mortgage market institutions, purchasing residential mortgages originated by direct lending institutions. They invest in loans at or close to market interest rates. Recently they have served homebuyers who do not qualify for AHFC low-interest loans. The State Pension Funds, for example, buy 30-year loans to owner-occupants with at least 10 percent equity, carrying 15 3/4 percent interest and meeting FNMA guidelines.

Since 1977, the State Pension Funds have purchased \$299,600,000 in residential mortgages. The Permanent Fund began investing in mortgages in 1981; in the first nine months of that year, it purchased \$10,400,000 in loans.

STATE SPENDING IN HOUSING AND HOUSING-RELATED PROGRAMS
(000)

<u>Program</u>	<u>FY 1982</u>	<u>FY 1981</u>	<u>FY 1980</u>	<u>FY 1979</u>	<u>FY 1978</u>
<u>Pioneers Homes</u>					
Operating	\$13,910.8	\$11,716.4	\$11,381.8	\$10,344.9	\$9,178.0
<u>Senior Citizens</u>					
<u>Tax Relief</u>					
Operating	2,236.0	3,103.0	2,735.1	2,510.9	2,141.6
<u>Veterans Housing Loans</u>					
\$ Volume Loaned	0.0	0.0	5,082.4	79,926.5	82,949.4
<u>Residential Energy</u>					
<u>Conservation</u>					
Operating & Capital	20,000.0	Not Available			
<u>State Mobile Home Loans</u>					
\$ Volume Loaned	0.0	0.0	5,763.0		
<u>Debt Service</u>					
Pioneers Home	2,481.8	1,471.3	1,322.8	1,134.8	1,029.2
Senior Citizen					
Housing	1,750.4	1,295.8	880.3	313.9	66.3
Remote Housing	239.8	246.1	227.6	230.3	238.0
<u>Institutional Investors</u>					
Pension Funds (\$					
Volume Purchased)		58,600.0	62,400.0	61,200.0	59,000.0
Permanent Fund (\$					
Volume Purchased)		10,400.0			

	<u>FY 1977</u>	<u>FY 1976</u>
Pioneers Homes	7,494.6	
Senior Citizens Tax Relief	1,525.0	
Veteran Housing	45,911.3	40,182.4
<u>Debt Service</u>		
Pioneers Homes	900.7	
Senior Citizens' Housing	0.0	
Remote Housing	223.0	
Pension Funds	58,400.0	

SOURCES: Executive Budget, Fiscal Years 1978, 1980, 1981, and 1982.

Alaska Budget in Brief, FY 1982.

Bill Pelto, Division of Budget and Management.

Richard Alexander, Department of Revenue.

APPENDIX E

INFORMATION NEEDS FOR HOUSING PROGRAM EVALUATION

Introduction

Many methods of program evaluation have been developed. Each is primarily a product of the different decision making situations in which they are applied. Different decision making situations include evaluating present or proposed actions; evaluating capital investments or operating programs; and evaluating one particular program or a number of programs designed to reach the same goal.

Independent of the type of evaluation, the primary goal of this type of exercise is to allocate public funds in a way that is most beneficial to the political constituency. This concept is similar to the economists concern with efficiency, the attempt to reach a particular outcome at the least resource cost. Cost-benefit analysis is program evaluation conducted in this strictest sense. Program evaluation may differ from the strict concern with efficiency for two reasons. First, the particular public agency may not bear the burden of all the cost; their concern is only with efficiency in terms of costs they bear. Secondly, the political process may define particular goals which prevent the most efficient approach. Given these constraints, the purpose of project evaluation is the most beneficial allocation of public funds.

Basic Concepts

A set of basic concepts should be consistently applied in any type of program evaluation. These concepts provide consistency both within a particular evaluation and across different evaluations. Consistency across evaluations is important since the alternate evaluations could be used to select the best method of achieving a particular objective or to select from competing users for a fixed amount of public resources.

The following basic concepts should apply in any program evaluation (see Devanney, et al, 1976).

1. Make the client group explicit. Any particular public action will generate costs and benefits for a number of groups. In a program evaluation, the costs and benefits to a specific group are considered and effects to other groups are ignored. For example, when public housing is provided through federal grants, these federal funds are not costs to the state.
2. Make the greatest use of market prices. Since the changes which result from public actions affect many different types of resources, applying market prices to these resources allows their comparison. When applying prices to outcomes and costs, three concerns are important. First, prices may not reflect the value to the public of certain resources. Prices may ignore social cost and benefits. Secondly, prices are not independent of the present income distribution and distributional consequences must be treated explicitly. Finally, this does not mean outcomes which cannot be valued with a market price should be ignored.
3. Value net rather than gross changes. The benefits created by a public action include only the net change. For example, if one effect of the action is to create jobs, the total number of jobs measures the benefits of the action only in certain cases. If the workers hired would have been unemployed, then the jobs are a benefit. To the extent workers would have been employed, these jobs are not a benefit.
4. Make explicit distributional effects. Public actions will affect different groups in the community differently. Certain groups may bear a greater share of the costs than the share of benefits they receive. Policy makers may consider these distributional consequences in addition to the overall efficiency effects.

5. Make the baseline explicit. The effects of public action are determined by comparing what will (or did) happen with the action to what would happen without the action. The baseline describes what would have happened without the program; it is the scenario to which the program effects are compared. For example, when examining the effects of the AHFC program, the baseline is what would have happened in the program year without the program, not what happened in the previous year.

Uncertainty

A program evaluation is conducted under conditions of uncertainty. The source of uncertainty lies primarily in the description of what would have happened or what will happen. This uncertainty is primarily an information problem.

The information problem is of two general types. First, projection of events which either will or would have taken place is an important part of estimating program effects. Knowledge of how the important systems work is necessary. Uncertainty can arise if the workings of these systems is not clearly understood. The second type of information problem concerns data. Data problems exist most importantly when we attempt to understand what happened because of a program. Missing data prevents the development of a complete picture of what happened.

Information Needs For Housing Program Evaluation

In this section, we will describe the information gaps we found in doing the evaluation of the housing programs. We concentrate on those gaps we feel are most important. The housing information needs can be grouped into three classes: program data, housing market data, and housing market analysis. Each of these is described briefly below:

1. Program data. In our study, we found a surprising amount of data collected by the programs. A good deal of demographic data was available in an easily accessible form (much of it accessible by computer). Helpful additional information would include:
 - a. Racial information for the borrower or renter.
 - b. Prior housing information for borrower or renter, including prior housing type, location, and amount sold for.
 - c. A similar complete set of demographic and housing data on unsuccessful applicants.
2. Market data. The primary constraint to completing our analysis was data on housing markets. Anchorage is the only market for which very complete information exists. Other urban markets have only limited information. Housing market data on rural markets is non-existent. Housing market data consists of information on prices, new construction, sales, and quality of the existing stock.

Another type of market data which is needed is information on the population not served by the programs. Except for census years, this information is not available. This type of information would be extremely important, for example, when trying to measure the housing demand effect of the programs, since demographic factors importantly influence demand.

3. Housing market analysis. Finally, certain systems which affect housing need to be better understood. The supply side of the housing market is not very well understood. As we have shown, important impacts depend on the supply response. This side of the market includes bankers, builders, land developers, and those sectors of industry which supply inputs to these groups.

An especially important component of the supply side is the conversion of housing between rental and owner housing. The conversion factor is important for estimating the net effect of the program on new construction.

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