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(HOUSING FILE)

1982

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 tenants.

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; Home 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 have been made in rural areas by December 14, 1981, with a total principal amount of \$2,651,800. 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	1
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

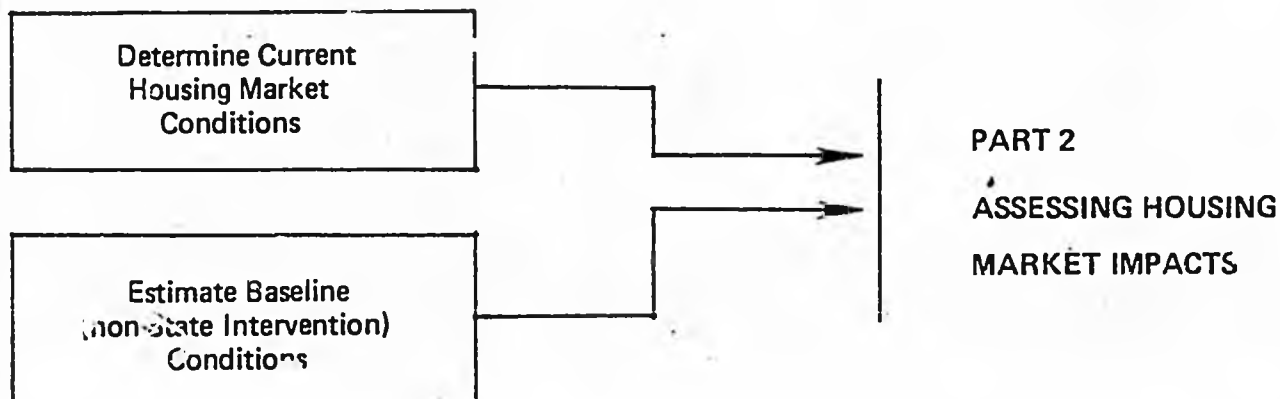
The Senior Citizens Housing Development Fund in 1976 was authorized \$7.5 million from bond revenues for capital funds. These funds became available in increments from the proceeds of several sales of state bonds which were to be payed off through state appropriations.

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.

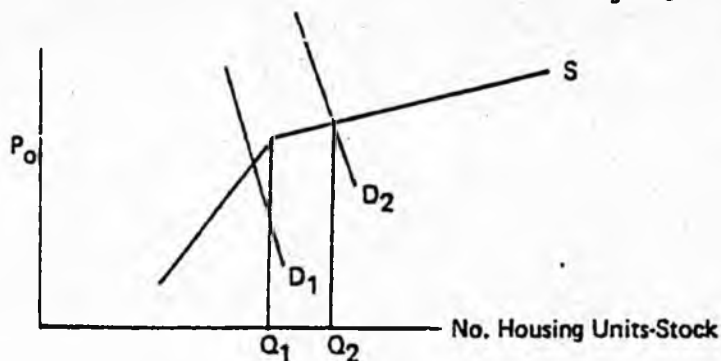
their prices will be at least equal to their costs of construction and the price of land. We also assume unsubsidized, nonrental units will not be built unless market rents will cover interest costs and maintenance. When prices are too low to induce new construction, prices, and rents for the existing 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.

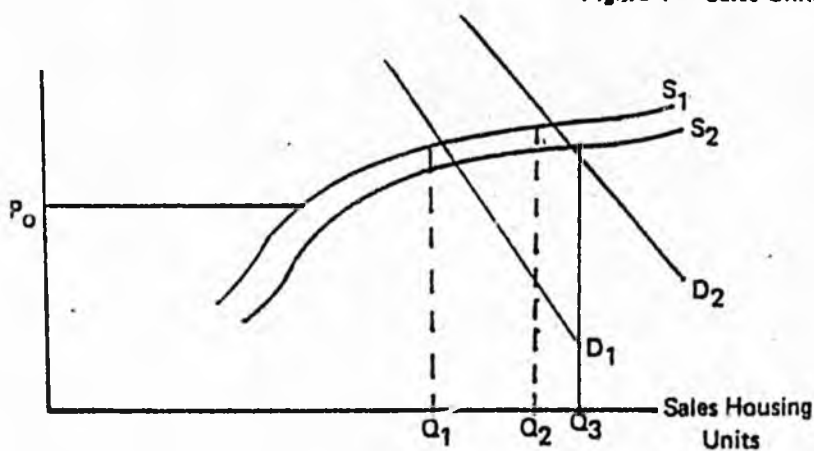
³Many people think of conversions only as the change over from apartments to condominium sales, however, single family housing can be rented or sold depending on market conditions, and the same is true for condominiums.

Figure 3



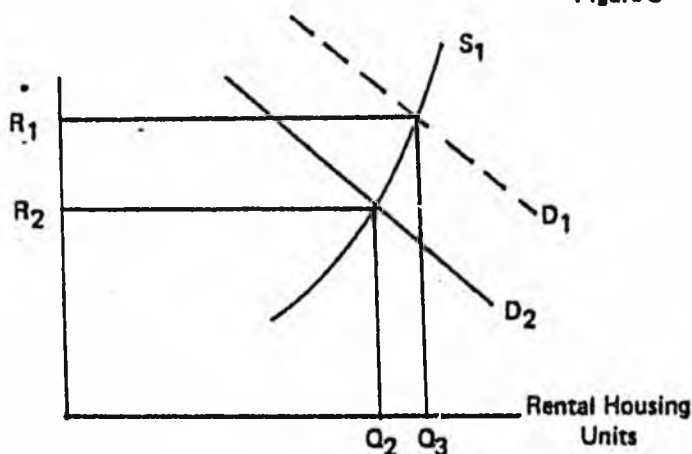
- D₁ – Represents the demand for the existing stock of housing at beginning of period.
- D₂ – Represents a new demand curve which has shifted to the right because of an increase in the number of households.
- Q₁ - Q₂ – Represents construction of new units (or new mobile homes).
- P₀ – Represents the price above which new construction will take place.

Figure 4 – Sales Units



- D₁ – Represents demand for sales units w/o loan programs.
- D₂ – Represents shift in demand for sales units as a result of below-market interest rates.
- S₁ – Supply curve for sales units (conversions and new construction).
- S₂ – Shift in supply curve due to decrease in rents. (Figure 5)
- Q₁ – Represents the number of sales housing units at beginning of period.
- Q₁ - Q₂ – Represents construction of new sales units due to shift in demand from sales to rental units and conversions from rental to sales due to increase in sale price.
- Q₂ - Q₃ – Represents rental to sales conversions due to decreases in rents as loan program shifts demand curve for rentals.

Figure 5 – Rental Units



- D₁ – Represents demand for rental units w/o loan programs.
- D₂ – Represents shift in demand for rental units as result of below-market interest rates.
- S₁ – Supply of rental units (conversions and new construction).
- Q₂ – Represents the number of rental units at beginning of period.
- Q₂ - Q₃ – 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 $[Q_2$ and $Q_1]$ in Figure 5 and $[Q_1$ 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 indential 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 300 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 PURCHASED³

	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	
Seidovia			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	131	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

³Data 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 Joan 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%

^a July 1, 1980, Bond Sale, Alaska Housing Finance

^b December 1, 1980, Bond Sale, Alaska Housing Finance

^c June 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		5	1	58	40
Total	1,596	5,052	247	825	185	369	492	1,026	2,520	7,272
Percentage Distribution										
< \$70,000	24%	47%	52%	68%	14%	55%	51%	68%	32%	53%
\$70,000-120,000	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 homebuyers 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 \$30,000; whereas only 800 (32 percent) of all new homes sold for less than \$30,000.

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%	48,000	73,000	99,000	113,000	130,500	146,500
	>\$90,000 - 19.5%						
	<\$90,000 - 12.375%	48,000	73,000	99,000	116,500	136,500	156,000
	>\$90,000 - 16.0%						
	<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	57,500	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%	
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 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

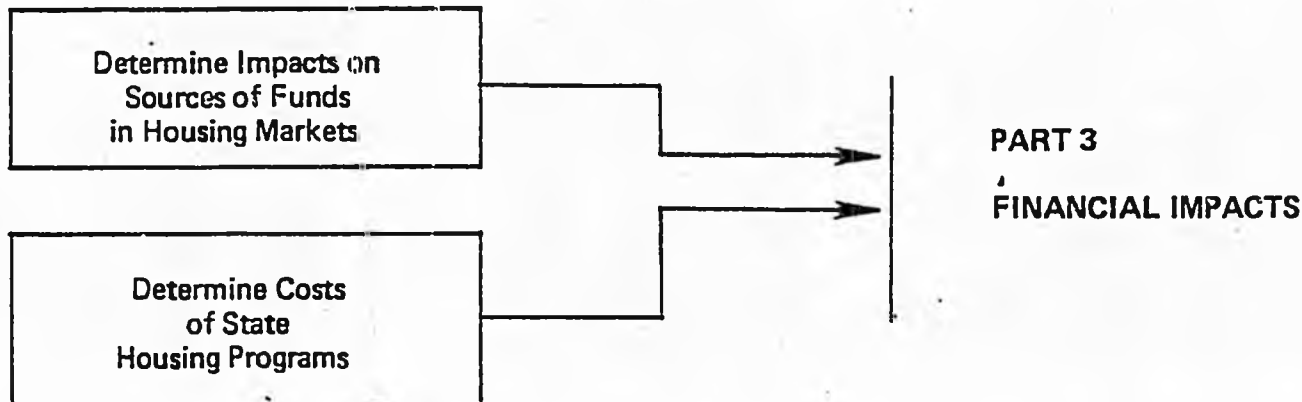
particular point is that the multiplier based just on real estate activity would be less than multipliers commonly quoted for the so-called "basic" sectors of the economy.

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										
Savings and Loan	6,565	211,789				6,062	224,602			
Credit Unions		64,500					64,000			
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										
Farmer's Home Administration ^c			125	6,349				70	1,230	
Dept. Housing-Urban Develop. ^c			754	65,122				244	15,287	
								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