DRAFT THREE

AN EVALUATION OF THE FEDERAL ASSISTED HOME ONWERSHIP PROGRAM (1976)

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CHAPTER ONE

INTRODUCTION

On November 3, 1975, the Minister of State for Urban Affairs introduced a "Federal Housing Action Program" (FHAP). The goal of the program is:

> to stimulate production of the kind of good quality housing that lower and middle income Canadians need and can afford, and to stimulate employment throughout the country.[1]

One of the major elements of the FHAP is the Assisted Home Ownership Program (AHOP).[2] A different version of AHOP had been in existence since 1973, under which assistance had been available only to persons with low incomes. Under the modified FHAP - AHOP, any household of two or more persons qualified for some assistance provided it purchased a moderately priced unit (moderately priced is defined as being below maximum

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[1] CMHC News Release, Ottawa, November 3, 1975.

[2] Other measures announced at the same time by the Minister were:

(1) to require private lending institutions to direct in 1976 an additional $750 million into the financing of new, lower and moderately priced housing;

(2) to require private lenders to restrict their low down payment lending to new low and moderately priced housing;

(3) to stimulate production of rental units by extending the Assisted Rental Program (ARP);

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house prices set for each market area). As a result of the changes in the program the number of new units built to qualify for assistance increased from approximately 9,000 in 1975 to 38,000 in 1976 -- nearly one-quarter of all new units built in 1976 for owner occupancy.

This paper will evaluate the new version of AHOP in terms of it's success in achieving stated objectives and the costs generated by the program. The objectives are:[1]

1. to increase affordability by offering assistance to anyone seeking to buy modest cost housing;
2. to increase employment; and
3. to hold down house prices and reduce demand by the well-housed.

Each of these three goals will be evaluated in detail in Chapter Two through Four respectively. Chapter Five will estimate the capital and subsidy costs of AHOP to CMHC.

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(4) to extend to the end of 1977, capital cost allowances on new rental units;

(5) to give to municipalities $1,000 for each housing unit built within specified price and density criteria; this Municipal Incentive Grant Program (MIG) expires December 31, 1978; and,

(6) to make loans and grants to muncipalities for water treatment facilities and mains.

[1]Memorandum to the Cabinet, October 24, 1975.

A second concern of this paper is with the mechanics of the program: how it works and what effects the design of the program has on its success. To fully understand the modification made to AHOP in November, 1975, it is necessary to understand the context of the program. In Section One of the Chapter, a brief history of home ownership programs in CMHC will be presented, illustrating how the program has evolved to its present state. Section Two will describe in detail the operation of the program as it existed in 1976. The effects of the instruments used to deliver the program on the success of AHOP in achieving its goals will be discussed in Chapters Five, Six and Seven. Chapter Eight will summarize the conclusions reached in the individual chapters.

1.1 HISTORY OF CMHC HOME OWNERSHIP ASSISTANCE PROGRAM

Until 1970, CMHC did not have any large scale program[1] to subsidize home ownership for low-income families. On February 2, 1970, special provisions were made to subsidize home ownership for low-income households[2]. The technique used involved reducing the interest rate for mortgages on specially designated low priced units purchased by low income households to as low as the Corporation's own borrowing rate. The ratio of gross debt service to income would be 27 percent. At the time, conventional mortgage rates were $10\frac{1}{2}\%$ whereas the CMHC borrowing

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[1] In 1953, it financed a small number of co-operative housing units in Nova Scotia under Section 40.

[2] See Table 1.1 for a general overview of change in the cost of home-ownership from 1957 to 1976. Also Chart 1.1 briefly reviews federal programs with an ownership component in the 1970's.

TABLE 1.1

COSTS OF HOME OWNERSHIP 1957-1976

	(1) Price of New Single Detached Bungalow Under NHA[1]	(2) Conventional Mortgage Interest Rates[2]	(3) Annual P & I Payment (25 yr. term)	(4) Average Annual Wages & Salaries[3]	(5) Real Costs of Ownership Col. (3) ÷ Col. (4)
	$	%	$	$	
1957	14044	5.40	933	3531	.26
1958	14267	5.60	955	3688	.26
1959	14462	6.50	1046	3817	.27
1960	14273	7.45	1128	3940	.29
1961	14463	7.00	1094	4068	.27
1962	14684	6.95	1112	4188	.27
1963	15068	6.91	1135	4330	.26
1964	15807	6.88	1186	4499	.26
1965	16572	6.83	1237	4733	.26
1966	18059	7.57	1432	5010	.29
1967	18529	7.88	1513	5344	.28
1968	18922	9.18	1719	5714	.30
1969	20315	9.69	1915	6117	.31
1970	20528	10.53	2000	6595	.30
1971	19894	9.34	1887	7157	.26
1972	22168	9.37	2042	7759	.26
1973	24370	9.52	2269	8344	.27
1974	28683	11.37	3064	9261	.33
1975	33356	11.23	3530	10574	.33
1976	37823	11.93	4195	11860	.35

SOURCES:

[1]Canadian Housing Statistics, 1976, Table 9C. Note that this covers only single detached units. In addition, it excludes the mortgage insurance fee.

[2]Canadian Housing Statistics, Table 8O, selected years.

[3]Statistics Canada Catalogue 72-201, Average Weekly Wages & Salaries, Industrial Composite, (Weekly Figure Times 52), selected years.

CHART 1.1

CHRONOLOGY OF IMPORTANT EVENTS
IN DEVELOPMENT OF AHOP

Year	Month	Event
1970	February	-Introduction of a program for innovative housing which included a low income ownership component.
1971	May	-Introduction of $100 Million Program to continue assistance for low income ownership.
1973	June	-NHA Amendments, including The Assisted Home Ownership Program.
1974	June	-AHOP restricted to new units and assistance increased from $300 to $600.
1974	December	-Introduction of New Home Ownership Grant of $500.
1975	October	-AHOP Allocation for 1975 fully committed -Wage and Price Controls Announced
1975	November	ANNOUNCEMENT OF FHAP PROGRAM

rate was 8½%, so that the mortgage interest rate could be reduced by as much as two percentage points, depending on income. During the year, 3,771 units were approved for home-ownership under the program, all in the eleven largest metropolitan areas. Recipients were primarily the young, with few or no children and with incomes in the $4,000 to $6,000 range.

Although incomes were above the average for public housing tenants, the Corporation believed that many of the households would, without assistance, apply for public housing. Since it was estimated that subsidized home-ownership would be cheaper for the government than public housing, the home ownership assistance program was extended in May, 1971, with a further allocation of $100 million. In October, 1971, the government used the program to stimulate the economy by extending it to households with incomes of up to $9,000.

These programs were undertaken within the existing authority of the National Housing Act. In 1973, as part of a major legislative amendment, CMHC was permitted to subsidize eligible home-owners a further $300 per annum, in addition to the subsidy available through lending at a reduced rate of interest.[1] To ensure units built under the program

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[1]The label "Assisted Home Ownership Program" (AHOP) was introduced at this time.

were modest, the Corporation established maximum house prices which varied by market area.[1]

Originally, existing as well as new units were eligible for assistance under the program. Since the price of new housing increased rapidly after 1973, the number of applicants increased as well. From June, 1973, to the end of 1974, there were 16,000 applicants for assistance, compared to 5,000 under the $100 million program in 1972 and part of 1973. To reduce the demand for funds under AHOP, CMHC restricted assistance in June, 1974, to new dwelling units only.

The program continued through the next year and by October, 1975, the entire capital allocation for AHOP for that year ($458 million) had been committed. In the same month, October, 1975, the Prime Minister announced the imposition of wage and price controls. In the area of housing no direct federal price controls were established, although the Minister of State for Urban Affairs, on the same date of the announcement of the FHAP program, "urged the provinces to institute rent controls with the federal government's commitment to control inflation and support new housing construction".[2]

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[1]Originally, these were called Basic House Price Indexes (BHPI) and assistance was based on the BHPI rather than actual selling price. It was soon discovered that many houses were selling below the BHPI and assistance was then based on actual selling price. The BHPI became maximum house price (MHP).

[2]Statement of the Honourable Barnett Danson, P.C., M.P., House of Commons, Monday, November 3, 1975, p. 4.

In the home ownership sector, it was hoped that the setting of maximum house prices would have a similar anti-inflationary effect.

Summing up the historical background to FHAP, the following factors had a significant influence on the design of AHOP

(a) the large demand on the federal budget of the old AHOP program;

(b) the desire to control inflation in home ownership; and

(c) the need to generate new employment.

1.2 THE AHOP PROGRAM UNDER FHAP

The new AHOP program consists of two components: an interest reduction loan (IRL) and a grant. The initial stage in the process involves the setting of a maximum house price (MHP) in each market area.[1] Any house that has a selling price below this MHP and is insured either by CMHC or by a recognized private insurer can be purchased under the AHOP program.[2] When a household of two or more persons undertakes to purchase the house, it negotiates a mortgage with a lender, either CMHC or some institution, at a market rate of interest.[3] At the same time, it applies

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[1]See Chapter VI for a discussion of the maximum house price.

[2]Although the legislation permits new as well as existing homes, CMHC has restricted activity to new units only.

[3]In June 1974, private lenders were permitted to participate in AHOP, but the value of assistance through private lenders was lower

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to CMHC for assistance under the AHOP program. The purchaser is eligible for the IRL regardless of family income and whether or not there are dependents. The restrictions are (i) that the household consist of two or more persons; (ii) that they occupy the house as a permanent residence; and (iii) that the house be priced at or below the MHP.

The IRL is calculated in the first year as the difference between actual principal and interest payments on a maximum 95%, 35 year mortgage and principal and interest payments for the same mortgage at an 8% rate of interest. In the example in Table 1.2, the size of the IRL in the first year is $70 per month[1].

To determine whether a household is eligible for the grant as well, the ratio of principal interest and taxes at the 8% interest rate to gross family income is calculated[2]. If the ratio is greater than 25%, the household can receive a grant of up to $750 in the first year to bring

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than through CMHC. The FHAP changes made the two programs (direct and private lender) identical. CMHC also encouraged borrowers to use private lenders wherever possible. As a result the demand for CMHC capital funds would be reduced.

[1]If the mortgage is held by CMHC, the assistance is credited to the borrowers account; otherwise CMHC mails a cheque every month directly to the purchaser.

[2]The new AHOP uses gross income rather than adjusted family income. See, Chapter Seven for a discussion of the difference.

TABLE 1.2

HYPOTHETICAL EXAMPLE IN CALCULATION OF IRL AND GRANT

			per month	per year
1)	Your home has a $30,000 mortgage at 11½ per cent amortized over 25 years. Payments (principal and interest only) are approximately	$300.		$3,600.
		LESS		
2)	At an interest rate of 8 per cent, payments would be approximately.....	$230. ⟶	$230.	$2,760.
3)	Thus, for the first year, you will receive an Interest Reduction Loan of approximately.....	$70.		$840.
			PLUS	
4)	Assuming that taxes are.....	$50. ⟶	$50.	$600.
5)	You would have to pay approximately $230 plus $50.....		$280.	$3,360.
6)	Assuming your total income is.....	$900.		$10,800.
			LESS	
7)	25 per cent of this income is	$225. ⟶	$225.	$2,700.
8)	The amount of your subsidy would be		$55.	$600.

You would receive a subsidy of $55 per month during the first year.

SOURCE: CMHC's publicity booklet "If you ever dreamed of owning your own home", CMHC, Ottawa, 1976.

the ratio down to 25%. If after receiving the full $750, the household's gross debt service ratio is between 25% and 30%, it qualifies for the $750 assistance. In several provinces, if the ratio is above 30%, the household qualifies for a further provincial grant to reduce the ratio to 30%.[1]

In the second year, the size of total assistance is reduced. If the household receives only an IRL, the size of assistance is reduced by one-fifth of the original amount for each year over five years. If the household receives a grant, then total assistance, (IRL plus federal and provincial grants) is reduced by one-fifth of the original amount, or $240, whichever is the lesser, for each year for five years. The reduction is taken first from the provincial grant then the federal grant and finally from the IRL. Should the GDS ratio rise to above 30%, the household can request special hardship consideration; assistance may remain at the same level as in the previous year.

At the end of five years, the accumulated value of the IRL, without interest, becomes repayable with interest calculated at the Section 58 (NHA) rate. Appendix B describes the different possible methods of repayment in detail.

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[1]See Chapter Two for a discussion of provincial supplementation; the maximum provincial grant varies from $750 in Ontario to $300 in New Brunswick.

Thus the major features of the AHOP are:

(1) maximum house prices that vary by market area;

(2) an IRL available to any household with two persons or more that purchases a new unit price at or below the MHP;

(3) a grant payable to low income households with at least one dependent; and

(4) repayment of the IRL after 5 years.

The next three chapters examine the success of the program in achieving it's objectives of increasing affordability, generating employment, and reducing inflation in house prices.

CHAPTER TWO

ACHIEVEMENT OF GOALS: (1) REDUCING AFFORDABILITY PROBLEMS

In its submission to the Cabinet, the Corporation argued that, because of high interest rates and the high price of new housing, the average family was unable "to meet the monthly cash payments ... (in) buying a house"[1]. However, as incomes rise over time with inflation while monthly principal and interest payments remain constant, the ability to "afford" a unit increases. In the hypothetical example in Figure 2.1, the household is able to afford the home in the fifth year, defining affordability as paying less than 30% of income on gross debt service. By the 20th year the gross debt service ratio will have declined to 13%. Thus, the affordability problem was viewed by the Corporation as primarily one of cash flow: insufficient cash available now to afford the purchase of the home. The structure of the assistance, stepping out gradually over five years, reflects the Corporation's expectation that either incomes will rise or mortgage interest rates will decline sufficiently over the life of the mortgage to allow the household to remain in an ownership situation.

This type of affordability problem is conceptually different from the traditional affordability problem defined in terms of insufficient income to afford housing at existing prices, regardless of inflation. Under this traditional concept, the provision of a subsidy for home-owner is just-

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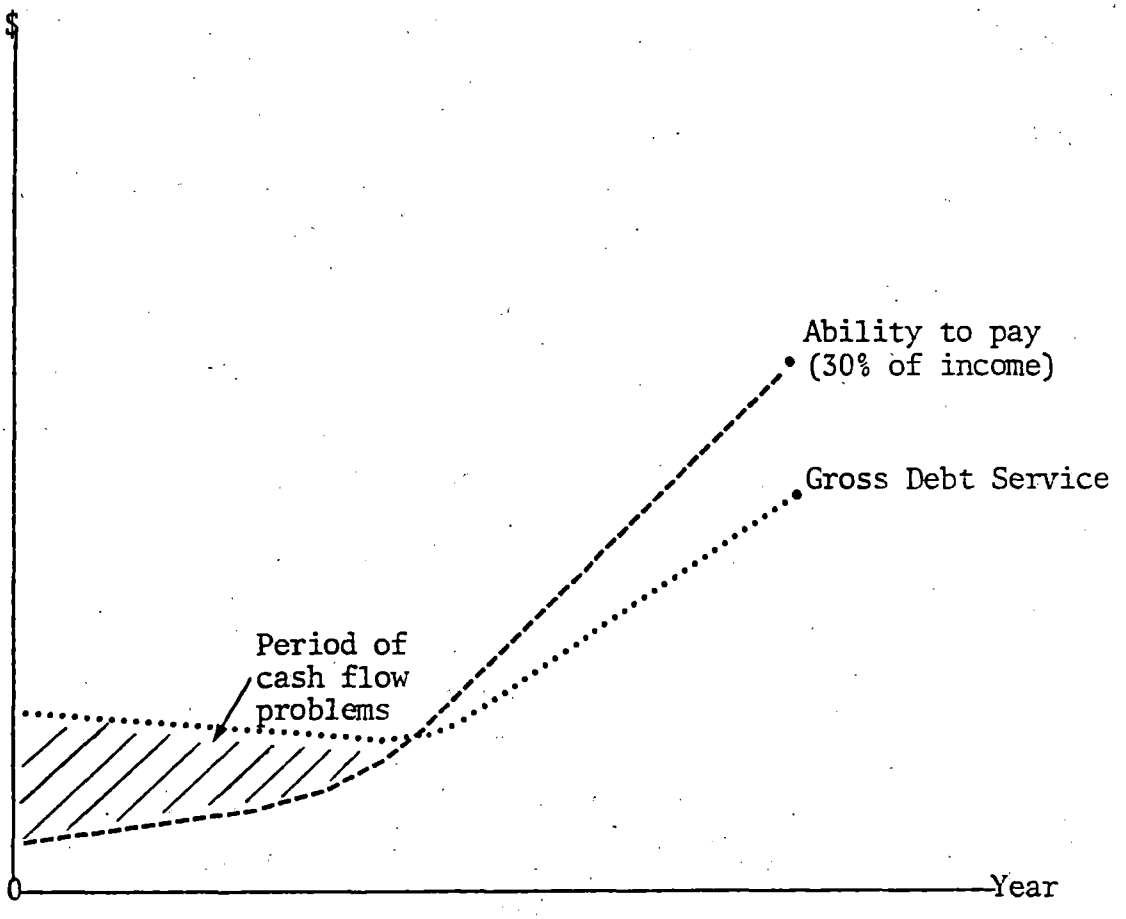
[1] Memorandum to the Cabinet, October 24, 1975, Appendix E, p. 1.

FIGURE 2.1

GRAPHIC ILLUSTRATION OF
HYPOTHETICAL CASH FLOW PROBLEM



SOURCE: Table 2.1.

TAB' 2.1

HYPOTHETICAL EXAMPLE OF CASH FLOW
PROBLEMS IN PURCHASING A HOME

(1) Year	(2) Income[1]	(3) Principal and Interest[2]	(4) Taxes[1]	(5) Gross Debt Service col (3) + col (4)	(6) Ratio col (5) ÷ col (2)
	$	$	$	$	
1	10,800	3,600	600	4,200	.39
2	11,664	3,600	648	4,248	.36
3	12,597	3,600	700	4,300	.34
4	13,605	3,600	756	4,356	.32
5	14,693	3,600	816	4,416	.30
6	15,868	3,600	881	4,481	.28
7	17,138	3,600	952	4,552	.27
8	18,509	3,600	1,028	4,628	.25
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.					
20	46,609	3,600	2,589	6,189	.13

[1]Income and taxes assumed to rise at 8% per annum.

[2]Interest rate of 11½% assumed to be in effect at end of 5 year term.

SOURCE: Initial situation same in Table 1.2.

ified on the basis of such factors as home-ownership being socially desirable[1] or home-ownership being a good investment for the purchaser[2]. This contrasts with the cash flow concept in which the need is not for a subsidy but only for a different type of financing. In the original suggestions for modifying AHOP, the two types of problems were identified with separate programs: the IRL would bear interest from the beginning (and therefore contain no subsidy) whereas only households with insufficient income would receive a grant. However, to "simplify" the program, it was decided to provide the IRL free of interest for five years.

It is nevertheless useful to retain the distinction between cash flow problems and traditional affordability problems. For simplicity, those who receive a grant are defined as facing traditional affordability problems: the remainder of the population are defined as having cash flow problems.

In terms of the evaluation of households with cash flow problems, Section 2.1 of this report will identify two types of households: (i) those th received IRL assistance and likely had cash flow problems; and (ii) those that benefited from assistance even though they did not face such problems. Section 2.2 will examine recipients of grant assistance -- where they are,

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[1]For a discussion of the social costs and benefits of home-ownership, see McAfee, R.A., Interactive Evaluation: A User-Oriented Process to Assist Housing Program Reformulation, Ph.D. Dissertation, School of Community and Regional Planning, U.B.C., 1975, pp. 95-108.

[2]See Appendix C for an estimate of the economic costs and benefits of home-ownership.

what type of units they purchase and how assistance varies with income. In Section 2.3, the role of provincial supplementation, in extending the ability of the program to meet those in still greater need (in the traditional sense) will be examined.

2.1 HOUSEHOLDS WITH CASH FLOW PROBLEMS

As can be seen in Table 2.2, 11,068 of the 18,526 approvals on file for 1976, or 59.7%, received IRL assistance only. Of these, 45.8% had a GDS ratio before assistance of less than 25%, and 19.7% had a GDS ratio above 30%. Since mortgage lenders would not generally lend to households with GDS ratios above 30%, this latter group can be considered as having significant cash flow problems and would not have been able to purchase a unit without the IRL.[1]

For those households with a lower GDS ratio, most would have been given a mortgage by an institutional lender, if they applied. In its submission to Cabinet the Corporation argued, however, that even these households would have been unable to purchase a home because the residential construction industry was not building modest priced units. On the assumption that from one-quarter to one-half[2] of the households with a GDS ratio before assistance below 30% would not have been able to purchase a home

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[1] Kam, in a report to the Treasury Board, used a tenure choice equation to estimate how many recipients of AHOP assistance in 1973-75 would have purchased a home without assistance. Unfortunately, neither price nor income at time of purchase were used as explanatory variables. See Appendix D of this report.

[2] The estimate of one quarter to one half is quite arbitrary and is based on the impression of persons involved in the delivery of the program.

TABLE 2.2

RELATION OF GROSS DEBT SERVICE RATIO
TO TYPE OF ASSISTANCE

	IRL-Only		Grant and IRL		Total	
GDS Ratio Before Assistance	No.	% of all IRL-only	No.	% of all Grant-only	No.	% of Total
Under 15%	400	3.6	--		400	2.2
15-20	1420	12.8	--		1420	7.7
20-25	3256	29.4	--		3256	17.6
25-30	3810	34.4	--		3810	20.6
30-35	1706	15.4	2154	28.8	3860	20.8
35-40	476	4.3	5157	69.1	5633	30.4
40	--	0.0	147	2.0	147	0.8
TOTAL[1]	11068	99.9	7458	99.9	18526	100.1

[1]Total of percentages may not sum to 100 because of rounding.

SOURCE: Program Evaluation Unit analysis of Computer tape on approvals.

without AHOP because of the lack of supply of such units, we estimate that 40 to 60% of all households receiving only the IRL would not have otherwise been able to purchase a home[1].

In Table 2.3, the characteristics of households receiving IRL only are compared to the characteristics of the population receiving a grant as well. As can be seen, a greater proportion of recipients of IRL only are under 25 years old and married with no children. Geographically the two populations i.e. grant recipients and IRL only recipients, are distributed identically, with over one-third in each of Ontario and Quebec. In comparison to the total population, the proportion of approvals to total population is higher in Quebec, excluding Montreal, and lower in Alberta. The latter reflects the Corporation's policy to restrict AHOP in Calgary and Edmonton, by having relatively low MHP's, because the market in those areas was already buoyant[2]. In terms of income, 33% of recipients had an income above $20,000 and only 5% had an income below $12,000.

A second area of concern, in addition to the distribution of recipients, is the average value of assistance. As stated, the IRL is interest free. As can be seen in Table 2.4, the average value of the IRL

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[1]To arrive at this estimate add the 19.7% with a GDS ratio above 30% plus one-half (or one-quarter) of the remaining 80.3%.

[2]See Chapter Seven, for a discussion of the Maximum House Prices.

TABLE 2.3

CHARACTERISTICS OF HOUSEHOLDS RECEIVING
IRL AND IRL PLUS GRANT

	% Distribution of Grant Recipients	% Distribution of IRL-only Recipients	% Distribution of all Canadian Families
	%	%	%
1. Age of Head			
Under 25	22	30	6
26-35	56	50	23
36-55	20	18	44
56+	2	2	27
2. Type of Family			
Married with children	91	49	55
Married no children	--	38	29
Not married with children	9	3	9
Other	--	10	7
3. Previous Tenure			
Owner	9	11	
Renting - under $60/mth. *	3	3	
Renting - over $60/mth.	88	86	
4. Dwelling Type			
Single-detached	55	59	60
Semi-detached	10	11	11
Row	24	24	11
Apartment	10	5	28
Other	1	1	1
5. Number of Persons			
2	4	49	30
3	46	21	20
4	34	19	21
5	11	7	14
6+	5	4	16
6. Provinces			
Newfoundland	2	2	2
Prince Edward Island	--	--	--
Nova Scotia	3	5	3
New Brunswick	3	3	3
Quebec	34	34	27
Ontario	37	37	37
Manitoba	2	1	5
Saskatchewan	4	3	4
Alberta	--	1	8
British Columbia	14	14	11
Yukon	--	--	--
North West Territories	--	--	--

Cont'd.

TABLE 2.3

	% Distribution of Grant Recipients	% Distribution of IRL-only Recipients	% Distribution of all Canadian Families
	%	%	%
7. Metropolitan Areas			
Toronto	17	18	13
Montreal	14	13	13
Vancouver	7	6	6
Maritime Metropolitan Areas	9	12	2
Other Quebec Metropolitan Areas	7	5	3
Other Ontario Metropolitan Areas	5	3	10
Praire Metropolitan Areas	4	3	9
Victoria	--	--	1
8. Family Income			
Under $8,000	3	--	29
$ 8,000 - 9,999	11	1	9
$10,000 - 11,999	29	4	9
$12,000 - 13,999	33	10	9
$14,000 - 15,999	18	17	8
$16,000 - 17,999	6	17	7
$18,000 - 19,999	--	18	6
$20,000 - 24,999	--	24	24
$25,000 - 25,999	--	6	24
$30,000+	--	3	24

SOURCE: (1) AHOP Recipients based on internal computer analysis of files.

(2) Income on total population: Statistics Canada Survey of Household Facilities and Income, 1974; Income up dated to 1976 by multiplying by 30% from 1973.

(3) Other population characteristics from Census of Canada, 1971.

*The use of the $60 per month figure is designed to separate those paying nominal rent (for example, those living with parents) from those paying a fair market rent.

in the first year is $930 and the average interest rate was 11½%. Consequently, the value of interest foregone is $107[1]. In the second year, the value of interest foregone is $193. On the assumption that the household is indifferent between $100 this year and $110 next year (it has a discount rate of 10%[2]), the value of this $193 to the purchaser at the time of purchase is only $175. Applying the same calculation to each of the five years, a total subsidy value of $950 is arrived at. In Table 2.5 the value of the subsidy is compared across different population characteristics. For IRL only recipients, the subsidy rises with family income, reflecting the fact that higher income households are purchasing more expensive housing; the size of the IRL is directly related to the size of the mortgage. This inequity, the size of the subsidy increasing with income, cannot be explained by the fact that different market areas have different MHP's since it occurs in each of the three largest metropolitian areas as well as nationally. However, the different MHP's does explain why average subsidies are higher in Toronto and Vancouver than Montreal[3].

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[1]The calculation assumes IRL is paid out at the beginning of the year. Since it is actually paid monthly, the estimate of the value of the assistance is slightly high.

[2]For a theoretical discussion of discount rates, see Mishan, E., Cost-Benefit Analysis, London, 1969.

[3]See Appendix D for a discussion of horizontal equity, i.e., whether it is fair for households in Toronto to receive more assistance than than an equivalent household in Montreal.

TABLE 2.4

CALCULATION OF SUBSIDY ON IRL AND GRANT

(1) CALCULATION OF SUBSIDY ON IRL

YEAR	AVERAGE IRL $	CUMULATIVE AVERAGE IRL $	INTEREST SAVED ON CUMULATIVE AVERAGE IRL[1] $	DISCOUNTED VALUE OF INTEREST SAVED[2] $
1	930	930	107	197
2	744	1674	193	175
3	558	2232	257	212
4	372	2604	299	231
5	186	2790	321	225
				950

(2) CALCULATION OF SUBSIDY ON IRL AND GRANT

YEAR	AVERAGE IRL $	CUMULATIVE AVERAGE IRL $	INTEREST SAVED ON CUMULATIVE AVERAGE IRL[1] $	GRANT $	GRANT PLUS INTEREST SAVED $	DISCOUNTED VALUE OF GRANT PLUS INTEREST SAVED $
1	967	967	111	515	626	626
2	952	1919	221	298	598	544
3	894	2813	323	123	446	329
4	776	3589	413	9	422	320
5	553	4142	476	--	476	326
						2145

[1]Average interest rate on mortgage in 1976 was 11½%.

[2]Discount rate of 10% assured.

TABLE 2.5

AVERAGE SUBSIDY (NET PRESENT VALUE)

	RECEIVING GRANT				RECEIVING IRL ONLY			
	Canada	Toronto	Montreal	Vancouver	Canada	Toronto	Montreal	Vancouver
1. Household Type								
1. Married with Child(ren)	2105	2363	1917	2722	942	1116	848	1173
2. Married no Child	n/a	n/a	n/a	n/a	959	1100	851	1211
3. Not married with child	2283	2495	2066	2675	974	1166	879	1106
2. Age of Head								
1. 15 - 25	2181	2441	2011	2737	953	1094	861	1203
2. 26 - 35	2107	2363	1914	2724	946	1101	850	1201
3. 36 - 55	2096	2352	1916	2672	964	1136	849	1074
3. Previous Tenure								
1. Renting, Rent less than $60/mth	2245	2443	1997	2535	1053	1174	849	1219
2. Renting, Rent greater than $60/mth	2121	2361	1921	2725	950	1094	852	1117
3. Owning	2078	2516	1964	2800	928	1184	855	1016
4. Work Status of Spouse								
1. No Spouse	2279	2495	2078	2675	965	1104	873	1048
2. Spouse not Working	2120	2469	1930	2753	901	1042	843	1141
3. Spouse Working	1953	1964	1649	2410	989	1124	857	1225
5. Income (Family)								
1. $ 8000 - $ 9999	2268	2357	2430	3114	662	--	754	n/a
2. 10000 - 11999	2151	2641	2264	2962	771	780	786	1045
3. 12000 - 13999	2039	2739	1849	3117	840	817	809	791
4. 14000 - 15999	2225	2437	1328	2907	900	958	834	951
5. 16000 - 17999	1770	1667	1110	2074	927	1003	860	1115
6. 18000 - 19999	1444	1445	--	--	928	1060	865	1253
7. 20000 - 24999	--	--	--	--	1039	1168	867	1235
8. 25000 - 29999	--	--	--	--	1064	1267	878	1161
9. 30000 -	--	--	--	--	1081	1339	879	1131

2.2 RECIPIENTS OF GRANT ASSISTANCE

Whereas any household can be a recipient of IRL assistance provided there is more than one person in the household, recipients of grant assistance are expected to be lower income households. Compared to the low income line of Statistics Canada[1], virtually all recipients of a grant have incomes above the low income line but below twice the low income line, previously renting and younger than 55 years of age (See Table 2.3). Using these three criteria as the definition of the population eligible for grant assistance, it can be estimated that there are 480,000 households who might qualify (Table 2.6). Table 2.5 indicates that 1.56% of the entire eligible population, or 7,458 families, received grant assistance in 1976. The incidence is highest in the Atlantic provinces and British Columbia, and lowest in Alberta where, as mentioned previously, the program was limited by using a low MHP. In terms of income, grant recipients are primarily in the $12,000 - 16,000 income range, and are somehwat more likely to be purchasers of apartment units than IRL-only recipients.

With respect to income, the value of assistance[2] decreases as in-

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[1] In 1976, the Low Income Lines were:

family of 2	-$ 6,635
3	- 7,962
4	- 9,287
5	- 10,616

[2] See Table 2.7 for the calculation of the net present value of assistance when a grant is included.

TABLE 2.6

COMPARISON OF TARGET POPULATION AND AHOP GRANT RECIPIENT

	Households In Need	AHOP Grants Recipients	Incidence (2 ÷ 1)
	No.	No.	%
1. Total	479,150	7,458	156
2. By Province			
Newfoundland	6,260	173	276
Prince Edward Island	1,430	42	294
Nova Scotia	13,950	391	280
New Brunswick	12,500	271	217
Quebec	201,470	2,418	120
Ontario	147,710	2,649	179
Manitoba	15,850	154	97
Saskatchewan	12,150	273	225
Alberta	31,250	43	14
British Columbia	36,580	1,032	282
3. By Age of Head			
1. 15 - 24	81,190	1,639	202
2. 25 - 34	184,560	4,296	233
3. 35 - 59	203,400	1,519	75
4. No. of Persons in Household			
2	102,140	318	31
3	122,490	3,395	277
4	131,390	2,566	190
5	67,130	788	117
6	56,000	391	70
5. Income Class*	102,920	823	79
1. $ 8000 - $ 9999	102,920	823	79
2. 10000 - 11999	119,390	2,138	179
3. 12000 - 13999	100,560	2,427	241
4. 14000 - 15999	55,500	1,372	247
5. 16000 -	28,510	500	175

come rises. This is to be expected since the size of the grant is directly related to income: the grant reduces the GDS ratio to 25% of income. As can be seen in Table 2.5, this is true within individual market areas as well as between them. As in the case of the IRL, the size of grant assistance varies between market areas because of differences in the MHP.

2.3 PROVINCIAL SUPPLEMENTATION

Provincial supplementation of AHOP assistance represents an effort, on the part of the provinces, to lower the eligible income levels for home-ownership by providing a further grant. As a result, the eligible target population includes households below the Statistics Canada low income line.

During 1976, very few households received provincial supplementation -- only 491 (Table 2.7). No formal system had been developed between CMHC and provincial housing authorities to unify the CMHC system with those of the provinces. As a result, each province had different procedures, which were often confusing to the client. In addition, the two largest provinces, Ontario and Quebec, operated their own low income ownership program, independent of AHOP. Even British Columbia offered a grant program outside of AHOP, even though it supplemented AHOP.

A second possible explanation is that potential purchasers with very low income were frightened by the fact that they would have to repay the IRL in five years and not be in any position financially to do so. For its part, CMHC has been vague about what would happen at the end

TABLE 2.7

PROVINCIAL SUPPLEMENTATION

Province	Maximum Amount of Subsidy	Level of GDS	No. With Supplement	Comments
Newfoundland	$ 300	25%	7	
Prince Edward Island	Provide interest free capital loan of up to $4,000; earned 1/60 th per month	30%	not known	
Nova Scotia	$ 300	25%	8	
New Brunswick	$ 300	30%	75	Also a 0.5% interest $7,500 mortgage, program for very low income
Quebec	No supplementation			Have an ownership program Which reduces mortgage by 3% for properties under $17,000
Ontario	No supplementation			Home program includes reduced interest rate mortgages
Manitoba	$300 in south $500 in north	25%	36	First time home-owners

Cont'd.

TABLE 2.7

Province	Maximum Amount of Subsidy	Level of GDS	No. With Supplement	Comments
Saskatchewan	$500 AHOP/COOP only	25%	309	Also a program giving of to $1000 for low income
Alberta	No supplementation			Starter Home Ownership program provides interest rate subsidy
British Columbia	$ 750	30%	61	Restricted to Bristish Columbia Residents of at least 2 years, or Canadian and spent five years in British Columbia or born in British Columbia
Northwest Territories	No supplementation			
Yukon	No supplementation			

*As of December 7, 1976.

SOURCE: Insured lending Division, CMHC.

of five years. Thus, the General Memorandum, that provides guidelines to CMHC officers who administer the program states "more detailed instructions on this aspect of administration will be issued in due course" (not yet issued); and "if the property is resold at below original price, the remaining balance owing may be written off on the authority of the local manager." Faced with this uncertainty, the systematic annual reduction of IRL payments, the prospect of rising utility costs, possible unforeseen repairs and the need in many cases to purchase an automobile because many AHOP units were in the suburbs, many low income households could not afford AHOP even with federal and provincial grants.

A third reason why very few cases of provincial supplementation occurred is the possibility that approved lenders did not accept such households. From the perspective of the lender, without assurance of continued government assistance after five years for the low income borrower, the probability of the household defaulting and/or being in arrears is extremely high. One method used by lenders for screening applicants is the level of other credit obligations (if the applicant owes money to others). Since most low income households live in debt, the probability of rejection is quite high.

In December 1976, the Corporation decided to establish a uniform agreement under which it would act as the agent for provinces wishing to supplement AHOP. Provided the provinces agreed to the federal guidelines

and repaid the Corporation within 10 working days, CMHC would administer the provincial supplementation program. Thus, an applicant need only apply once for assistance. As of April 30, 1977, only Ontario, New Brunswick and the Northwest Territories have signed agreement although British Columbia, Newfoundland and Nova Scotia have indicated agreement in principle. Only Alberta and Quebec have rejected the federal offer for administrative assistance.

Given the other reasons, for the limited recourse to supplementation, it is difficult to estimate the future take-up resulting from improvements in program administration. In Chapter Four it is estimated that, if a household receives $750 in provincial grant, the federal subsidy cost will almost double.

2.4 SUMMARY

In this Chapter, the ability of AHOP to ensure affordability was examined in detail. The major conclusions are:

(a) from 40% to 60% of households receiving the IRL only required assistance in order to meet the cash flow requirements of home-ownership in the beginning years.

(b) the average present value of the IRL subsidy for IRL-only recipients is $950;

(c) the value of the IRL varies directly with income, i.e., the higher the income level, the higher the value of assistance. This is true both nationally and in each of the three largest metropolitan areas.

(d) a large portion of IRL-only recipients are young and with no children;

(e) approximately one-third of IRL-only recipients have incomes in excess of $20,000;

(f) for grant recipients, the average present value of assistance is $2,105;

(g) for grant recipients, the proportion of the target group that is being served is highest in the Maritimes and British Columbia and lowest in Alberta. Households in the $12,000 - $16,000 income range are the most likely to be taking up the AHOP grant;

(h) provincial supplementation is only now beginning to occur on a significant scale. To the end of 1976, only 491 households had received provincial supplementation;

(i) with provincial supplementation, it will be possible to have lower income households in the program but will also significantly increase the cost to CMHC and raise the probability of difficulties at the end of five years.

CHAPTER THREE

ACHIEVEMENT OF GOALS: (2) ECONOMIC STIMULATION

As outlined in the first chapter, one of the reasons for expanding AHOP in November, 1975, was to generate employment. Since the Great Depression of the 1930's, governments have used fiscal policy as a means of stimulating the economy during downturns in business cycles. Residential construction has been a favorite sector for such policies. But, as Smith[1] and the Economic Council[2] point out, the use of residential construction as a means of stimulating the overall economy normally increases instability in the residential construction sector which itself is naturally counter-cyclical. In other words, during an upswing in the overall economy investment in inventories and non-residential construction increases while residential construction declines while the reverse occurs during the downswing in the cycle. As a result, government policy to increase employment during the downswing in the business cycle by increasing residential construction will increase the amplitude of the cycle in construction. There is, unfortunately, no easy solution to this dilemma. Smith argued that "unless the immediate housing situation were critical, general stabilization priorities would usually outweigh

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[1]Smith, L.B., The Post-War Canadian Housing and Residential Mortgage Market and the Role of Government, University of Toronto Press, Toronto, 1974, pp. 131-140.

[2]Economic Council of Canada, Toward More Stable Growth in Construction, Information Canada, Ottawa, 1973, pp. 169-189.

short term priorities".[1] In other words, it is better to increase the construction cycle than suffer from a depression in the overall economy. The Economic Council argues that "this approach to stabilization by offsetting instability of one component with that of another... would be particularly unattractive with respect to the broader social objectives of CMHC".[2] From the point of view of sound objectives, CMHC ought to resist using housing as a means of stimulating the economy.

There is no clear answer to the question of whether to use residential construction to stimulate the overall economy. Nevertheless, in October, 1975, when the government introduced the Anti-Inflation Board and, at the same time, wanted to stimulate the economy, it turned to CMHC and, in particular, AHOP and ARP. The question that must be addressed, therefore, is how effective was AHOP in generating new housing units. In fact this general question may generate two analyses based upon the following questions:

(i) how many additional housing units and jobs were created, other than would have been created had AHOP not existed? and

(ii) what is the average lag between program announcement and the actual generation of employment?

These two questions will be addressed in each of the following two sections.

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[1] Op. cit. p. 153

[2] Op. cit. p. 204

3.1 NUMBER OF UNITS GENERATED

It is impossible in housing program evaluation to precisely determine what would have happened had a particular program not applied. Yet the crucial question in estimating the effect of AHOP on employment is not how many units were built under the program but how many additional units would have been built and how many additional jobs would have been created relative to what would have occurred without AHOP.

There are three possible approaches to calculating how the housing market would have behaved without the introduction of AHOP: (i) by estimating the level of funds that would have been available for residential mortgages from private sources; (ii) by estimating directly the number of units that would have been produced by the construction industry; and (iii) by estimating how potential purchasers of housing would have behaved.

In the present analysis it was decided that the first approach was the most appropriate one. This approach has been developed and tested by other agencies in Canada.[1] It is useful because, conceptually, the relationships developed in previous models are more clearly established. For example, the relationship between the level of mortgage approvals and mortgage interest rates is well accepted. In addition, appropriate data are more readily available for testing the relationships.

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[1]Three large scale econometric models of the Canadian economy, which contain a housing component, are: (i) Candide by the Economic Council of Canada; (ii) Canhouse by CMHC; and (iii) RDX2 by the Bank of Canada.

This analysis uses the RDX2 model to estimate what the level of investment in residential mortgages would have been in the absence of AHOP. The RDX2 model was selected because it is a quarterly model and is therefore more sensitive to short term changes in the variables which affect the level of investment in residential mortgages.

The RDX2 model is applied to provide estimates of the level of activity in mortgage lending by financial institutions which would have occurred given past trends.[1] The difference between the amounts which would have been approved and those actually approved in 1976 can partially be attributed to AHOP. Then the number of units which can be attributed to AHOP can be also estimated. In addition some estimates are made of the employment generation effects of AHOP. A final section of the analysis examines lending by caisses populaires, credit unions and others.[2]

3.1.1 EFFECT OF AHOP ON INSTITUTIONAL LENDING BEHAVIOUR

A. Institutions Involved

The four major institutions involved in the mortgage market, apart from the Corporation itself, are chartered banks, life insurance

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[1] The details of the method employed in the present analysis are found in Appendix E.

[2] Lending by non-institutional lenders is an exogenous variable in RDX2 and, consequently, cannot be treated in the same way as mortgage lending by institutional lenders.

companies and trust and loan companies[1]. While each is involved in residential and non-residential, new and existing housing, NHA and conventional lending, single detached and multiple unit mortgages, the proportion of funds going to each varies considerably both between institutions and over time. As can be seen in Table 3.1, chartered banks account for 24% of all mortgage activity of institutions. Their major impact is in the new residential field, particularly in the market for single detached housing. They account for 48% of all single detached unit NHA mortgage lending. One of the reasons for this is their branch office structure which puts them in a good position to cater to this market. While trust companies also have a branch structure, they are concentrated in the urbanized areas of the country where multiple unit structures are more common. Life insurance companies, with a longer term structure of assets and no branch office network have emphasized the non-residential market. In the residential sector, they have preferred the single large multiple project to the scattered single detached or existing market.

B. Components of Increase in Mortgage Activity Due to AHOP

For the purposes of this analysis, there are, in effect, two identifiable components which contribute to increases in residential mortgage lending activity attributable to AHOP.[2] These are:

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[1] In this Report, the latter two are grouped together since they are combined in RDX2 as well.

[2] For details in the calculations see Table in Appendix E.

TABLE 3.1

MORTGAGE APPROVALS BY INSTITUTIONS: 1976

	Chartered Banks		Life Insurance Companies		Trust Companies		Loan Companies		Others		Total
	$	%	$	%	$	%	$	%	$	%	$
1. Total*	2844	24	2168	19	4164	36	2079	18	380	3	11,636
2. New Residential	1629	28	978	17	1902	33	960	17	271	5	5,740
Existing Residential	1177	21	202	4	2049	36	909	16	107	2	4,444
Non-Residential	35	2	985	65	205	14	210	14	78	5	1,513
3. New											
NHA - Total	1074	33	421	13	1014	31	509	16	227	7	3,245
Singles	538	48	101	9	185	17	296	26	n.a.		1,120
Multiples	528	25	316	15	821	39	437	21	n.a.		2,102
Conventional Total	562	22	561	22	896	36	452	18	45	2	2,516

* Because some figures are gross and others net, percentages may not total to 100%. All dollar amounts are in millions.

SOURCE: Canadian Housing Statistics, 1976.

(i) the incremental effect of AHOP on aggregate lending activity; and

(ii) changes in the pattern of lending from existing residential and non-residential to mortgages for new houses.

Table 3.2 provides a breakdown of these effects for 1976. It can be seen that: (i) the institutions most affected have been the trust and loan companies with about 65 percent of the increase; (ii) the effect of each component is almost identical; (iii) in the chartered banks the change in lending patterns is clearly the contributing factor; (iv) for trust and loan companies the reverse is the case; and (v) for the life insurance companies, the least important actors, the effects are evenly divided.

C. The Effect of AHOP on the Generation of Units

In estimating the effect that AHOP has had upon the level of units produced in the housing market two steps are necessary in the calculation. These are as follows:

(i) the increment to total mortgage lending is divided by the average AHOP mortgage loan in 1976 ($34,000); and

(ii) in addition the price effect of AHOP must be considered. AHOP units on average are priced to cost less than conventionally-financed units.

TABLE 3.2

ESTIMATED INCREASE IN MORTGAGE APPROVALS
BY INSTITUTION: 1976*

Institution	Incremental Effect	Changes in Lending Pattern	Totals
Chartered Banks	0	112	112
Life Insurance Companies	17	16	33
Trust and Loan Companies	192	76	268
Totals	209	204	413

* Millions of dollars.

> Consequently for the same dollar volume of mortgage lending more units can be produced under AHOP.[1]

The results of this calculation are summarized in Table 3.3. The important points to note are: (i) the total number of incremental units due to AHOP is 11,128. This constitutes 35 percent of total AHOP - eligible approvals in 1976. This appears to be a significant addition to the overall total; and (ii) the relative proportions of the increment are almost equally divided between the "incremental effect" and the "AHOP price effect."

From this it may be inferred that the program has probably enjoyed success in meeting two objectives. First in adding to the stock of housing, particularly to the stock accessible to lower income people, it has satisfied both production and social goals. And secondly the importance of the "incremental effect" suggests that AHOP did in fact increase employment significantly. This latter point will be addressed again in the next section of this chapter.

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[1] The average price of NHA but not AHOP, units in 1976 was $43,058 whereas the average price of AHOP units was $35,265; thus, Non-AHOP units are 22% more expensive than AHOP units. For example, if an institution approved 5,000 AHOP units in 1976 and 1,000 are estimated as net new units using the approach outlined above. A further 22% of the remaining 4,000 units must be added (880 units) as being new units built because AHOP units are cheaper than non-AHOP units, and therefore use less mortgage financing.

TABLE 3.3

NEW CONSTRUCTION ATTRIBUTABLE TO AHOP

Institutions	Estimated Increase in Units Due to Incremental Effect	Estimated Increase in Units Due to Lower AHOP Prices	Total Increase in Units	AHOP Eligible Approvals	Ratio of Total Increase to (3÷4)
Banks	1,482	3,102	4,584	15,577	0.29
Life Insurance	437	391	828	2,442	0.34
Trust and Loan Companies	3,529	2,187	5,716	13,431	0.43
Total	5,448	5,680	11,128	31,450	0.35

D. Estimates of Elasticities Implicit in the Increase in Activity Due to AHOP.

What elasticity of demand is implicit in these assumptions? To estimate this it is first necessary to define the value of the subsidy. From the point of view of cost-benefit economics the net present value of the subsidy should be used. Using a discount rate of 10 percent this value was $1,423 for AHOP in 1976.[1] For an average price of $35,865 for AHOP units this represents a price reduction of 4 per cent.

In 1976 there was a total of 273,208 units started in Canada. Of these approximately 160,000 were for homeownership. The 11,128 additional units due to AHOP therefore represent 7 per cent of all ownership starts.

Since price elasticity is defined as the percentage change in the quantity divided by the percentage change in price, the resultant elasticity is 1.75.[2]

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[1]Based on an average subsidy of $950 for IRL-only recipients and $2,350 for grant recipients.

[2]By arranging for progressive mortgage repayments the quantity of housing produced would have increased anyway, even without a subsidy Consequently, the 1.75 value is likely an overestimate.

E. Employment Generated by AHOP

Since employment generation is an explicit objective of the program the extra amount of employment merits some analysis. This section will examine only the employment effects associated with the 5,448 incremental units since those units associated with the "price effect" cannot be considered to have generated new employment. Rather, the "price effect" resulted in a substition of lower priced units with smaller labour inputs for higher priced units with greater labour inputs . The net effect on employment generation is therefore considered to be negligible in this case.

CMHC has estimated the labour components of new construction for both on-site and off-site labour by dwelling type for 1971.[1] In Table 3.4 the additional man-years of employment are multiplied by the number of incremental units to provide estimates of total additional employment attributal to AHOP. This procedure results in an estimate of 6,228 extra man-years of employment.

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[1]Lea Hanson, "Labour Requirements for the Residential Construction Industry," CMHC, Market and Industry Analysis Division's 1976.

TABLE 3.4

INCREMENT IN EMPLOYMENT DUE TO AHOP

	Man Years of Employment per unit[1]	Additional AHOP Units[2]	Additional Employment man-years
Single Detached	1.267	3156	3999
Semi-Detached	1.068	599	640
Row	0.940	1296	1218
Apartment	0.811	447	363
TOTAL		5448	6228

[1]See Hansen, L., "Labour Requirement for the Residential Construction Industry" CMHC Market and Industry, March, 1976.

[2]These totals are distributed according to the distribution of all AHOP approvals for 1976.

In addition to direct employment the residential construction industry also generates secondary employment; for example, in the appliance and furniture industries. Since empirical estimates of this effect are not available at present, it has been assumed here that each AHOP unit generates an additional 0.3 man-years of employment. When this is applied to the incremental 5,448 units then an additional 1,634 man-years can be assumed. Together then the direct and indirect effects of AHOP on employment in Canada can be estimated at 7,862 man-years in total.

3.1.2 EFFECT OF AHOP ON NON-INSTITUTIONAL LENDING BEHAVIOUR

The non-institutional sector consists primarily of those credit unions and caisse populaires not recognized as approved lenders, and private capital. As can be seen in Table 3.5 this sector accounted for 29% of total starts in 1976, down from the high in 1974 of 37% and up substantially from the low of 20% in 1971 and 1972. In single detached units, the predominant form for AHOP, non-institutional lenders actually increased their share of the market in 1976 whereas for multiples, the predominant form of ARP, the share of non-institutional lenders declined. Regionally, institutional lending in the single-detached market is increasing in Nova Scotia, Quebec, Alberta and British Columbia and declining in New Brunswick and Ontario. Since the share of non-institutional lending in 1976 is close to its average share over the previous five years, it is impossible to argue that, there was any significant substitution of institutional for non-institutional lending.

TABLE 3.5

STARTS ATTRIBUTABLE TO NON-INSTITUTIONAL LENDERS

	Total Starts			Starts Other Than CMHC & Approved Lenders (NHA & Conventional)			(2) as a % of (1)		
1970	Single Detached	Other	Total	Single Detached	Other	Total	Single Detached	Other	Total
1970	70749	119779	190525	23382	17628	41010	33	15	22
1971	98056	135597	233653	32023	13837	45860	33	10	20
1972	115570	134344	249914	33890	15531	49420	29	12	20
1973	131552	136977	268529	46632	20517	67149	35	15	25
1974	122143	99980	222123	48549	33840	82389	40	34	37
1975	123929	107527	231456	43896	28639	72535	35	27	31
1976	134313	138890	273203	48431	31847	80282	36	23	29

SOURCE: Canadian Housing Statistics 1976 Table 14.

As will be seen, CMHC approvals have not been analyzed in the same way since these are discretionary (i.e., they do not respond to the market in a predictable way). It is thus difficult to estimate how many units would have been built under CMHC direct financing without AHOP. Since the Corporation played the same residual role in 1976 as it did in the 1960's, there is little likelihood that CMHC direct activity will seriously affect the quality of the result.

Before leaving this subject it is worth noting that the de facto exclusion of caisse populaires and credit unions from the AHOP involves a particular form of inequity. Insofar as the clientele of these associations tend to be lower income households[1], a large portion of the population who are owner applicants[2] for mortgage assistance in general do not benefit from AHOP, especially in the smaller towns where a caisse populaire, a credit union, is a major source of mortgage financing. To be sure, the Corporation has attempted to attract these institutions on a regional basis, but very few have become involved. Of the total 1976 AHOP population, less than 200 have mortgages from these institutions. Without going into detail, the main reasons why credit unions and caisse populaires have not participated in AHOP are:

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[1]Unfortunately, there is no evidence on the clientele of credit unions and caisses populaires relative to other institutional lenders.

[2]Nationally, 24% of all AHOP approvals went to owner-applicants. This ranged from 4% in Ontario to 71% in Newfoundland (based on internal file analysis). Generally a local credit union cannot finance a larger development by itself: as a result, their clients are primarily the owner-applicant.

- they are unwilling to do the paperwork involved and wait the time until approval is granted or go through the extensive default procedures required by the NHA[1];
- they provide internal, rather than external, insurance (i.e., they bear the risk of default themselves through high interest rates rather than charge the client an explicit fee);
- most provide only 75% coverage and are unwilling to move into the high-ratio loan;
- most provide 3 year term mortgages whereas AHOP requires 5 year term; this is especially true in the Prairies.

Obviously, this paper is not the place to discuss the problems associated with this group of lenders, since it affects the general insured lending program of the Corporation.

While AHOP can be applied to non-NHA first mortgages, provided they are insured and have a five year term, there is no evidence as yet of the degree to which non-NHA insured first mortgages are using AHOP. Initial estimates suggest that fewer than 5% of all AHOP approvals fall in this category[2].

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[1]Generally it takes 6 weeks to get CMHC approval for an NHA insured mortgage whereas private insurers have a 48 house lag. However, because NHA mortgages are more negotiable on the secondary market, institutions such as banks which deal with the secondary market, prefer NHA mortgages. In addition, private insurers generally pay an institution on default, requiring the lender to foreclose and sell the property, whereas CMHC will take over the property in the case of default.

[2]Based on estimates from program division.

3.2 LAGS IN THE IMPLEMENTATION OF AHOP

A major concern of economic stimulation policy is the lag between original implementation and actual employment generation. In brief, if the lag between the introduction of the program and actual construction and occupancy results in economic stimulation after conditions have changed then the desired objective may not be reached.

In effect there are two main classes of lags that should be considered here. First, there are those lags which occur only once in the history of a program. Three such lags can be readily identified: (i) the lag between program announcement and legislative approval. Since the program was announced in November and the legislation passed in mid December, 1975 this lag can be considered of little consequence; (ii) the lag between the passing of legislation of the issuance of rules and regulations. In the case of AHOP program regulations were announced at the end of March, 1976 -- a period of 10 weeks; (iii) the lag between issuance of regulations and builder/lender/public acceptance of the program. This lag was probably quite short since a version of AHOP was already in place.

Secondly, there are other lags which tend to recur. These are: (i) a lag due to the issuance of building permits at the municipal level. This tends to be quite short in most municipalities; (ii) a lag due to approvals related to the land development process. This often involves municipal and provincial agencies in topics ranging from rezoning to

servicing requirements. When AHOP (1976) was initially announced it was assumed that adequate supply of serviced land was available in most market areas[1]. Since AHOP units were started quickly in most market areas, this assumption appears to have been justified; and (iii) a lag between initial construction and final occupancy. This lag generally averages four months for singles and eight months for multiples. As most AHOP units are sold prior to completion this has not proved to be a problem.

3.3 SUMMARY

This section of the analysis dealt with the role of the program in economic stimulation; particularly with regard to the production of housing and the generation of employment. The following points are summary of the main findings:

(a) the additional investment in new house mortgages directly resulting from AHOP through the four main sets of institutional lenders (chartered banks, life insurance companies, trust companies and loan companies) was estimated at $413 million;

(b) the bulk of additional investment ($268 million) cause from trust and loan companies;

(c) the additional number of new housing units generated by AHOP was estimated to be 11,128. Of these 5,448 were attributed to the increase in mortgage lending. The remaining 5,680 were attributed to the fact that AHOP units cost significantly less than conventionally - financed units;

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[1]This land development process is presently being studied by the Federal Provincial Task Force on the Cost of Serviced Land (Greenspan).

(d) the AHOP program generated 7,862 extra man-years of employment; and

(e) the usual lag effects inherent in developing and implementing a program, from announcement to occupancy of the unit, were found to be relatively insignificant.

CHAPTER FOUR

ACHIEVEMENT OF GOALS: (3) PRODUCTION OF LOW PRICED HOUSING

As mentioned in Chapter One, the third major goal of the FHAP program was "to hold down house prices"[1], consistent with the anti-inflationary policy of the government. AHOP was expected to restrain prices in two ways:

(1) by increasing the supply of units in general, AHOP would reduce the upward pressure of demand;

(2) by ensuring that a larger proportion of new units are low priced, the price of new housing averaged over all units would decline even if the price of identical homes rose.

The maintaining of low prices for AHOP units through the MHP has the additional benefit of requiring a smaller subsidy per unit.

In this chapter we shall explore the extent to which AHOP was able to hold down the price of housing in 1976. In Section 1 we shall examine the effect of AHOP in price via increased supply; Section 2 will look at the effect of AHOP on the average price of new housing. Since AHOP house prices are below non-AHOP prices, how are builders able to provide the cheaper units; in other words, what aspects of "quality" differentiate AHOP

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[1]Memorandum to the Cabinet, October 24, 1975.

from non-AHOP units? Section 3 of this Chapter will provide some evidence on this question.

4.1 EFFECT OF AHOP ON THE PRICE OF HOUSING VIA INCREASED SUPPLY

As estimated in Chapter Three, AHOP has resulted in an increase of approximately 20% in the overall supply of new owner-occupied housing in 1976. By increasing supply, AHOP was expected to satisfy a portion of the demand for new housing and thus reduce the increased pressure on housing prices in general. In addition, by providing a subsidy for home-ownership, AHOP would also increase the demand for new housing. Consequently, the net effect of the program on the rate of inflation cannot be identified a prior.

To calculate the rate of inflation in housing, we shall use Statistic Canada New House Price Index[1]. Since this index is calculated only for a few metropolitan areas, the conclusions reached in this section are valid only for these centres.

As can be seen in Table 4.1, the price of new housing increased most rapidly between 1973 and 1974, in all of the six centres for which data were collected. After 1974, the rate of inflation declined quite

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[1]See Statistics Canada, Construction Price Statistics Catalogue 62-007 for a description of the method used to calculate the index.

TABLE 4.1

PERCENTAGE CHANGE IN HOUSE PRICES FOR IDENTICAL HOUSES[1]

METROPOLITAN AREA	1971-72[2]	1972-73[2]	1973-74[2]	1974-75[2]	1975-76[2]	Dec.75-Dec.76[3]
Montreal	8	17	41	7	6	6
Toronto	10	25	25	0	5	4
Ottawa-Hull	13	23	24	4	8	6
Winnipeg	5	22	27	9	13	11
Calgary	10	15	28	20	25	16
Edmonton	9	22	30	19	20	12
Halifax					6	3
St. Catharines					8	10
Kitchener					3	2
London					6	6
Regina					18	4
Saskatoon					22	16

SOURCE: Statistics Canada, Construction Price Statistics, March, 1977, Cat. #62-007.

NOTES: [1]Available for 6 cities only from 1971; extended to 6 more cities in 1975.

[2]Based on difference between annual average index.

[3]Based on difference between index in December 1976 and December 1975.

rapidly in Montreal, Toronto and Ottawa-Hull, but declined only moderately in Calgary and Edmonton. In the latter two cities, prices began declining significantly only in mid-1976. How much of this decline can be attributed to AHOP and what would have happened to prices in 1976 without AHOP?

On the first question, the fact that prices began to decline in 1974 at a time when the original AHOP program was first coming into effect suggests that AHOP might, in fact, have had a significant impact, at least in the three eastern cities. However, in both Toronto and Ottawa-Hull, the AHOP program was very small[1].

A more important reason for the decline in prices is the rapid increase in the rate of interest on conventional mortgages, from 9% in January, 1973, to 12% in September, 1974. This high interest rate effectively limited a large part of the demand for new owner-occupied housing. Surprisingly, prices continued to rise in Edmonton and Calgary, due primarily to the high rates of migration into these cities as a result of the oil boom. Since the AHOP program under FHAP was not very extensive in these cities in 1976, the decline in prices in 1976 cannot be due to AHOP.

What would have happened to house prices in 1976 without AHOP? Since interest rates remained high throughout the year, it is unlikely that there would have been any significant increase in demand. However, as interest rates began to decline early in 1977, the price of new, owner-occupied

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[1]In Toronto, there were 370 approvals in 1974; in Ottawa-Hull, 517.

units might be expected to rise. Unfortunately, we do not have data as yet for 1977 house prices to determine whether they have begun to rise.

4.2 EFFECT OF AHOP ON AVERAGE PRICE

The second means by which AHOP was expected to reduce the rate of inflation in new housing was by changing the mix of housing produced. By increasing the proportion of low priced housing, the average price of new housing was expected to fall even if the price of an identical unit rose over time. As can be seen in Table 4.2, the average price of an NHA single detached home[1] reflected similar price movements over the 1971-75 period as the Statistics Canada index of an identical unit; rising rapidly in 1973-74 in almost all the metropolitan areas. However, with the exceptions of Halifax and Toronto, the price of the average single detached unit rose more rapidly than the price of identical dwelling units. In other words, the change in the mix of housing between 1975 and 1976 appears to be toward more expensive housing and not toward cheaper housing.

What appears to have happened is that the AHOP program has resulted in a price gap; units are built either at a or very near the AHOP price ceiling or at or near the NHA price ceiling[2], -- very few units are built

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[1]Unfortunately, data on new house prices are available for only NHA housing. We do not know what has been happening in the non-NHA sector; therefore, our conculusions are limited to NHA units.

[2]The NHA price ceilings are approximately 20% higher than the AHOP celings, depending on the market area.

TABLE 4.2

PERCENTAGE CHANGE IN AVERAGE HOUSE PRICE
NEW SINGLE DETACHED UNDER NHA

METROPOLITAN AREA	1971-72	1972-73	1973-74	1974-75	1975-76
Montreal	4	11	25	14	9
Toronto	0	13	72	- 8	0
Ottawa-Hull	0	0	28	9	17
Winnipeg	10	15	34	18	19
Calgary	4	18	28	24	29
Edmonton	7	13	26	25	27
Halifax	2	3	1	21	1
St. Catharines	3	14	28	6	14
Kitchener	5	16	49	1	10
London	4	11	22	2	16
Regina	13	20	20	21	22
Saskatoon	7	13	19	28	24

SOURCE: Canadian Housing Statistics, Selected Years.

TABLE 4.3

COMPARISON OF CHANGES IN AVERAGE PRICE
OF NHA SINGLE DETACHED UNITS AND
PRICE INDEX OF NEW (IDENTICAL) UNITS

METROPOLITAN AREA	NHA SINGLE DETACHED UNIT[1]			PRICE INDEX[2]
	PRICE, 1971 $	PRICE, 1976 $	% CHANGE	% CHANGE, 1971-76
Montreal	17,834	32,178	80.4	100.9
Toronto	32,646	57,417	75.9	80.7
Ottawa-Hull	27,539	45,044	63.6	92.5
Winnipeg	21,583	51,352	137.9	99.8
Calgary	23,893	59,999	151.1	143.1
Edmonton	25,712	61,428	138.9	145.8

SOURCE: [1]Canadian Housing Statistics, Selected Years.

[2]Statistics Canada, Construction Price Statistics, March, 1977.

in between the two. As a result, the average price has not declined. Instead, the middle range of the new housing market has disappeared in several of the centres. The reasons for this are that unsubsidized houses priced just above the AHOP limit cost the purchaser in the first year 25% more than units built at the price limit[1].

Even if the average price of new single detached units rose more rapidly than originally expected relative to the Statistics Canada new house price index, it is possible that the average price of all new housing units rose less rapidly because AHOP was able to increase the proportion of row and apartment units being built. However, as can be seen in Table 4.4, the distribution of housing units by type across Canada is very similar for AHOP as for non-AHOP units. While there was some shift from single-detached to row units, the shift has not been sufficiently large to affect the average price of new owner-occupied housing.

4.3 CHARACTERISTICS OF AHOP UNITS

In the Memorandum to the Cabinet[2], CMHC argued that purchasers of new housing were over-consuming housing, i.e. they were purchasing more housing than they needed. Although the Memorandum did not define how much housing a family "needed" and did not present any evidence on the extent to which families were over-consuming, the Memorandum suggested that AHOP

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[1] In Chapter Six, we discuss in greater detail the effects of the Maximum House Prices.

[2] Op. cit., p. 1.

TABLE 4.4

PERCENTAGE DISTRIBUTION OF
AHOP AND NON-AHOP UNITS, BY DWELLING TYPE

Dwelling Type	Per Cent of AHOP Units	Per Cent of Non-AHOP Units
Single-Detached	56.9	64.1
Semi-Detached	10.4	10.8
Duplex	0.3	0.5
Triplex	0.3	0.4
Row	23.8	15.2
Apartment	8.2	8.9

SOURCE: Special Tabulation of CMHC Computer File.

would encourage the production of a greater supply of lower priced housing by providing less of those housing characteristics that might be considered unnecessary.

As mentioned above, there was some shift away from single-detached units toward row housing. Thus, one of the features of housing that is economized is land. As can be seen in Table 4.5, this has occurred primarily in Vancouver and the Metropolitan areas of Ontario where the land in 1976 was relatively expensive.

A second characteristic of housing that has been economized has been internal floor area -- what is termed CMHC as "livable floor area" (LFA). As can be seen in Table 4.6, AHOP units tend to have significantly less LFA than non-AHOP units; the median LFA in AHOP units 1033 square feet whereas in non-AHOP units it is 1125 square feet. Geographically, the smaller units are in Quebec and the Maritime provinces. In Ontario and British Columbia, the row housing units tend to have more internal space than the single-detached units in Quebec and the Maritimes.

A third characteristic that has been economized is the location of the unit. While it is impossible to determine from the computer file in Ottawa the location of AHOP units, most Regional Economists in CMHC has suggested that AHOP units are built on cheaper land, either on the very outskirts of the city or on otherwise undesirable locations.

TABLE 4.5

COMPARISON OF AHOP AND NON-AHOP UNITS
BY METROPOLITAN AREA

	AHOP Approved NHA Loans		Non-AHOP Approved NHA Loans		Ratio of Non-AHOP to AHOP Average	
	Average Selling Price Dollars	No. of Units	Average Selling Price Dollars	No. of Units	Selling Price	No. of Units
Canada	35,791	18,526	43,058	20,309	1.20	.91
Calgary	--	--	56,041	314	--	--
Chicoutimi	28,526	299	30,712	304	1.08	1.02
Edmonton	36,243	129	52,351	699	1.44	5.42
Halifax	34,910	371	35,745	40	1.02	0.11
Hamilton	40,957	324	45,522	349	1.11	1.08
Kitchener	34,943	212	46,721	411	1.34	1.94
London	34,000	249	41,929	228	1.23	0.92
Montreal	30,058	2,447	32,229	2,552	1.07	1.04
Niagara	32,761	169	40,678	743	1.24	4.40
Ottawa-Hull	36,799	790	42,951	1,517	1.17	1.92
Quebec	30,824	824	31,190	502	1.01	0.61
Regina	32,952	110	48,156	110	1.46	1.00
St. John's	34,671	206	37,207	21	1.07	0.10
Saskatoon	34,785	184	39,384	175	1.13	0.95
Toronto	44,628	3,185	51,994	3,090	1.17	0.97
Vancouver	45,673	1,136	49,632	564	1.09	0.50
Windsor	28,839	169	39,902	78	1.38	0.46
Winnipeg	33,491	198	46,675	1,064	1.39	5.37
Sudbury	33,935	48	40,525	119	1.19	3.10
Victoria	42,712	36	61,223	36	1.43	1.00
Saint John	33,607	150	34,250	35	1.02	0.23
Other Urban Areas	35,405	1,871	42,319	1,893	1.20	1.01
Non-Urban Areas	32,693	5,302	41,717	5,239	1.28	0.99

TABLE 4.6

PERCENTAGE DISTRIBUTION OF AHOP
AND NON-AHOP UNITS, BY LIVABLE FLOOR AREA

Livable Floor Area sq. ft.	Per Cent of AHOP Units	Per Cent of Non-AHOP Units
Under 701	0.4	0.5
701- 800	1.6	1.0
801- 900	7.8	4.1
901-1000	31.2	18.6
1001-1100	29.0	23.1
1101-1200	13.1	19.5
1201-1400	13.0	21.4
1401-1600	3.8	8.0
1600+	0.1	3.8

SOURCE: Special Tabulation of CMHC Computer File.

4.4 SUMMARY

In this chapter, there is little evidence to support the claim that AHOP has had a significant impact on reducing the rate of inflation in new housing. In general, prices had begun to decline prior to the announcement of (See Table 4.5) AHOP because of the high rate of interest on conventional mortgage.

Nor has AHOP reduced the average price of new housing. While AHOP resulted in the completion of a large proportion of lower priced units, it also forced up the price of non-AHOP, NHA units, creating a gap in the market between the two.

In order to build lower priced housing, builders have constructed generally smaller housing units under AHOP, and on lower quality lots than the non-AHOP units. In addition, there has been some shift from single-detached toward row units, especially in Ontario and British Columbia.

CHAPTER FIVE

PROGRAM COSTS

5.1 COMMITMENTS AND BUDGETS

The Corporation in its annual submissions to Treasury Board for capital and subsidy authority, derives estimates of the cost of AHOP for five year periods. As can be seen in Table 5.1, the 1976 forecast was for 31,500 AHOP-P and 2,800 AHOP-D units[1]. This compares to actual approvals of 21,000 AHOP-P and 1,906 AHOP-D units. In 1977, the level of AHOP-P is forecasted to rise to 41,500 units while AHOP-D will increase to 1,940 units[2]; to the end of May, 1977, there had been over 12,620 AHOP-P and 168 AHOP-D units.

The lag between approval of an AHOP eligible mortgage at the branch office and the codification of the application for computer usage can be as long as four months. Thus, as of March 15, 1977, only 18,526 AHOP eligible mortgage applications approved in 1976 were on the computer-based file. Of these, only 11,581 were actually receiving cheques (see Table 5.2). To arrive at cost estimates, the figures

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[1] AHOP-P are units under private i.e., approved lenders; AHOP-D are units receiving direct CMHC mortgages.

[2] CMHC Budget Division, Program Forecast, 1978/79; pp. 189-174.

TABLE 5.1

AHOP PROGRAM FORECASTS

	1976	1977	1978	1979	1980	1981	1982
1. Units - AHOP-P	20,793	41,450	45,000	45,000	45,000	45,000	45,000
- AHOP-D	1,915	1,940	1,730	1,740	1,690	1,690	1,660
2. Commitments[1]							
IRL - AHOP-P	73.8	95.3	103.6	103.6	103.7	103.6	103.7
AHOP-D	6.8	4.3	3.9	3.7	3.8	3.8	3.7
Grants	79.9	66.7	59.3	59.6	58.1	58.0	57.0

[1]Millions of constant 1977 dollars.

SOURCE: CMHC Program Forecast 1978-79.

TABLE 5.2

ESTIMATED AND ACTUAL ASSISTANCE: AHOP 1976

	IRL	Grant
1. No. of Actual Recipients[1] to April 15, 1977	11,851	5,037
2. Average Actual Amount in First Year for Recipient	$ 971	$ 490
3. No. of Approvals, 1976[2]	18,526	7,456
4. Average Imputed Amount in First Year per Recipient	$ 943	$ 516
5. Total number of approvals[3]	22,906	

[1]CMHC Mortgage Administration Division, Computer File

[2]CMHC Data and Systems Computer File

[3]CMHC Program Management System

derived from the mortgage approval file were multiplied by the appropriate factor to bring the overall budget in line with total approvals.

5.1.1 COMMITMENTS

"Commitments" represent the sum total of funds required to pay grants and loans over the five years of the loan. These had been estimated to be $3,915 per unit under AHOP-P and $3,859 per unit under AHOP-D[1]. On the basis of 1976 experience, total commitment per unit will be $3,780 for AHOP-P and $3,208 for AHOP-D.

Whereas the original estimates per unit appear only slightly too high for AHOP-P, they are 20% too high for AHOP-D. The reason for this is that AHOP-D has gone primarily to lower priced rural and small urban areas; as a result total required assistance is lower. Furthermore, the income distribution of AHOP-D recipients is fairly similar to AHOP-P, with slightly under 50% requiring grant assistance in both cases[2].

It should be noted that, with evidence of interest rates falling, the level of IRL will fall significantly. Thus, a reduction in interest rates from 11½% (as predominated in 1976) to 10½% (as existed in January 1977) represents a 29% reduction in IRL, or a 23% reduction in total

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[1] Ibid p. 192. Budget Division estimates average interest foregone on AHOP-P IRL's to be $3,554; average grant averaged over all recipients is estimated at $354.

[2] See Chapter VI.

commitment (see Table 5.3). The implication is that the budgetary commitments, on a per unit basis, are too high.

5.1.2 CASH FLOW

In the development of its budget, the Corporation is required to identify not only the commitments that it must make but also the cash flow required to fulfil these commitments. These are divided into non-budgetary (loans that are eventually repayable, such as the IRL) and budgetary (subsidies that are not repayable). Included in the latter is interest foregone on the IRL because it is interest-free over five years.

In developing its forecast, the Corporation uses a fairly complex system to account for phasing of applications and the fact that IRL's and grants are paid out in monthly cheques. In this report, the concern is with broader cost implications and therefore a less elaborate system is used.

To estimate costs, Section 5.2 will initially examine the long-term cash flow implication of approvals in 1976. Then, in the following section estimates of future take-up under the program, and the cash flow implications thereof, will be examined.

TABLE 5.3

EFFECT OF CHANGE IN RATE OF INTEREST ON
SIZE OF INTEREST REDUCTION LOAN

SIZE OF MORTGAGE	ANNUAL P & I AT				$ DIFFERENCES		SIZE OF IRL AT	DECLINE IN IRL	
	8%	9½%	10½%	11½%	11½-10½	11½-9½	11½%	11½-10½	11½-9½
$30,000	2,750	3,103	3,344	3,592	248	489	842		
$35,000	3,209	3,620	3,902	4,192	290	527	983	29%	58%
$40,000	3,667	4,137	4,459	4,790	331	653	1,123		

5.2 CASH FLOW IMPLICATIONS OF 1976 APPROVALS

Before making any estimates of the cash flow requirements of 1976 approvals, it is first necessary to make some crude assumptions about phasing (i.e., in which calendar year will approvals given in 1976 begin payment?). Involved in this question is the fact that:

(a) approvals do not occur at the beginning of the year but are spread over all twelve months; and,

(b) there is a lag of approximately 5 months between mortgage approval and the writing of the first IRL cheque. Given the rough nature of these estimates of cash flow, it is assumed that 1/3 of all approvals in 1976 will be allocated to 1976 cash flow requirements and 2/3 to 1977 requirement.

Among the approvals in 1976, the average IRL in the first year is $944 and the average grant (averaged over all AHOP recipients and not just grant recipients) was $208. Table 5.4 describes the rate at which average IRL and grant phase out over the five year life of the program, using the rule that assistance declined by $240 or one-fifth of the original amount, whichever is the lesser[1]. At the end of the fifth year, the recipient has a number of options regarding repayment. These include:

(a) repaying the entire IRL; or,

(b) paying the IRL back at the same rate at which assistance declined over the first five years.

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[1] If no grant is given, assistance declines by one-fifth only (i.e., there is no maximum amount.)

TABLE 5.4

CASH FLOW IMPLICATIONS OF 1976 APPROVALS

Year of Receipt Basis				Calendar Year Basis**				Total Cash Flow***				
Average Per AHOP Recipient				Average Per AHOP Recipient								
Year	Grant $	IRL $	Interest Foregone on IRL* $	Year	Grant $	IRL $	Interest Foregone $	Grant	IRL (Non-Budgetary)	Total Cash Flow	Interest Foregone	Total Budgetary (Grant and Int. Forg.)
								(millions of dollars)				
1	208	944	94	1976	69	315	16	1.58	7.22	8.80	0.37	31.95
2	120	829	177	1977	179	906	77	4.10	20.76	24.86	1.16	5.26
3	50	697	247	1978	97	785	161	2.22	17.99	20.21	3.69	5.91
4	4	540	301	1979	35	645	233	0.80	14.78	15.58	5.34	6.14
5		342	335	1980	3	474	288	0.07	10.86	10.95	6.60	6.67
6		-3352		1981		-889	269		-20.32	-20.32	6.17	6.17
				1982		-2234	112		-51.19	-51.19	2.57	2.57

* Assuming 10% simple interest rate; part of subsidy budget but not of cash flow.

** Assuming phasing of 1/3 in current year and 2/3 in following year.

*** 22914 Approvals in 1976.

SOURCE: CMHC Computer File on Approvals.

A third option, which is not yet formalized because it requires an Order-In-Council, is to "wrap" the IRL into the mortgage when the mortgage is renewed[1]. From the point of view of the Corporation, this involves lump-sum repayment by the mortgage company and from the point of view of the borrower eases his cash flow burden since the IRL is then amortized over a longer period[2]. It is expected that the Corporation will apply for a change in the regulations to accommodate this possibility as early as possible since it reduces its own capital commitments. From the point of view of the following estimates of cash flow, it has been assumed that full repayment of the IRL at the end of five year periods will occur.

As can be seen in Table 5.4, cash flow will peak at $25 m. in 1977 and then decline with a cash inflow occurring with repayment of IRL's in 1981. The subsidy cost, as defined by the sum of grant and interest foregone, will be close to $7 million per year for each year between 1977 and 1980 then decline in 1981 to $5 million.

5.3 CASH FLOW IMPLICATIONS OF FUTURE APPROVALS

As mentioned in Section 5.1, the reduction in interest rates will have a substantial effect on the size of the IRL. On the other hand,

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[1] In other words, a new mortgage would be written at the end of five years to include outstanding principal and the IRL.

[2] Whereas 20 years remain to amortize the loan, use of option (b) above will require amortization over approximately seven years.

increases in the price of new housing will raise the size of the IRL and of the grant, especially if incomes do not keep pace with prices.

As a simplification, it has been assumed that the decline in IRL will just offset the increase due to rising house prices. Given the decline in interest rates and the large effect this has on the IRL, this is likely to generate an upper bound to costs.

A more difficult assumption involves estimating future take-up under the AHOP program. The Corporation[1] estimates an upper bound of 50,000 units per annum over the next five years. With the decline in interest rates and the resultant decline in the value of IRL, this is likely to be too high since many households will demand more expensive housing. A more accurate forecast is likely to be 30,000 units, based on the observation that, in the first four months of 1977, there were 9,800 AHOP approvals[2]. Extrapolating this trend for the full year leads to an estimate 30,000 approvals for 1977[3].

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[1] CMHC Program Forecast, op. cit.

[2] CMHC Program Management System, Report for Week Ending April 30, 1977.

[3] A second factor that will lead to a decline in AHOP is the increased use of the Assisted Rental Program by increasing the rental stock, the pressure on ownership will decline.

As can be seen in Table 5.5, if the program is run for 5 years, cash flow will peak in 1980 at over $100 million and by 1982 the program will enter into net repayment.

Figures on cash flow are of importance to financial planning for the Corporation as well as for control agencies. However, from the point of view of evaluating a program, the more relevant figure is the cost of the subsidy (i.e., the "budgetary" cost of the program).

5.4 BUDGETARY COST OF AHOP-76

The two principal direct costs of the program are the grant and the interest foregone on the IRL. As indicated in Table 5.4, average grant for the 1976 approvals was $208[1] and average IRL was $944. To translate the figures onto a calendar year basis requires a number of assumptions on lags. As will be recalled, it was assumed that only one-third of all 1976 approvals actually generated cash outflow in 1976. If it is further assumed that these are evenly spread over the year, one-half of the interest foregone on these expenditures can be attributed to 1976 and the remainder to the following year.

As indicated in Table 5.4, the cost of the subsidy for the 22914 approvals was $1.95 million in 1976 and $5.26 million in 1977. Although grant expenditures decline in 1978. The value of interest foregone more than compensates, so that in 1979 the value of the subsidy rises to $6.14 million.

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[1]This figure is averaged over all approvals and not just grant recipients.

TABLE 5.5

CASH FLOW IMPLICATIONS OF APPROVALS TO 1980

Year of Disbursement	No. of Approvals	Total Cash Flow* (IRL and Grant) (in millions of $)	Cash Flow by Year of Approval (in millions of $)				
			1976	1977	1978	1979	1980
1976	22,914	8.80	8.80	--	--		
1977	30,000	36.38	24.86	11.52	--		
1978	30,000	64.28	20.21	32.55	11.52		
1979	30,000	86.11	15.88	26.46	32.55	11.52	
1980	30,000	101.88	10.95	20.40	26.46	32.55	11.52
1981	--	73.83	-20.32	14.34	20.40	26.46	32.55
1982	--	-16.59	-51.19	-26.60	14.34	20.40	26.46
1983	--	-58.88	--	-67.02	-26.60	14.34	20.40
1984	--	-79.28	--		-67.02	-26.60	14.34
1985	--	-93.62	--			-67.02	-26.60
1986	--	-67.02					-67.02

* Assumption: Reduction in interest rates exactly offset rising price increase.

On the assumption that "a dollar today is equal to a dollar tomorrow" the $34.7 million total cost of the subsidy for the 22914 approvals is $1,513 per unit. Because of inflation and the preference for current over future consumption[1], many economists argue that next year's expenditures ought to be discounted, although there is no agreement on the "appropriate" discount rate. At a 5% rate, the subsidy cost per unit is $1,303, at 10% the subsidy is $1,138, and at 15% it is $1,005.

5.5 EFFECT OF FHAP CHANGES ON COSTS

As stated in Chapter I, a major concern of CMHC in widening the scope of the program was to reduce the per unit subsidy without imposing undue hardship. The major tool for doing this was the IRL, replacing a portion of the grant with an interest-free, repayable, loan.

The question to be asked in this section is: how much has been saved? Insofar as the average value of the IRL was $3,352 spread over five years, the average saving per unit was $3,352 at a zero discount rate or $2,912 at a 10% discount rate. Over the 22914 AHOP approvals and using this 10% discount rate, this amounts to $66.7 million.

However, under the old program, not all households would have been eligible for assistance. Specifically, those with GDS ratio below 25% or those without a dependent child would not have qualified. Had the $1,200 limit to total assistance still been in force, only 52% of the 1976 FHAP

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[1]See Chapter II for a discussion of discount rates.

TABLE 5.6

EFFECT OF FHAP CHANGES ON EXPENDITURES IN FIRST YEAR

	ALL GRANTS, MAXIMUM $1200		ALL GRANTS, MAXIMUM $1800		FHAP PROGRAM
	GROSS INCOME	ADJUSTED INCOME	GROSS INCOME	ADJUSTED INCOME	
1. Percent or 1976 Recipients	52%	58%	56%	61%	100%
2. Average Assistance	$930	$1015	$1176	$1259	$1152*

*IRL 944; Grant $298.

SOURCE: Special tabulations of Computer File.

approvals would have qualified; 34% would not have qualified because their incomes were too high and 14% because their GDS ratio, after assistance, would have too high (i.e., above 30%). The average amount of assistance in the first year, would have been $930. Had the maximum size of assistance been increased to $1,800, 56% of all 1976 recipients would have qualified for some assistance; 34% would have had incomes too high to qualify and the remaining 10% would still have had incomes too low to qualify for participation in the program (see Table 5.6).

A second change in the program was the replacement of adjusted family income[1] with gross income. One major effect of using gross income is to reduce the average size of the subsidy to the household. A second effect is to increase the number of eligible households. A household with an income too low under the adjusted income definition might qualify for assistance under the gross income concept. As can be seen in Table 5.6, average assistance declines by approximately $80 or 10%, through the use of the gross income concept. Accordingly, the number of eligible households declined by 5%[2].

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[1]Adjusted income, under AHOP in 1975, was defined as gross income less $1,000 for a working spouse and less $300 for each dependent child.

[2]A number of provincial housing ministers have argued that the Corporation ought to use the adjusted income in order to make income definitions consistent with public housing programs. The question of appropriate income definitions across housing programs will be discussed by the Social Housing Review. See also Report 1 of the Task Force on Shelter and Incomes, CMHC, March 1976, pp. 65-76.

5.6 CONTINUED ASSISTANCE AFTER FIVE YEARS

Because of the large amount of IRL assistance (relative to total income) that is repayable after five years, the Corporation faces the possibility of having to continue to provide assistance beyond five years. The Chairman of CMHC, in a recent talk[1], assured borrowers that assistance will be forthcoming, although he has not specified the amount or type of assistance. As an extreme situation, consider a family with income of $11,649 buying a home for $35,600 at 12%. The IRL in the first year is $1,100 and the grant is $750; PIT after assistance would be $2,912. If the assistance steps out at $240 per year, the family will have accumulated, at the end of five years, an IRL of $5,290 or 15% of the value of the house.

Should the price of the house rise by 15% over the five years, they will then be in a position to sell the house without incurring a loss. Should they sell the house, CMHC guarantees the return of their equity before repayment of the IRL. Thus, should it happen that the price of the house does not rise by 15% over the five year period, CMHC will lose a portion of the IRL. It is not expected, however, that house prices will rise so slowly[2] so that the possible cost to the Corporation of the loss of IRL due to declining house prices is not likely to be very high.

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[1] Quoted in the Ottawa Citizen, May, 1977.

[2] 15% over five years is 2.8% per annum.

A more serious problem arises if the household wishes to remain in the house. Assuming repayment of IRL is arranged by renegotiating a mortgage at the market rate in five years (assume it to be 10%) then in the above example, the total principal outstanding would be approximately $38,000 and annual PIT would be $4,839 (i.e., an annual growth of 10.7%)[1]. By extending the remaining period from 20 to 30 years, PIT would be $4,438, for an annual growth of 8.8%.

Insofar as 78% of AHOP approvals were given to households under 35, a group with greater potential for income growth, partly because of the potential of income from the spouse once the children have grown, it does not seem likely that the majority of applicants even if they are in such a severe initial situation, will face severe affordability problems after five years if interest rates do not rise above 10%.

However, should interest rates rise to 12%, problems will arise. In the above example, with a 20 year period, annual PIT will be $5429, requiring an annual income growth of 13%. In such a situation, further government assistance, either through a new program of preferred rate mortgages or through extension of the current IRL program will be required.

It is, of course, possible that some households will nevertheless be unable to meet repayment of IRL even at a 10% mortgage rate. Experience to date, however, suggests that the number of AHOP recipients in arrears or default under the previous program is small, although greater than arrears under other NHA programs.

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[1] Taxes in the first year are assumed to be $354; after 5 years, they are $500.

Of the 14538 AHOP approvals in 1970-72, 5.3% or 720 were in arrears of at least one month in 1976. This compares to 1.5% for normal direct CMHC lending and 5.7% for limited dividend rental housing. Defaults under the program have amounted to 763 units or slightly more than 4% of total approvals under the 1976 FHAP - AHOP program it can be expected that the proportion of total units likely to default and/or be in arrears would be higher because of the higher levels of assistance involved.

In contrast, the proportion likely to need further assistance after five years is likely to be lower in the FHAP program since interest rates are likely to fall by 1981 whereas between 1971 and 1976 they rose from 8¾% to 11¾%. Furthermore unemployment rates are likely to decline from the current high levels by 1981. Of the 2,285 households who have been reinterviewed[1] after five years, 317 or 14% required further assistance. With the fall in interest rates, the percentage still requiring assistance after five years under the FHAP - AHOP program and originally grant recipients is likely to be between five to ten percent.[2]

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[1]The old AHOP program required that all applicants be reinterviewed prior to renewal in order to determine whether further assistance is required; under FHAP, the onus is on the recipient to request further assistance.

[2]CMHC's Program and Market Requirements Division estimate, using different assumptions, that 8.1% of AHOP recipients will require further assistance if interest rates drop to 9%. See Thomas, T. "AHOP AFTER FIVE", CMHC's Program and Market Requirements Division, June, 1977.

TABLE 5.7

SITUATION OF RECIPIENTS OF AHOP ASSISTANCE IN 1971/72*

- Total approvals under Section 58 AHOP	20,948
- No. Paid Out in Full	5,112
- Total Acquired by CMHC through Foreclosure or Otherwise	763
- Total Resales	6,372
- Number Reinterviewed and not Eligible for Further Assistance	2,285
- Total with 5-Year Term not yet Reached	6,099
- Total Reinterviewed and Eligible for Further Assistance	317

*As of December 31, 1976.

SOURCE: CMHC Mortgage and Servicing Section.

5.7 COSTS OF PROVINCIAL SUPPLEMENTATION

As mentioned in Chapter II, provincial supplementation will likely increase the probability of default and/or arrears since it allows lower income households to participate[1] and increases the size of the outstanding IRL. The latter occurs because grant assistance slips out first. As can be seen in the example in Table 5.8, by reaching a household with income of $7,427 rather than $9,930, the IRL starts to decline only in year eight rather than year five. Assuming assistance slips out by $240 per annum, total IRL is $8,840 rather than $5,720; total federal grant is $3,900 rather than $1,560[2]. While the extent of provincial supplementation is still uncertain, the degree to which it is successful will result in a substantial increase in the cost of the program to the federal government.

5.8 COSTS OF AHOP RELATIVE TO PUBLIC HOUSING

One justification[3] for this depth of assistance is that, while AHOP might be expensive if given to a low income household, it is cheaper for government to use AHOP than Public or Non-Profit Housing. Even if the recipient of AHOP assistance is not currently on the waiting list for

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[1] Lower income households are believed to have a higher probability of default.

[2] Using a 10% discount rate for the example in Table 5.8, the cost of the program rises from $3,161 to $6,649 per unit.

[3] Dennis refers to the argument in regard to the original AHOP. The Chairman of CMHC, Mr. Teron, has also presented this argument. See op. cit. p. 268.

TABLE 5.8

ILLUSTRATION OF COST OF PROVINCIAL SUPPLEMENTATION

Year	PIT	IRL	Federal Grant	Minimum Income	IRL	Federal Grant	Prov. Grant	Minimum Income
1	4,728	1,000	750	9,930	1,000	750	750	7,427
2	4,768	1,000	510	10,860	1,000	750	510	8,360
3	4,813	1,000	270	11,810	1,000	750	270	9,310
4	4,863	1,000	30	12,780	1,000	750	30	10,276
5	4,913	790	--	13,743	1,000	540	--	11,243
6	4,968	550		14,727	1,000	300		12,227
7	5,028	310		15,727	1,000	60		13,227
8	5,093	70		16,743	820			14,243
9	5,158	0			580			15,260
10	5,228				340			16,293
11	5,303				100			17,343
12	5,383				0			17,943
TOTAL		5,720	1,560		8,840	3,900	1,560	

Assumptions:

Price		$40,000
Loan & Fee		38,380
Taxes		500
P & I	@ 11%	4,228
	@ 8%	3,228

Taxes rise at 8% p.a.

Maximum annual reduction $240

Minimum Income $\frac{\text{NET PIT}}{30\%}$

Assistance continued until all IRL & Grant Used.

Public Housing, there is a high probability that, should his income fall and/or the costs of shelter rise, he might then be on the waiting list. How does the cost of AHOP compare to that of Public Housing?

As can be seen in Table 5.9, for a typical unit built in 1976, the subsidy in Public Housing in the first year for a household with income of $9,930 would be $2,559. Had the same family purchased an AHOP unit, it would receive a grant of $750 and an IRL of $1,000[1]. The major reason for the difference is that, in the latter case, the costs of maintenance are put in the household whereas in Public Housing, the government bears the cost. After 10 years, should income rise at 10% per annum, the subsidy would be $355 in Public Housing. In AHOP, the same household would have begun repayment of IRL in the 10th year. Using a discount rate of 10%, the net present value of the subsidy under AHOP would be $3,161; under Public Housing, it would be $8,994. For the household with an income of $7,427 and receiving an additional $750 provincial grant, the present value of the subsidy under AHOP is $8,557 whereas in Public Housing it is $17,770. Thus, assuming a 10% grant on income, the net present value of the subsidy, under public housing is more than twice the subsidy under AHOP. In other words, if the household with income of $7,427 has more than a 50% probability of entering Public Housing, it is cheaper for the government to use AHOP as the means of providing assistance. As income rises to $9,930, the

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[1]See Table 5.8.

TABLE 5.9

SUBSIDY COST OF PUBLIC HOUSING

	ITEMS	YEAR 1	GROWTH RATE	YEAR 10	NET PRESENT VALUE OVER 10 YEARS
		$	%	$	$
Cost:	Amortization[1]	3,946	0	3,941	
	Operation and Maintenance[2]	600	10	1,556	
	Taxes[2]	500	10	1,297	
	TOTAL	5,041		6,794	
Income:	A)	9,930[3]	10	25,756	
			5	16,175	
	B)	7,427[4]	10	19,264	
			5	12,097	
	C)	4,800[5]	10	12,450	
			5	7,819	
Subsidy[6]:	A)	2,559		355	8,994
		2,559		2,750	17,770
	B)	3,184		1,978	18,182
		3,184		3,769	22,942
	C)	3,841		3,682	25,558
		3,841		4,839	28,354

[1] Based on 50 year amortization at 11½% of $35,000; this approximates the average cost of family public housing in 1976.

[2] Based on typical units built in 1976.

[3] Based on example in Table 5.8; $1,000 IRL plus $750 grant.

[4] Based on example in Table 5.8; $1,000 IRL plus $1,500 grant.

[5] Based on average family income in Ontario.

[6] Total costs less one quarter of income; different numbers refer to

probability of a family entering Public Housing need only be 35% (i.e., 3,161 8,994) for AHOP to be chaper to government!

5.9 SUMMARY

In this chapter the costs associated with AHOP in 1976 have been examined in detail. The average commitment for IRL and grant for five years was $3,780 per unit in AHOP-P and $3,208 in AHOP-D. Total 1976 commitments will generate a cash outflow of $25 million in 1977, declining to $5 million in 1981. Taking into account future approvals, AHOP will generate a peak cash flow of $100 million in 1980-81.

To estimate the subsidy cost of the program, the net present value of the subsidies in the program were calculated using a 10% discount rate. The average subsidy per unit is $1,138; for the 22914 units approved; amounting to $26 million. Thus, the subsidy cost of the AHOP program in 1976 was $26 million.

These figures do not take into account the possibility of default or that the household may require further assistance after five years. Based on experience with the $200 million program, arrears are likely to amount to 6% of total recipients of grant assistance and 1½% of IRL-only recipients. Defaults are expected to be in the 5 - 10% range for grant recipients. It is difficult, however, to estimate the costs of these arrears and defaults since they depend on the price at which the house is resold.

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[1] The entire question of inter-program costs will be examined by the Social Housing Review.

Provincial supplementation will almost double the subsidy cost to the federal government and increase the probability of default. However, in comparison to Public Housing, AHOP costs only one-half as much, largely through its ability to put the costs of maintenance and operation onto the homeowner. Thus, if a household with income of $7,500 has more than a 50% probability of entering Public Housing, it is cheaper for government to use AHOP ~~than public housing~~.

CHAPTER SIX

DELIVERY MECHANISMS OF AHOP: (1) THE MAXIMUM HOUSE PRICE

In devising its AHOP program in 1973, the Corporation was concerned that households in high priced housing markets, such as Vancouver, be as eligible for assistance as households in low price regions, such as rural Quebec. Had the Corporation established a single maximum income or maximum house price across the country, this limit would have to be low enough to exclude expensive housing and yet high enough to admit some housing units that would qualify in the high priced markte. Given the wide divergence in house prices between markets, a single maximum price could not meet these two requirements.

Consequently, the Corporation applied different maximum house prices and, by implication, different maximum incomes for eligible recipients, in each market area. This represented a major departure from traditional federal policy of treating all regions "equally". Moreover, it provided CMHC with a potentially powerful tool for controlling the production of AHOP units on a market area basis. Previously, geographic control was exercised by administrative allocations of budgets; the maximum house price provided the market with a clear signal of how many AHOP units could be produced.

Thus, the maximum house price could be used to ensure that comparable modest housing is built in all parts of the country, or it can

be used to control the level of production in individual market areas. In this chapter we shall attempt to examine how the maximum house price has in fact been used. Does it reflect the price of comparable housing units across all markets? If not, is it controlling production in a desirable geographical pattern? In Section 6.1, the former question is examined; Section 6.2, looks at the second question.

6.1 PRODUCTION OF IDENTICAL MODEST HOUSING

The original reason for having geographically different maximum house prices was to ensure that comparable housing could be built in all locations. The Corporation then modified this rule by allowing "acceptable units" for each market. As can be seen in Table 6.1, this type of acceptable unit varied from row units in centres such as Edmonton to semi-detached units in Winnipeg and detached units in Saskatoon. In general, the single-detached units are smaller in internal floor area than the row units

These estimates of prices and "acceptability" are based on the local branch manager's perception of the market. Another accepted source for such house price comparisons is the Royal Trust real estate service. As a company engaged in employee transfers for several large corporations, Royal Trust has found a great demand for some indication of spatial price differences. As a result, the company

TABLE 6.1

MAXIMUM HOUSE PRICES BY LOCATION

	Location	Total $	Land $	Building $	Size sq. ft.	Type[1]	Storeys	Average of price of a detached unit	In-use rates
1.	Yukon	41,000	7,000	34,000	1,000	D	1	n/a	32.30
2.	Kelowna	34,000	10,000	24,000	1,100	R	2	33,800	23.75
3.	Victoria	45,000	12,500	32,500	1,100	R	2	38,100	26.93
4.	Prince George	39,000	5,000	39,000	1,000	D	1	36,000	29.05
5.	Kamloops	34,000	10,000	24,000	11,000	R	2	33,700	25.16
6.	Cranbrook	33,000	5,000	28,000	1,000	S	1	n/a	29.85
7.	Vancouver	47,000	n/a	n/a	1,100	R	2	45,700	25.29
8.	Edmonton	41,000	8,500	32,500	1,050	R	2	36,700	29.70
9.	Yellowknife	43,500	9,200	34,300	1,000	D	1	41,000	40.06
10.	Lethbridge	37,500	7,500	30,000	920	S	2	32,100	33.71 (city land)
11.	Red Deer	36,500	5,775	30,725	1,000	S	1	36,000	30.49
12.	Calgary	41,000	9,000	32,000	1,100	R	2	n/a	29.11
13.	Regina	38,000	8,000	30,000	900	D	1	34,200	31.18
14.	Saskatoon	38,000	9,075	28,925	900	D	1	36,200	31.28
15.	Winnipeg	37,500	9,600	27,900	1,040	S	2	31,900	29.20
16.	Thunder Bay	37,500	7,000	30,500	1,100	R	2	36,600	n/a
17.	North Bay	34,000	7,500	26,500	1,100	D	2	n/a	26.16
18.	Peterboro	34,000	6,000	28,000	1,032	R	2	33,000	26.75
19.	Sault Ste. Marie	34,000	6,500	27,500	1,000	S	2	37,200	27.97
20.	St. Catherines	34,000	5,500	28,500	1,100	R	2	33,900	n/a

Cont'd

TABLE 6.1

	Location	Total $	Land $	Building $	Size sq. ft.	Type[1]	Storeys	Average of price of a detached unit	In-use rates
21.	Hamilton	43,000	15,000	27,500	1,100	R	2	n/a	n/a
22.	Kingston	34,000	8,000	26,000	1,100	R	2	34,000	25.46
23.	Timmins	36,000	8,500	27,500	950	S	1	35,600	n/a
24.	Windsor	36,500	9,000	27,500	1,075	S	2	29,600	n/a
25.	Sudbury	34,000	8,500	25,500	950	S	2	34,000	27.49
26.	Ottawa	38,000	6,500	31,500	1,100	R	2	34,200	26.50
27.	Oshawa	45,000	16,000	29,000	1,100	R	2	44,500	n/a
28.	London	35,000	10,000	25,000	1,100	S	2	35,100	n/a
29.	Kitchener	38,000	10,700	27,300	1,100	S	2	34,000	n/a
30.	Barrie	39,000	9,000	30,000	1,270	R	2	38,200	n/a
31.	Toronto	47,000	15,000	32,000	11,000	R	2	n/a	n/a
32.	Trois Rivières	31,000	2,500	28,500	960	D	1	28,300	n/a
33.	Val d'Or	32,000	4,500	27,500	960	D	1	29,500	n/a
34.	Rimouski	34,000	5,000	29,000	960	D	1	31,400	n/a
35.	Montreal	33,500	4,000	29,500	1,000	D	1	30,700	n/a
36.	Sept Iles	37,500	7,000	30,500	960	D	1	33,300	n/a
37.	Chicoutimi	31,000	3,000	28,000	960	D	1	28,900	n/a
38.	Sherbrooke	31,000	1,800	29,200	960	D	1	28,300	n/a
39.	Hull	38,000	10,000	28,000	960	D	1	34,200	n/a
40.	Quebec City	33,000	3,500	29,500	960	D	1	31,400	n/a

Cont'd

TABLE 6.1

	Location	Total	Land	Building	Size	Type[1]	Storeys	Average of price of a detached unit	In-use rates
		$	$	$	sq. ft.				
41.	Fredericton	34,500	7,000	27,500	1,000	D	1	30,600	28.94
42.	Moncton	32,000	5,000	27,000	1,000	D	1	29,600	23.38
43.	Saint John	34,500	7,000	27,500	1,000	D	1	34,000	29.24
44.	Sydney	34,000	3,750	30,250	1,100	D	1	31,300	29.39
45.	Halifax	38,500	8,750	29,750	1,100	S	2	32,600	28.47
46.	Charlottetown	33,000	7,500	25,500	1,000	D	1	31,800	n/a
47.	St. John's	38,000	10,400	27,600	900	D	1	34,200	31.12

[1] R is Row units.
D is Detached units.
S is single units.

SOURCE: CMHC, Lending Division.

asked their local real estate officers in several cities to estimate the price of two identical, prespecified housing units[1].

How does this measure compare with AHOP maximum house price? As can be seen in Table 6.2, using the set of average per cent differences, cities for which a comparison is possible, the Royal Trust is, on average 34% higher than the MHP. The Royal Trust is substantially higher in the Prairie Provinces and only slightly higher in Quebec. In Sourthern Ontario and Vancouver it is close to the average difference for the whole country. The standard deviation over the 34 observations is 16.8, or slightly less than one-half the mean. While there is no standard for acceptable standard deviation, this would appear to be quite high.

Summing up, there is substantial variation in relative house prices for AHOP vis-a-vis the Royal Trust price. This leads to the conclusion that AHOP maximum house prices do not reflect the prices of indentical dwellings. This is not surprising since, as stated, acceptable housing does vary by region. The large size of the variation is however quite surprising. The next section will examine whether AHOP maximum prices are being used to control the level of production of AHOP units in particular market areas.

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[1]Appendix F, describes both the service and the type of housing that is used as the basis for estimating prices.

TABLE 6.2

COMPARISON OF ROYAL TRUST
AND AHOP MAXIMUM HOUSE PRICES

	House Price Royal Trust House 1 December 1976 $	Maximum House Price October 1971 $	Per Cent Difference
British Columbia			
-Kelowna	47,700	34,000	40
-Victoria	64,000	45,000	42
-Vancouver			
-Kerrisdale	93,000		
-West Vancouver	75,000		
-North Vancouver	71,900	47,000	28
-Richmond	60,000*		
-Surrey	53,000		
Prairies			
-Edmonton	68,500	41,000	67
-Calgary	65,000	41,000	59
-Regina	58,000	38,000	53
-Lethbridge	59,500	37,500	59
-Saskatoon	56,000	38,000	47
-Winnipeg	51,000	37,500	36
Ontario			
-Thunder Bay	60,000	37,500	60
-North Bay	41,500	34,000	22
-Peterboro	47,000	34,000	38
-Sault Ste. Marie	49,000	34,000	44
-St. Catherines	46,000	34,000	35
-Hamilton	58,000	43,000	35
-Kingston	45,500	34,000	34
-Windsor	49,000	36,500	34
-Sudbury	52,000	34,000	53
-Ottawa	60,300	38,000	59
-Oshawa	54,500	45,000	21
-London	46,000	35,000	31
-Kitchener	53,000	38,000	39
-Barrie	44,500	39,000	14
-Toronto			
-Central	76,000		
-Thornhill	76,000		
-Mississauga	66,000	47,000	38
-Scarboro	65,000*		
-Richmond Hill	60,000		
Quebec			
-Trois Rivières	31,000	31,000	0
-Sherbrooke	32,000	31,000	3
-Hull	42,000	38,000	11
-Montreal			
-Mount Royal	65,000		
-Hudson	53,000		
-St. Lambert	46,500		
-Longueil	40,000		
-St. Bruno	39,000*		
-Beasonsfield	38,000		
-Brossard	38,000	33,500	16
-Pointe Claire	37,500		
-Boucherville	35,000		
-Laval	33,000		
-Beloeil	33,000		
-Pierrefonds	31,500		
-Chateauguay	27,000		

TABLE 6.2

	House Price Royal Trust House 1 December 1976	Maximum House Price October 1971	Per Cent Difference
	$	$	
-Quebec City			
-Ste. Foy	45,000	33,000	23
-Charlesbourg	40,500*		
Maritimes			
-Fredericton	45,000	34,500	30
-Moncton	37,000	32,000	16
-Saint John	41,000	34,500	19
-Halifax	50,000	38,500	30
-Charlottetown	40,000	33,000	21
-St. John's	43,800	38,000	15
Simple Average			34

*Sub-market in which AHOP is Occurring.

SOURCE: CMHC and Royal Trust Real Estate Service.

6.2 USE OF MAXIMUM HOUSE PRICES TO CONTROL PRODUCTION

Why should CMHC be attempting to control production on certain markets? One major reason is that the residential construction industry in 1976 was already at full employment and, therefore, AHOP would merely bid up the prices for scarce inputs such as land and labour with no increase in real production. In such markets, the Corporation would want to limit the number of AHOP units built.

One possible means of limiting production in such circumstances is to reduce the budget for that location. This, has been a major tool used by the Corporation in many of its programs. And, with programs that involve direct CMHC lending, such a course is feasible. However, the Corporation generally is unwilling to publicize its priorities so that, from the point of view of the public, there would be confusion regarding what allocations are made to individual markets.

With regard to AHOP, the use of budget allocations is not as useful. On the one hand, the program is "responsive" to builder applications and, as long as the builder has a suitable project for which there is a market, the local CMHC office will generally accept it. As a result, is is necessary to establish a clear signal to builders to make them aware of Corporation priorities. Furthermore, since a unit need not be NHA-insured to qualify under AHOP, it is possible to have a large influx of AHOP applicants despite attempts to control the local allocation.

As a result, the Corporation has implemented the maximum house price as the lever that controls the amount of AHOP units in a locale. A high MHP encourages the production of units whereas a low MHP discourages production, these prices being relative to the market price for a modest unit in that region.

Since the maximum house prices are revised quarterly on a fairly informal basis, the question is whether the level of the MHP's, relative to the Royal Trust prices, reflects the priorities of the Corporation for controlling production within individual markets. In terms of the question posed at the beginning of this section, is the MHP low, relative to the Royal Trust price, in those markets in which the construction industry is at full employment, and high in markets in which the construction industry is not very active?

How should the level of activity in individual markets be measured? Ideally, a measure of unemployment resources in that market prior to the introduction of AHOP would be used. Unfortunately, Statistics Canada does not provide information on unemployment in the construction industry for individual market areas. It is therefore necessary to use imperfect proxy measures. One that can be used is the number of starts per capita both in 1975, prior to FHAP-AHOP, and in 1976, during AHOP.

Thus, an inverse relation between the level of the MHP and 1975 starts per capita is expected: where the level of starts per capita

is high, the MHP will be relatively low and vice versa. With regard to 1976 starts per capita, the same relationship should occur, although the inclusion of AHOP units in total starts will result in a slightly weaker relationship.

As can be seen in Table 6.3, the correlation between starts per capita, in both years, and the relative MHP is negatively signed, as expected. However, the relation in 1975 is weaker than in 1976. This reflects the rapid rate at which housing markets change and the fact that, in general, previous year's market conditions are poor measures of the current situation. Since markets do change rapidly, it is necessary to review market conditions continually. The Corporation, as stated, does review the MHP's quarterly to account for changing situations. In general, this would appear to be sufficiently often to be able to take new situations into account[1].

As stressed in Chapter Three, AHOP is also designed to generate employment in regions in which employment in general is stagnant. To measure stagnancy, the rate of growth in employment in the region over the previous few years is used somewhat arbitrarily: the 1973-75 period is used since 1976 data are still preliminary. To the extent that

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[1]In Appendix G, one possible method to make the process semi-automatic is presented.

TABLE 6.3

RELATIONSHIP OF MAXIMUM
HOUSE PRICE TO STARTS AND EMPLOYMENT

Pearson correlation between this ratio of MHP to the Royal Trust price of house 1 and selected variables			
Housing Starts 1975 Per Population 1971[2]	Housing Starts 1976 Per Population 1971[1][2]	Employment[1] 1975 / Employment 1977	Employment[1] 1975 ÷ Employment 1961
-0.08	-0.33	-0.28	-0.4

SOURCE: (1) Statistics Canada, Employment Index, 1976.

(2) Canadian Housing Statistics, 1976.

employment goals are pursued through the use of the MHP, it is expected that, in regions in which the rate of growth in employment is low, the MHP relative to the Royal Trust price would be high, and vice versa. As can be seen on Table 6.3, there is a negative relationship, although the size of the coefficient is relatively low (only 28%). Interestingly, the size of the coefficient is much larger, 41%, between long-run, 1961-75, employment, and the MHP relative to the Royal Trust price. From this, it might be inferred that the Corporation, in setting its priorities, is more concerned with long-term employment conditions than with short-run effects. Whether it ought to place such priorities is not an issue tha can be pursued here. It is, however, consistent with the Economic Council's view stated in Chapter One, that housing policy ought to be concerned with long-run goals[1].

6.3 SUMMARY

Summing up, this chapter has to determine whether the maximum house prices reflect the prices of modest housing across individual market areas. Bearing in mind the difficulties inherent in estimating the price of identical housing, the MHP's were compared with the prices of identical housing developed by Royal Trust. It was found that the MHP varied substantially from the Royal Trust prices.

The question then faced was whether these differences reflect in-

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[1] Op. cit.

appropriate pricing by the Corporation or whether they reflect other goals of the MHP. Specifically, by having a high MHP, it would be possible to increase the level of starts. This would be desirable in situations in which the construction industry has high unemployment or in which the local economy in general is not growing. It was found in looking across a number of cities, that these have in fact been uses to which the MHP has been put.

CHAPTER SEVEN

WORK STATUS OF SPOUSE

To qualify for the grant portion of assistance in AHOP, it is necessary both to have a low income and to have at least one child. In a review of 1975 AHOP, in which all assistance involved a grant, it was found that a very low proportion of qualifying households -- approximately 10% -- had a spouse who was actively employed[1]. The review suggested that this low percentage (10% vs 35% for the country as a whole) was due either to:

(a) deception on the part of the applicant; or

(b) decision of the spouse to leave the labour force in order for the family to be eligible for the grant, i.e., the program has a work disincentive for the spouse.

If the former is valid, the Corporation should either eliminate the inclusion of spouse's income from the calculation or tighten up the enforcement, e.g. by having spot checks and/or stiffen penalties for misrepresentation[2]. With regard to the second question, since every dollar that the spouse earns is, in fact, "taxes", at a rate of up to 52%[1], a spouse will likely decide to leave the labour force -- especially when there is a young child. While the Corporation has no specific stance on the issue

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[1]Task Force on Shelter and Income, op.cit.

[2]The government of Ontario is currently auditing its new homeowner grant program and has suggested revenue gained is not worth the cost of the audit.

of female participation, it would appear that the government would, in general, prefer to have as neutral a program as possible with regard to labour force participation. While neutral is a vague term, it suggests that no additional disincentives be added that would affect the work decision. Therefore, in the second part of the section, the cost to the Corporation of moving from a family to a head of household income definition is estimated.

7.1 OBSERVATIONS REGARDING SPOUSE PARTICIPATION

The basic observation to make is that in considering households with low incomes and dependents, the participation rate of the spouse is, for this population, quite low. On reflection, this is not surprising since, on the one hand, the presence of a young child[2] deters the spouse from working, while on the other hand, the very fact that income is low means that there is only one income earner in the family. This is confirmed by the data on 1974 work patterns presented in Table 7.1.

As can be seen, spouse participation rates rise rapidly with household income. For households with incomes below twelve thousand dollar range, the average is approximately 21%, or half of what it is for households

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[1]Consider a household in which using head's income only, the household receives full grant, but using total family income, it receives no grant. Since the total value of the grant is $1,560 (i.e. $750 + $510 + $270 + $30) a spouse with income of $3,000 would be taxed at a rate of 52%. If work-related expenses and income taxes are included, it is feasible that, for a low income spouse, total cost of working in the first year may exceed income. Since income is tested only once in the five years, it is necessary to include the value of grants in all years. The question of more frequent income checks is discussed in Chapter Eight.

[2]As will be shown below, most AHOP recipients are quite young and to received a grant, must have a dependent.

TABLE 7.1

WORK STATUS OF SPOUSE
HOUSEHOLDS WITH DEPENDENT CHILDREN
1974

Income Class Household	Per cent of total population in income class	Per cent of spouses at work
Under $1,000	2.0	1.1
$2,000 - 3,999	4.2	4.3
4,000 - 5,999	7.0	8.5
6,000 - 7,999	9,0	16.0
8,000 - 9,999	12.1	19.6
Subtotal	34.4	13.4
10,000 - 11,999	13.2	26.4
12,000 - 14,999	18.0	37.3
15,000 - 24,999	27.4	48.7
25,000	7.1	53.2
TOTAL	100.0	31.9

SOURCE: Statistics Canada, HIFE 1974, Special Tabulation.

in the fifteen to twenty-five thousand dollar range. The former group are those who would be eligible for the grant while the latter would likely recieve only the IRL. How do these figures compare with reported AHOP female participation rates?

As can be seen in Table 7.2, of AHOP grant recipients, only 8% reported a spouse working; less than half the value that would be expected from given national rates. Table 7.3 shows that apart from Ontario this difference is similar across most regions and age groups. Does previous experience with female participation rates suggest that a 13 percentage point decline in female participation rates is consistent with 50% decline in female income?

One of the better Canadian study of female participation rates that can be referred is by Officer and Andersen[1]. Using a quarterly data from 195C to 1967, they find that as real per capita income declines by $1,000 (using 1961 dollars), the participation rate of females 20-24 will rise 21-3 percent, and for females 25-34, by 25.8 percent. On the assumption that the after tax value of not having a working spouse would be $3,000 in 1976 dollars, or $1,590 in 1961 dollars, the 50 percent implicit AHOP tax should result in 17 and 21 percentage point decline[2].

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[1]L. H. Officer, and P. R. Andersen "Labour Force Participation in Canada" CJE May 1969, p. 278. In other words, participation rates would decline from the average of .21 for households with income below $12,000 to between 0.5 and 0.9 for potential AHOP grant recipients.

[2]Between 1961 and 1976 Q2 the GNE price deflater rose by 188%. Hence, looking at a muro sample of married women in Toronto finds that participation rates fall as income of the husband increases but that, for women with an

TABLE 7.2

SPOUSE PARTICIPATION
NHA HOME OWNERSHIP APPROVALS*

	Total	No Spouse Reported	Spouse not Working	Spouse Working	Participation Rate**
AHOP-D IRL-only	1,024	128	528	368	.41
AHOP-P IRL-only	10,044	1,250	3,828	4,966	.56
AHOP-D with Grant	673	89	538	46	.08
AHOP-P with Grant	6,785	604	5,612	569	.09

SOURCE: CMHC files.

*Households with spouse and dependent child.

**Number of households with spouse working ÷ total number of households with spouse reported.

TABLE 7.3

FEMALE LABOUR FORCE PARTICIPATION
COMPARISON OF AHOP RECIPIENTS AND NATIONAL AVERAGE

	AHOP GRANT RECIPIENTS		NATIONAL	
	Number Working	Per cent of total	Number Working	Per cent of total
1. Age of Head				
15 - 25	128	8	32590	32
26 - 35	320	8	90820	24
36 - 55	156	13	102950	20
56	10	20	17290	23
2. Provinces				
Maritimes	48	6	35840	26
Quebec	99	4	60850	18
Ontario	374	16	81400	25
Prairies	28	7	46820	26
British Columbia	66	7	19740	20
3. Urban Size				
100,000	445	10	104320	24
30,000 - 100,000	170	7	23680	24
Other			116650	22
4. Total	615	9	24465	23

Thus, the observed decline in participating rates is not inconsistent with the evidence of Officer & Andersen.

To conclude this section, it was found that by reducing net income of the spouse by 50% through the application of AHOP grant calculation rules, the participation rate of the spouse may have declined by approximately 8 percentage points. This income effect is consistent with other evidence. While deception on the application form may occur, and thus spot checks may be useful, the scale of such deception is not likely to be as great as previously felt.

7.2 COSTS OF SWITCHING TO A "HEAD ONLY" INCOME DEFINITION

As mentioned above, the Corporation has not established a policy stance regarding female participation, especially during troughs in the business cycle when AHOP is most active. What would be the cost of implementing a program based on income of the head only? Insofar as only 9% of grant recipients have a working spouse, the cost for this group is small. For recipients of the IRL-only. Many would now be eligible for grant assistance. As can be seen in Table 7.4, this is the group that would generate the greatest increase in cost. Furthermore, many of the new recipients of grants assistants, just over one-third, would have gross family incomes over $20,000

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infant at home, the probability of the spouse working one-half of the probility of all spouses. In other words, it is the presence of a young child and not income that deters labour force participation. See Spencer, "Determinants of Labour Force Participation of Married Women" CJE May 1963, p.222.

TABLE 7.4

EFFECT OF USING TWENTY-FIVE PERCENT OF INCOME
OF HOUSEHOLD HEAD ON ELIGIBILITY TO RECEIVE AHOP GRANT

Increase in grant first year *	Number Currently Receiving AHOP			
	AHOP-P IRL-only	AHOP-D IRL-only	AHOP-P with grant	AHOP-D with grant
No change	2.985	509	3,530	445
Under 100	91	13	34	5
100 - 249	185	23	48	4
250 - 499	354	42	88	11

* Dollars.

To offset this rise in costs, it would be necessary to raise the GDS ratio for head's income to 30%. The result will be a shifting of benefits (rather than just an augmentation) from poorer families, in which the spouse does not work, to those which have a higher income because the spouse is working. This is a trade-off between equity on the one hand, to the encouragement of spouse labour force participation on the other. This choice would be made by the Corporation in conjunction with other departments concerned with general labour force participation.

CHAPTER EIGHT

THE BEHAVIOUR OF LENDERS

The original FHAP program was designed to shift the burden of financing from the Corporation to private lenders. CMHC would be engaged primarily in residual lending when private funds were not available. Two issues raised at the time were:

(i) some institutions would be reluctant to provide loans to clients that also require further grant assistance because of the higher probability of default; and,

(ii) CMHC would be drawn into funding low income persons even in metropolitan areas where private monies are generally available.

In Table 8.1, the distribution of loan, by location, by lender and by grant/no grant category are presented. As can be seen from the top line, most institutions are providing assistance to both grant and no-grant recipients in relatively equal proportions. The only exception is the chartered bank class which provides 33% more assistance to the higher income groups. Nor does this split vary substantially by region. More surprisinly, CMHC also provides a greater proportion of its approvals to households not requiring grants -- in contradiction to the earlier expectation that the Corporation would be forced into assisting very low income households.

Geographically, the bulk of direct CMHC loans - over 60% - are geared to the smaller municiplalities with populations under 30,000, particularly in the Maritimes. These are the centres one might expect *a priori* to be less likely to have an adequate financial infrastructure.

In contrast, life insurance companies have focussed on the major urban centres in Quebec and Ontario, providing virtually no funding to the Maritimes or Prairies and very little to the smaller urban centres. This would appear to be consistent with the traditional life insurance policy of financing the larger developments rather than providing assistance for the single unit or small project.

Trust and loan companies as well as chartered banks appear to have spread their funding more evenly, with the exception of the two central provinces; the trust companies have provided the bulk of their funding to Ontario while the bulk of bank funding has gone to Quebec.

Summing up, the switch to private financing appears to have been in general quite successful. In broad terms, there appears to be no discrimination against the lower income grant recipients on the part of private lenders, although this might change as provincial supplementation is increased. CMHC has acted as a residual lender in the expected sense of smaller urban centres rather than lower income metropolitan area applicants.

TABLE 8.1

AHOP DISTRIBUTION
LOCATION BY LENDER TYPE

	WITHOUT GRANT							WITH GRANT						
	CMHC	LIFE INS.	LOAN CO.	TRUST CO.	CHARTERED BANK	SAVINGS BANK	OTHER	CMHC INS.	LIFE INS.	LOAN CO.	TRUST CO.	CHARTERED BANK	SAVINGS BANK	OTHER
TOTAL	666	346	709	1022	2509	144	39	556	346	699	1071	1997	154	122
I. PROV														
NEWFOUNDLAND	88	0	10	15	86	0	0	62	0	3	10	59	0	0
	13.2		1.4	1.5	3.4			11.2		0.4	1.0	3.1		
PRINCE EDWARD ISLAND	21	0	0	2	0	0	0	22	0	0	3	1	0	0
	3.2			0.2				4.0			0.3	0.1		
NOVA SCOTIA	101	0	44	59	44	0	0	139	1	44	67	48	0	0
	15.2		6.2	5.8	1.8			25.0	0.3	6.3	6.5	2.5		
NEW BRUNSWICK	79	13	30	13	102	0	0	91	20	19	29	49	0	0
	11.9	3.8	4.2	1.3	4.1			16.4	5.8	2.7	2.8	2.6		
QUEBEC	92	168	143	163	1367	144	31	75	181	117	169	1035	154	43
	13.8	48.6	20.2	15.9	54.5	100.0	7.9	13.5	52.3	16.7	16.1	54.6	100.0	3.5
ONTARIO	150	131	199	521	589	0	0	57	109	198	557	391	0	53
	22.5	37.8	28.1	51.0	23.5			10.3	31.5	28.3	56.0	20.6		4.4
MANITOBA	1	1	28	15	39	0	0	1	7	32	13	60	0	19
		0.3	3.9	1.5	1.6			0.2	2.0	4.6	1.3	3.2		1.6
SASKATCHEWAN	11	5	26	12	65	0	8	21	2	23	13	80	0	0
	1.7	1.3	3.7	1.2	2.6		2.1	3.8	0.6	3.3	1.3	4.2		
ALBERTA	19	2	10	0	6	0		14	2	7	0	5	0	7
	2.9	0.6	1.4		0.2			2.5	0.6	1.0		0.3		6
BRITISH COLUMBIA	80	26	218	222	209	0	0	62	24	254	150	169	0	0
	12.0	7.5	30.7	21.7	8.3			11.2	6.9	36.3	5.4	8.9		
YUKON/NWT	24	0	1	0	2	0	0	12	0	2	0	0	0	0
	3.6		0.1	0				2.2		0.2				
II. URBAN AREA														
ST. JOHN'S	25	0	5	15	29	0	0	31	0	3	8	23	0	0
	3.8		0.7	1.5	1.2			15.6		0.4	0.8	1.2		
HALIFAX	50	0	28	23	16	0	0	59	1	31	27	19	0	0
	7.5		3.9	2.3	0.6			10.6	0.3	4.4	2.6	1.0		
SAINT JOHN	9	2	3	6	16	0	0	8	9	4	18	25	0	0
	1.4	0.6	0.4	0.6	0.6			1.4	2.6	0.6	1.7	1.3		
MONTREAL	14	55	17	18	507	129	4	2	51	21	37	430	153	7
	2.1	15.9	2.4	1.8	20.2	89.6	10.5	0.4	14.7	3.0	3.6	22.7	99.4	6
QUEBEC CITY	0	54	24	27	115	0	2	1	17	3	25	59	0	13
		15.6	3.4	2.6	4.6		5.3	0.2	4.9	0.4	2.4	3.1		11
CHICOUTIMI	5	0	12	45	2	0	0	5	0	14	8	58	0	1
	0.8		1.7	4.4	0.1			0.9		2.0	0.8	3.1		
TORONTO	57	35	92	225	213	0	0	14	67	75	266	154	0	9
	8.6	10.1	13.0	22.0	8.5			2.5	19.4	10.7	25.8	8.1		7
KITCHENER	2	3	0	32	6	0	0	1	4	0	33	4	0	1
	0.3	0.9		3.1	0.2			0.2	1.2		3.2	0.2		
LONDON	0	0	8	25	38	0	0	0	0	20	39	32	0	0
			1.1	2.4	1.5					2.9	3.8	1.7		
WINDSOR	0	44	1	10	27	0	0	0	17	2	1	7	0	0
		12.7	0.1	1.0	1.1				4.9	0.3	0.1	0.4		
HAMILTON	29	0	12	45	2	0	0	11	74	27	38	139	0	2
	4.4		1.7	4.4	0.1			2.0	21.4	3.9	3.7	7.3		1
SUDBURY	0	0	19	0	5	0	0	0	0	4	0	3	0	0
			2.7		0.2					0.6		0.2		
NIAGARA	0	0	19	29	19	0	0	1	0	12	19	16	0	0
			2.7	2.8	0.8			0.2		1.7	1.8	0.8		
OTTAWA/HULL	6	62	4	48	140	0	0	5	17	3	25	59	0	13
	0.9	17.9	0.6	4.7	5.6			0.9	4.9	0.4	2.4	3.1		1.1
WINNIPEG	0	1	20	10	13	0	0	0	6	24	10	31	0	0
		0.3	2.8	1.0	0.5				1.7	3.4	1.0	1.6		
REGINA	0	0	0	1	0	0	2	0	0	0	0	0	0	7
				0.1			5.3							5
SASKATOON	0	3	1	5	14	0	0	0	2	1	11	27	0	0
		1.4	0.1	0.5	0.6				0.6	0.1	1.1	1.4		
EDMONTON	6	0	7	0	0	0	0	5	0	5	0	0	0	0
	0.9		1.0					0.9		0.7				
VANCOUVER	0	12	89	99	145	0	0	1	12	162	61	129	0	6
		3.5	12.6	9.7	5.8			0.2	3.5	23.2	5.9	6.8		5
VICTORIA	0	0	8	0	1	0	0	0	0	2	0	0	0	0
			1.1		0					0.3				
OTHER URBAN	71	20	90	137	238	15	0	28	18	111	157	118	1	16
30,000	10.7	5.8	12.7	13.4	9.5	10.4		5.0	5.2	15.9	15.2	8.2	0.6	14
UNDER 30000	392	53	250	256	869	0	28	284	68	171	217	623	0	44
	58.8	15.3	35.3	25.0	34.6		71.1	51.1	19.7	24.5	21.0	32.8		3.7

APPENDIX A

DATA SOURCES

A. Data Sources

Most of the data on AHOP used in this paper came from three sources:

(1) Program Management System;
(2) Data and Systems' Computer File N953N953; and
(3) Mortgage Administration's Computer File MJ05MJ05

In the following sections, cost of these three sources will be described in brief detail to provide some indication of the rehability of the information. For further details, it is recommended that the appropriate division in CMHC be contacted.

A.1 Program Management System

Each week, local offices send to National Office a report of activity during that week under each section of the NHA. This information (see Tables A.1 and A.2) contains information on units and dollars commitments approved and under discussion. The data are then computerized, and distributed to management (See Table A.3). The purpose of the data is to provide management with a current picture of program activity. However, because it is current, there is little opportunity to check or edit the data. As a result, there are numerous errors in the information. It is, however, the best estimate available on the universe of AHOP approvals available currently.

TABLE A.1

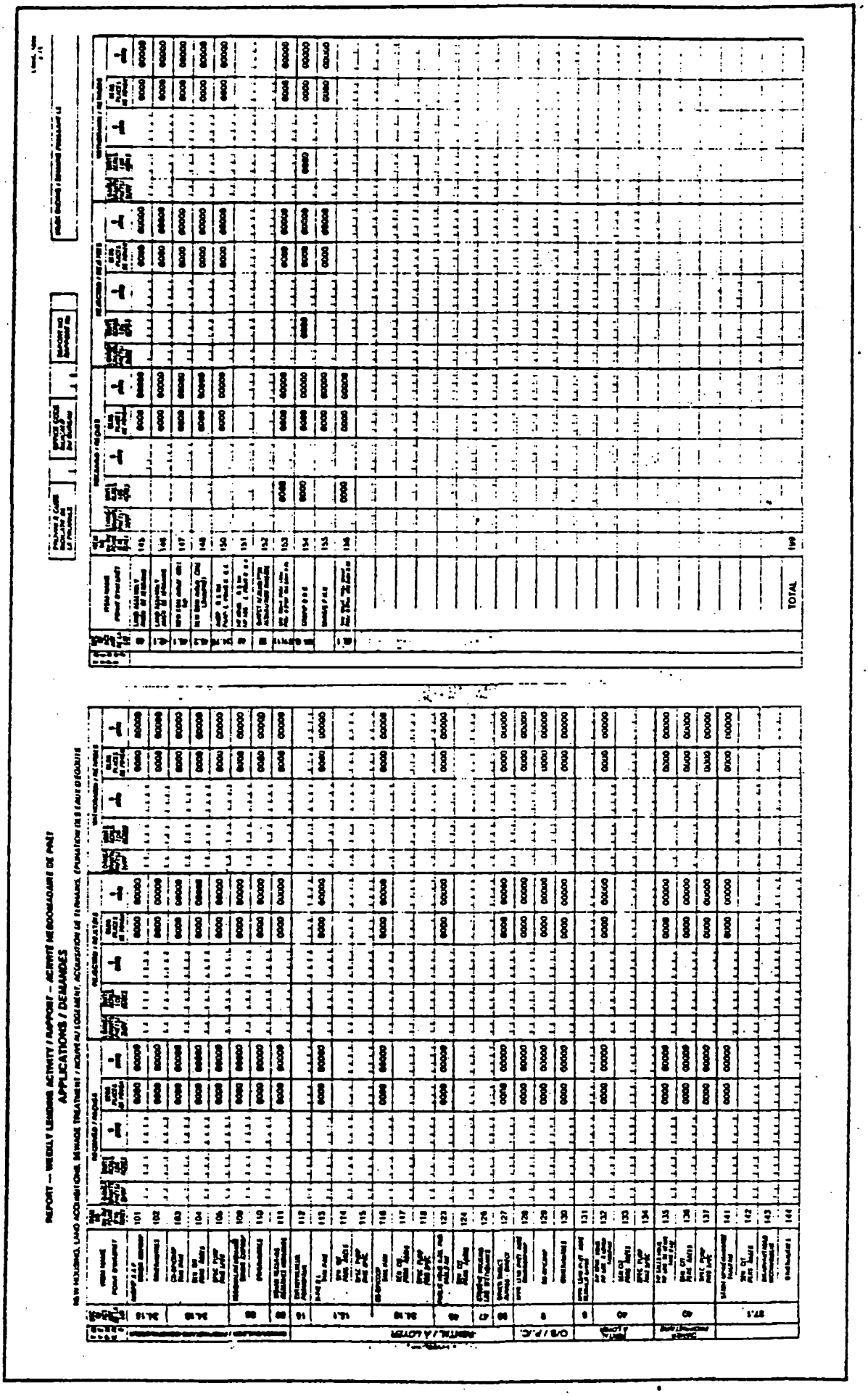


TABLE A.2

ACTIVITY REPORT – MORTGAGE INSURANCE A.R.P.(P), A.N.O.P.(P) FOR MONTH 30 April, 1977

SC 1629 2/77

LOCATION	APPLICATIONS (CMHC 530) IN PROCESS								COMMITTED YEAR TO DATE (CMHC 530 ISSUED)																							
	NEW RENTAL		NEW HOMEOWNER		EXISTING HOMEOWNER		TOTAL	FIRST MORTGAGE LOAN AMOUNT	NEW RENTAL (UNITS)				NEW HOMEOWNERSHIP (UNITS)				TOTAL NEW SECTION 6 (UNITS)		EXISTING HOUSING (UNITS)	FIRST MORTGAGE LOAN AMOUNT	LENDERS' SHARE (IN M$)				I.R.L. COMMITMENT (UNITS SOLD IN 1977)			UNSOLD A.N.O.P.(P) UNITS		
	UNITS	AGE (4 YRS +)	UNITS	AGE (7 YRS +)	UNITS	AGE (4 YRS +)	UNITS	$	VACANCY RATE %	A.R.P.(P) TARGET	A.R.P.(P) ACTIVITY	OTHER ACTIVITY	A.N.O.P.(P) DESIGNATED TARGET	A.N.O.P.(P) DESIGNATED ACTIVITY	OTHER ACTIVITY	TARGET	ACTIVITY	ACTIVITY	$	BANK	TRUST	LIFE	OTHER	1976 UNITS	1976 UNITS	1977 UNITS	1975 UNITS	1976 UNITS	1977 UNITS
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)
CANADA	65	28	2529	649	863	177	3457			10287	9553	861	16195	10398	4723	85643	25532	19423	1497					576	5665	1590	2574	12961	8338
NEWFOUNDLAND St. John's	1	0	29	10	17	7	47			500	0	1	1000	84	11	1750	96	79	5.6					5	68	24	2	242	57
P.E.I. Charlottetown	0	0	1	1	33	0	34			162	0	0	100	0	4	210	4	8	.4					0	0	0	0	4	0
NOVA SCOTIA	6	4	118	53	35	14	159			850	168	14	600	268	20	1550	470	151	17.9					1	124	44	0	118	224
Halifax	6	4	116	53	28	12	150			850	168	14	550	262	7	1500	451	125	16.7					1	124	38	0	118	224
Sydney	0	0	2	0	7	2	9			0	0	0	50	6	13	50	19	26	1.2					0	0	6	0	0	0
NEW BRUNSWICK	0	0	7	0	1	0	8			1247	30	0	816	189	7	2315	226	201	9.8					30	115	64	102	207	125
Moncton										200	0	0	250	40	7	402	47	81	3.8					0	63	1	2	87	39
St. John										90	4	0	300	23	0	440	27	63	2.8					2	24	16	26	41	7
Fredericton	0	0	7	0	1	0	8			957	26	0	266	126	0	1473	152	49	3.3					28	28	47	79	79	79
MANITOBA Winnipeg										1300	382	0	750	273	267	3550	922	1352	74.4					5	173	41	10	316	230
SASKATCHEWAN	1	1	52	16	32	2	85			1800	270	0	1700	370	136	1800	776	777	49.8					4	377	219	10	373	143
Regina										950	195	0	800	263	70	1850	463	467	31.3					4	185	177	9	101	78
Saskatoon	1	1	52	16	32	2	85			850	75	0	900	107	66	1950	248	310	18.5					0	192	42	1	274	65
ALBERTA	2	1	31	0	30	5	63			3600	1283	406	1550	142	932	13808	2763	2688	206.8					0	112	1	0	175	141
Edmonton										250	0	220	700	57	293	5950	570	1295	75.7					0	93	0	0	0	57
Calgary										3000	1183	0	700	28	394	5700	1605	1091	104.4					0	0	0	0	167	28
Red Deer	2	1	31	0	30	5	63			300	100	42	75	55	157	1225	356	126	16.7					0	1	1	0	1	54
Lethbridge										50	0	144	75	2	88	933	234	176	10					0	18	0	0	7	2
Yellowknife																													
BRITISH COLUMBIA	13	6	564	455	179	74	756			4450	2263	36	4503	2182	226	11086	4707	3388	290.5					2	646	214	54	2540	1963
Vancouver	12	6	563	455	132	34	707			248	1024	0	2900	1646	0	6828	2670	1993	183					0	448	138	0	1625	1505
Victoria										843	1029	0	900	316	30	1969	1375	487	55.7					2	89	48	2	684	264
Prince George	1	0	0	0	43	39	44			180	0	0	350	143	130	877	273	381	23					0	78	22	7	197	118
Kelowna	0	0	1	0	4	1	5			110	82	36	253	47	6	838	171	117	8.9					0	13	1	1	4	46
Kamloops										0	23	0	50	30	29	164	82	138	7.2					0	15	0	44	14	30
Cranbrook										60	105	0	50	0	31	410	136	272	12.6					0	2	0	0	0	0
NWT Yellowknife										131	108	0	31	0	11	339	119	4	4.5					0	0	0	0	0	0
YUKON Whitehorse	0	0	1	0	3	3	4			0	0	0	0	7	12	0	19	48	2.6					0	1	5	0	16	0

MANAGEMENT REPORT - YEAR-TO-DATE NHA ACTIVITY

AREA - CANADA

SUMMARY AT THE WEEK ENDING 31/DEC/76

SEC/PROGRAMS	TOTAL ALLOC BUDGET $000	TOTAL COMITD BUDGET $000	BAL NOT COMITD $000	BAL PCT NOT COM	APPL IN PROC $000	APPL UNDER DISC. $000	SURPLUS TOTAL FORCST $000	SURPLUS OR DEFICIT $000	UNITS APPR	UNITS APPL	UNITS IN PROC	UNITS UNDER DISC.	REDS APPR	REDS APPL	REDS IN PROC	REDS UNDER DISC.
15 ENTREPRENEUR	10000	9159	841	8				841	2	2			4		-1	
15.1 NON-PROFIT	299500	288021	11479	3	10663		10663	816	8662	9655	670		3702	4250	237	
34.15 AHOP-PANH		1227			491		491		44	64	16					
34.15 AHOP-REG	84200	74710	5490	6	3482		3482	2008	2504	2644	29					
34.19 COOP HOUSING	43200	40287	3713	8	7418		7418	-3805	1561	1875	241		6	6		
47 STUDENT HOUSNG																
58/59 HOMEOWNERS	11200	8308	2892	25	442		442	2450	394	445	25					
58 RENTAL	7400	5528	1872	25	967		967	905	257	319	26					
SUB-TOTAL CMHC	456200	431240	24960	5	23463		23463	1497	13424	15004	1007		3712	4256	236	
40 F/P HOUSNG-REG	54800	52984	1816	3	-644		-644	2460	2259	2076	-183					
40 F/P HOUSNG-PNH	56300	46534	9766	17	12019		12019	-2253	1835	1839	2					
43 PUBLIC HOUSING	358800	350426	8374	2	5077		5077	3297	13338	13981	306					
SUB-TOTAL PROV.	469900	449944	19956	4	16452		16452	3504	17432	17896	125					
TOTAL HOUSING	926100	881184	44916	4	39915		39915	5001	30856	32900	1132		3712	4256	236	
21.1 LAND LEASING	2000	2013	-13					-13								
40/42 LAND ASSEMBLY	91400	86452	5348	5	4699		4699	649								
51 WATER & SEWAGE	306100	302576	3524	1	10465		10465	-6941								
TOTAL INFRASTRUCT	399500	391041	8859	2	15164		15164	-6305								
25 URBAN RENEWAL	500	98	402	80				402								
27.5 NIP	21000	17474	3526	16	4110		4110	-584								
34.1 REHAB-NIP-DES	44800	43962	838	1	8328		8328	-7490	10247	13488	2888					
34.1 REHAB-RIP	4200	5363	-1163	-27	1522		1522	-2685	1930	2266	336		868	924	81	
34.1 REHAB-PANH	12100	11711	389	3	2513		2513	-2124	3372	4169	628					
55 DIRECT ACQUIS.	17000	15854	1146	6				1146								
TOTAL OTHERS	99600	94462	5138	5	16473		16473	-11335	15549	19923	3852		868	924	81	
TOTAL FWAD. BUDGET	1425600	1366687	58913	4	71552		71552	-12639	46405	52723	4984		4580	5180	317	
14.1 I.A.-AHOP-DIR.	2500	730	1770	70				1770	239	245	-3					
14.1 I.A.-AHOP-DIV.	155400	136734	18666	12	6163		6163	12503	22863	23928	850					
34.16 IHL-AHOP-DIR.	9800	6763	3037	30	144		144	2893	1915	1955	42					
34.16 IHL-AHOP-DIV.	96800	73751	23049	23	1120		1120	21929	20793	20628	366					
TOTAL I.A./I.H.L.	264500	217978	46522	17	7427		7427	39095	45810	46756	1255					
TOTAL CAPITAL BUDGET	1690100	1584665	105435	6	78979		78979	26456	92215	99479	6239		4580	5180	317	
6 OWN/RLDR-NEW		2390396			158657		158657		64236	69287	3172					
6 OWN/RLDR-EXIST		1211803			32317		32317		35275	38304	1155					
6 RENTAL		718920			190220		190220		29441	36833	5390		1188	1252	14	
TOTAL APPROVD LENDERS		4321119			381194		381194		128952	144424	9717		1188	1252	14	

TABLE A.3

A.2 Data and Systems File N953N953

The Data and Systems Division is responsible for keeping more detailed statistics on the approvals. Local Offices send to them copies of: (i) the Appraisal Form which describes in detail the structure (see Table A.4); (ii) The Application For Loan which describes the purchase /applicant and his ability to finance his home (see Tables A.5 and A.6)

The quality of this data is better than the Program Management System although difficulties arise in coding several of the blocks in those cases where the persons filling out the form has not been sufficiently careful. Furthermore, there is a substantial lag involved in the submission of these forms from the Local Office. In some cases, they may never be submitted since the data are used in National Office for information rather than administrative purposes. In addition, there is a six week lag until the data is coded and put in the computer file.

These data formed the core of most of the analysis. Using the May, 1977 version of the tape, 18,526 households were defined as AHOP-eligible whereas, Program Management System had 21,906. The difference is due to errors in coding whether the applicant will receive AHOP, lags in submitting the form, Non-NHA applicant and various minor errors. Unfortunately, time prevented a thorough editing of the file.

TABLE A.4

REPORT APPRAISAL (New Housing)
(HOME OWNERSHIP)

MASTER PLAN

CMHC 19 11/73

APPRAISAL CARD NO. 4

1 Liveable Floor Area X Basic Rate

TOTAL $

2 Adjustments to Building — PLUS — MINUS

Ext. Const.
Basement
Fireplace
Rec. Room
Plumbing
Heating
Garage/Car Pt.
Int. Const.
Windows
Split-level Allowance
Party Wall
Landscaping

(J) Part 8 Adjustment

SUB TOTALS

NET ADJUSTMENTS Plus = (1) Minus = (2)

3 Building Reproduction Cost $

4 Serviced Land Valuation $

5 Total Reproduction Value $

6 Depreciation/Obsolescence

Functional $
Economic $
TOTAL $

7. Market Price Adjustment $

8. Lending Value $

9. Loan by Lending Value $

10. Maximum Loan by Regulation $

11. Loan Applied For (Excluding Insurance Fee) $

Card No. 4

LOAN SUMMARY CARD NO. 1

Insurable Loan $ $
Mtge. Ins. Fee % $ $
TOTAL LOAN $ $
Amortization (Years)
Interest Rate (Code)
Annual Gross Debt Service:
Princ. and Interest $ $
Secondary Mortgage Financing/Ground Rent $ $
Taxes $ $
TOTAL GDS $ $
MONTHLY PAYM'TS P&I $
(Direct Loans Only) TX $ $
FIRE INS. REQUIRED (Direct Loans Only) $
Lending Value: Land $
Building $
TOTAL LENDING VALUE $
INITIAL TERM (years)
SPECIAL PROGRAM
Card No. 1

LAND AND BUILDING CARD NO. 3

A. Source of Lot
B. Subdivision
C. Dimensions: Frontage (Feet) Depth Feet AREA
D. Services Installed: (Yes (1) No (2))
SAN. SEWER | STORM | | WATER | CURBS
PAVED ROADS | SIDEWALK | WELL | MP TX
E. Services Paid
F. Plans
G. Applicant's Construction Costs
Land $
Construction or Contract Price $
Other $
SUB-TOTAL $
MORTGAGE INSURANCE FEE $
TOTAL CONSTRUCTION COSTS $
H. Total Habitable Rooms
No. of Bedrooms
Basement Rooms
I. Builder
Card No. 3

PREPARED BY: | DATE: | CHECKED BY: | DATE:

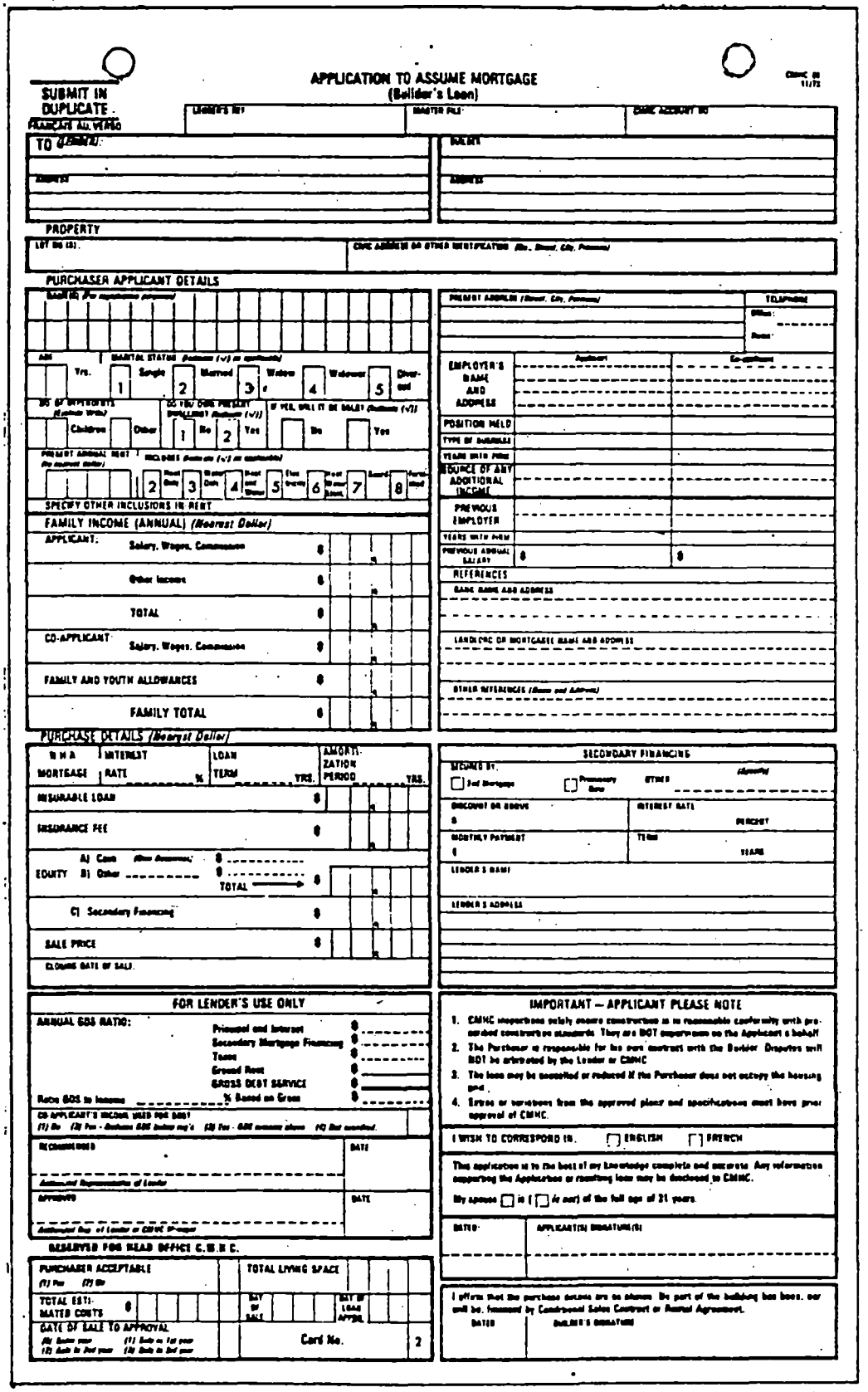
RECOMMENDED BY: | DATE:

(H.O. USE) KEY PUNCH INSTRUCTIONS

CHANGE OR OPERATION	STATUS CODE		DATE		CARD NO.			
LOAN COMMITTED	0	0						
LOAN CANCELLED	0	1						
LOAN REINSTATED	0	2						
CHANGE AFTER DELETION	0	6						
DELETION FOR CHANGE	0	8						
SALE LOAN UNCHANGED	2	0						

French on reverse/Français au verso

TABLE A.5



APPLICATION TO ASSUME MORTGAGE
(Builder's Loan)

SUBMIT IN DUPLICATE

LENDER'S NO. | MASTER FILE | CMHC ACCOUNT NO.

TO (LENDER) | SELLER

ADDRESS | ADDRESS

PROPERTY

LOT NO. (S) | CMHC ADDRESS OR OTHER IDENTIFICATION (No., Street, City, Province)

PURCHASER APPLICANT DETAILS

NAME(S) (Last name first)

AGE | MARITAL STATUS (Indicate (✓) as applicable) — 1 Single, 2 Married, 3 Widow, 4 Widower, 5 Divorced

NO. OF DEPENDENTS (Children / Other) | DO YOU OWN PRESENT DWELLING? (Indicate (✓)) — 1 No, 2 Yes | IF YES, WILL IT BE SOLD? — No / Yes

PRESENT ANNUAL RENT | INCLUDES (Indicate (✓) as applicable) — 2 Heat, 3 Water, 4 Light and Power, 5 Elevator, 6 Heat and Water, 7 Laundry, 8 Parking

SPECIFY OTHER INCLUSIONS IN RENT

PRESENT ADDRESS (Street, City, Province) | TELEPHONE — Office / Home

	Applicant	Co-applicant
EMPLOYER'S NAME AND ADDRESS		
POSITION HELD		
TYPE OF BUSINESS		
YEARS WITH FIRM		
SOURCE OF ANY ADDITIONAL INCOME		
PREVIOUS EMPLOYER		
YEARS WITH FIRM		
PREVIOUS ANNUAL SALARY	$	$

FAMILY INCOME (ANNUAL) (Nearest Dollar)

APPLICANT: Salary, Wages, Commission	$	
Other Income	$	
TOTAL	$	
CO-APPLICANT: Salary, Wages, Commission	$	
FAMILY AND YOUTH ALLOWANCES	$	
FAMILY TOTAL	$	

REFERENCES

BANK NAME AND ADDRESS

LANDLORD OR MORTGAGEE NAME AND ADDRESS

OTHER REFERENCES (Name and Address)

PURCHASE DETAILS (Nearest Dollar)

N.H.A. MORTGAGE	INTEREST RATE ____ %	LOAN TERM ____ YRS.	AMORTIZATION PERIOD ____ YRS.
INSURABLE LOAN	$		
INSURANCE FEE	$		
EQUITY A) Cash (Other Amounts)	$		
EQUITY B) Other ____	$		
EQUITY TOTAL →	$		
C) Secondary Financing	$		
SALE PRICE	$		
CLOSING DATE OF SALE			

SECONDARY FINANCING

SECURED BY: ☐ 2nd Mortgage ☐ Promissory Note OTHER (Specify)

DISCOUNT OR ABOVE $	INTEREST RATE ____ PERCENT
MONTHLY PAYMENT $	TERM ____ YEARS

LENDER'S NAME

LENDER'S ADDRESS

FOR LENDER'S USE ONLY

ANNUAL GDS RATIO:

Principal and Interest	$
Secondary Mortgage Financing	$
Taxes	$
Ground Rent	$
GROSS DEBT SERVICE	$
Ratio GDS to Income ____ % Based on Gross	$

CO-APPLICANT'S INCOME USED FOR GDS? (1) No (2) Yes - Combined GDS below maj's (3) Yes - GDS exceeds above (4) Not considered

RECOMMENDED | DATE

(Authorized Representative of Lender)

APPROVED | DATE

(Authorized Rep. of Lender or CMHC if Insured)

RESERVED FOR HEAD OFFICE C.M.H.C.

PURCHASER ACCEPTABLE (1) Yes (2) No		TOTAL LIVING SPACE	
TOTAL ESTIMATED COSTS	$	DAY OF SALE	DAY OF LOAN APPVL
DATE OF SALE TO APPROVAL (A) Same year (1) Sale in 1st year (2) Sale in 2nd year (3) Sale in 3rd year		Card No.	2

IMPORTANT — APPLICANT PLEASE NOTE

1. CMHC inspections solely ensure construction is in reasonable conformity with prescribed construction standards. They are NOT supervision on the Applicant's behalf.
2. The Purchaser is responsible for his own contract with the Builder. Disputes will NOT be arbitrated by the Lender or CMHC.
3. The loan may be cancelled or reduced if the Purchaser does not occupy the housing unit.
4. Errors or variations from the approved plans and specifications must have prior approval of CMHC.

I WISH TO CORRESPOND IN: ☐ ENGLISH ☐ FRENCH

This application is to the best of my knowledge complete and accurate. Any information supporting the Application or resulting loan may be disclosed to CMHC.

My spouse ☐ is / ☐ is not of the full age of 21 years.

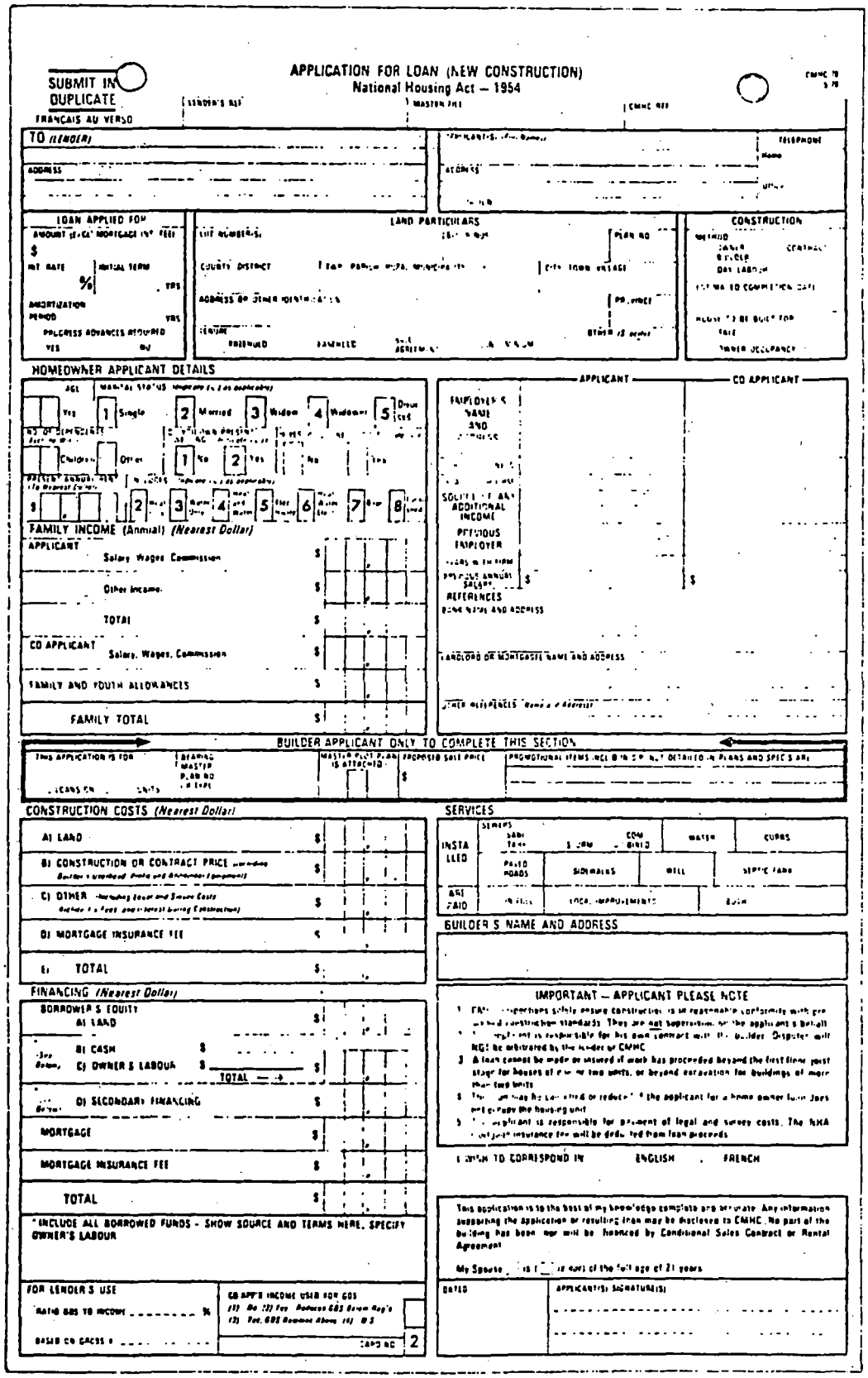
DATED: | APPLICANT(S) SIGNATURE(S)

I affirm that the purchase details are as shown. No part of the building has been, nor will be, financed by Conditional Sales Contract or Rental Agreement.

DATED | BUILDER'S SIGNATURE

CMHC 70 5/70
Instr. 311-3:2

TABLE A.6



SUBMIT IN DUPLICATE

APPLICATION FOR LOAN (NEW CONSTRUCTION)
National Housing Act — 1954

FRANÇAIS AU VERSO

TO (LENDER)

ADDRESS

TELEPHONE

LOAN APPLIED FOR

LAND PARTICULARS

CONSTRUCTION

HOMEOWNER APPLICANT DETAILS

APPLICANT — CO APPLICANT

FAMILY INCOME (Annual) (Nearest Dollar)

APPLICANT
Salary, Wages, Commission
Other Income
TOTAL
CO APPLICANT
Salary, Wages, Commission
FAMILY AND YOUTH ALLOWANCES
FAMILY TOTAL

EMPLOYER'S NAME AND ADDRESS
SOURCE OF ANY ADDITIONAL INCOME
PREVIOUS EMPLOYER
PREVIOUS ANNUAL SALARY
REFERENCES
BANK NAME AND ADDRESS
LANDLORD OR MORTGAGE NAME AND ADDRESS
OTHER REFERENCES

BUILDER APPLICANT ONLY TO COMPLETE THIS SECTION

This application is for
Master Plot Plan is attached
Proposed Sale Price
Promotional items not detailed on plans and specs are

CONSTRUCTION COSTS (Nearest Dollar)

A) LAND
B) CONSTRUCTION OR CONTRACT PRICE
C) OTHER
D) MORTGAGE INSURANCE FEE
E) TOTAL

SERVICES

INSTALLED: Sewers, Water, Curbs, Paved Roads, Sidewalks, Well, Septic Tank
NOT PAID: Local Improvements

BUILDER'S NAME AND ADDRESS

FINANCING (Nearest Dollar)

BORROWER'S EQUITY
A) LAND
B) CASH
C) OWNER'S LABOUR
TOTAL
D) SECONDARY FINANCING
MORTGAGE
MORTGAGE INSURANCE FEE
TOTAL

*INCLUDE ALL BORROWED FUNDS - SHOW SOURCE AND TERMS HERE. SPECIFY OWNER'S LABOUR

IMPORTANT — APPLICANT PLEASE NOTE

1. CMHC inspections solely ensure construction is in reasonable conformity with prescribed construction standards. They are not supervision on the applicant's behalf.
2. The applicant is responsible for his own contract with the builder. Disputes will NOT be arbitrated by the lender or CMHC.
3. A loan cannot be made or assured if work has proceeded beyond the first floor joist stage for houses of one or two units, or beyond excavation for buildings of more than two units.
4. The amount may be increased or reduced if the applicant for a home owner loan does not occupy the housing unit.
5. The applicant is responsible for payment of legal and survey costs. The NHA mortgage insurance fee will be deducted from loan proceeds.

I WISH TO CORRESPOND IN ENGLISH FRENCH

This application is to the best of my knowledge complete and accurate. Any information supporting the application or resulting from may be disclosed to CMHC. No part of the building has been nor will be financed by Conditional Sales Contract or Rental Agreement.

My Spouse is / is not over the full age of 21 years.

DATED

APPLICANT(S) SIGNATURE(S)

FOR LENDER'S USE

RATIO GDS TO INCOME %
BASIS OF CASE #
CO APP'S INCOME USED FOR GDS
CMHC NO

A.3 Mortgage Administration File MJ05MJ05

This is a cheque-writing computer file describing only the name of the recipient and the size of the cheque. In terms of quality, it is the best file available since it is used for a specific administrative purpose[1]. It is furthermore, the only source of information on the size of the IRL and Grant. Unfortunately, information on this file could not be merged with information on the Approvals file.[2] As a result, in relating the size of the IRL and Grant, to applicant, house type and location, it was necessary to estimate the values of IRL and Grant using information on the approval file on income, and interest rate and housing type. Given the errors in the latter, the data is subject to a margin of errors, although the average IRL and Grant as estimated is very close to the actual amount.[3]

Two other difficulties with the cheque-writing file is the lag and the commission of AHOP-D information. The lag is due to administrative requirements to process the application for a cheque -- up to six weeks,

---

[1]See Table A.7.

[2]The two systems use different systems of reference numbers.

[3]See Table 5.2.

Central Mortgage and Housing Corporation | Société centrale d'hypothèques et de logement

TABLE A.7

CMHC 1964 122

Bureau

APPROVAL – INTEREST REDUCTION LOAN/CONTRIBUTION
APPROBATION – PRÊT POUR ALLÉGEMENT D'INTÉRÊT/CONTRIBUTION

ENV. 563 B (2)

FOR CMHC USE/*RÉSERVÉ À LA SCHL*

Int. Red. Loan No. / *Prêt allég. d'int. nº*

CMHC Account No. / *Compte SCHL nº*

Lender's Ref./*Réf. du prêteur:*

Insurer's Ref./*Réf. de l'assureur:*

Location / *Endroit* | Reg. | Off./Bur. | Bor. / *Empr.*

Dwelling / *Logement* | Type/Genre | Prov. | Co. | Munic.

Lender/*Prêteur* | Type / *Genre* | Co. | Group / *Groupe*

PROPERTY BEING ACQUIRED / *PROPRIÉTÉ À ÊTRE ACQUISE*

Postal Address / *Adresse postale:*	Civic Address (if other than postal address) / *Adresse civile (si autre que postale)*

Lender (name & address) / *Prêteur (nom & adresse):*

Your application for an Interest Reduction Loan has been approved as detailed below and subject to the conditions stated on the reverse.

Votre demande d'un prêt pour allégement d'intérêt a été approuvée selon les détails ci-après et sous réserve des conditions énoncées au verso.

A Contribution has also been approved subject to the conditions stated on the reverse. The amount of Contribution is shown hereunder.

☐ *Une Contribution a aussi été approuvée sous réserve des conditions énoncées au verso. Le montant de la Contribution est indiqué ci-après.*

A Contribution has not been approved.

☐ *Aucune Contribution n'a été approuvée.*

DETAILS OF ASSISTANCE / *DÉTAILS DE L'AIDE*

Year / *Année*	Interest Reduction Loan / *Prêt pour allégement d'intérêt*	Contribution / *Contribution*	Other Assistance / *Autre aide*		Total Assistance / *Aide totale*	Monthly Advances / *Avances mensuelles*
FIRST / *PREMIÈRE*						
SECOND / *DEUXIÈME*						
THIRD / *TROISIÈME*						
FOURTH / *QUATRIÈME*						
FIFTH / *CINQUIÈME*						
TOTAL						

The Interest Reduction Loan is to be secured by a registered mortgage, the details of which are indicated below.

Le Prêt pour allégement d'intérêt doit être garanti par une hypothèque enregistrée dont les détails sont indiqués ci-après.

Mortgage Amount / *Montant de l'hypothèque*	Term / *Terme*	Interest Rate / *Taux d'intérêt*	
$	5 Yrs. / *Ans*	%	For amount repayable, see condition 4 on reverse. / *Prêt remboursable pour allég. d'int., voir condition 4 au verso.*

Deliver this Approval and the enclosed documents to your solicitor.

☐ *Veuillez remettre cette approbation et les documents ci-joints à votre notaire.*

Contact the solicitor indicated below who will have the necessary mortgage documents.

☐ *Veuillez communiquer avec le notaire nommé ci-après qui aura les documents hypothécaires nécessaires.*

Solicitor/Notary / *Avocat/Notaire:*	Date:	Approved by / *Approuvé par:*

FOR CMHC USE/*RÉSERVÉ À LA SCHL*

FIRST MORTGAGE / *PREMIÈRE HYPOTHÈQUE*		IRL MORTGAGE / *HYPOTHÈQUE PAI*	
Final IAD / *DAI définitive:*	Date: First Paym't. / *1er paiement:*	Registration No. / *Nº d'enregistrement:*	Regist. Date / *Date d'enregist.:*

and the lag between original mortgage approval and final occupancy. With regard to AHOP-D, assistance is credited to the account rather than through a cheque to the recipient.

A.4 Other Information

Lending Division continually monitors the programs and is particularly concerned with housing units started in addition to approvals. These data on starts are manually tabulated at present and provide and indication of expected future activity and, in particular, of where inventories of unsold units are devloping.

Computer Services Division is currently developing an elaborate system to merge the various data sources on AHOP, but this system is not yet available. As part of this process several of the forms are being revised; in some cases, forms used for this Report are no longer being used.

APPENDIX B

REPAYMENT OF IRL

B. Repayment of IRL

The General Memorandum[1] provides for two options regarding repayment of IRL:

(1) repayment of the IRL without interest bonus; and

(2) accelerated repayment at the same rate at which payment of assistance, with interest being charged after the fifth year.

A third option, requiring as Order-in-Council, is to wrap the IRL with the remaining principal and interest into a new mortgage instrument.

Table B.1, in this Appendix compares the three methods of repayment. As can be seen, the third option requires a higher annual repayment in the first two years after which it is substantially less than the step-stair method. Since, in all cases, market interest is paid, there is no subsidy in any system.

---

[1] GM B-1062, March 26, 1971.

TABLE B.1

ALTERNATE REPAYMENT SYSTEMS[1]

Year	Method 1 Lump Sum Repayment	Method 2 Step-Stair		Method 3 Amortization[3]
		Payment	Balance[2]	
6	3352	0	3687	383
7	0	240	3815	383
8	0	480	3576	383
9	0	720	3369	383
10	0	960	2745	383
11	0	1200	1820	383
12	0	1480	562	383
13	0	618	0	383
14	0	0	0	383
15	0	0	0	383
16	0	0	0	383
17	0	0	0	383
18	0	0	0	383
19	0	0	0	383
20	0	0	0	383
21	0	0	0	383
22	0	0	0	383
23	0	0	0	383
24	0	0	0	383
25	0	0	0	383

1. Based on accumulated IRL on $3,352, which is the estimated average.
2. Assumes single 10% interest and repayment at end of year.
3. Interest rate of 10% on 20 year period.

SOURCE: PEU Estimate.

APPENDIX C

HOME OWNERSHIP AS A GOOD INVESTMENT

C. Home Ownership As A Good Investment

In this Appendix, the benefit and costs of home-ownership as an investment good are estimated[1].

The very high rates of price inflation during the past 10 years has meant that a home-owner, when he sold his house could make a large profit.

For example, (see Table C.1) if a family purchased a new home in 1969 for $30,000 with $2,000 down and an 8% mortgage on the remainder, its principal and interest charge would be $137.38 a month. If it then sold the house in 1975 for $50,000, a not unreasonable figure given experience over the period, it would have made a profit of 151% or 78% over what it would have earned had it invested the money in a fund yielding 9%. This excludes the fact that the family has been living virtually rent-free in the dwelling during the period.

Furthermore, according to the Income Tax Act, this income is not even taxed at the capital gain rate. In other words, his real profit rate would be more than twice as much as what he could have earned on an income-bearing bond.

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[1]There are numerous sociological and economic studies of the benefits of homeownership. This Appendix will discuss only some of the highlights emanating from these studies.

Since a home-owner is eligible to declare only one home to be exempt from capital gains tax in any one year, he is not able to spread his investment among many modest-priced units. In other words, the tax system has a built-in incentive for a household to purchase the most expensive house that he can purchase. The only constraint on the value of the house is that he have sufficient money to pay the down payment and the regular P & I payments. The Minister of State for Urban Affairs, in 1973 and again in 1975, requested mortgage lenders not to provide high ratio (low down payment) loans for expensive housing as a means of limiting the purchase of such units to the rich. Lenders, in the past, would not give a loan with a high GDS-to-income ratio because of the risk of default. Thus, as the price of housing rose during the 1970's, many middle and lower middle income households were effectively barred from taking advantage of the investment gains available to the rich. AHOP, by providing high ratio loans on cheaper houses and at a lower rate of interest made ownership for this class of households feasible.

The question is whether house prices will continue to escalate as fast as they have in the past in order to make ownership a good investment. As a rough rule of thumb, the rate of price escalation must be greater than the real rate of interest on the bonds, after taxes, for the investment to be profitable. Should the prices escalate at a lower rate the merit to home-ownership as an investment good is questionable. Unfortunately, it is impossible to forecast the future of housing prices over the next five to ten years.

Even if home-ownership is not necessarily a good investment, it may still be an economical consumer good; that is to say, it may be cheaper in the long run to own rather than rent an identical unit even if the price of housing rises only as fast as the rate of interest. This can arise because P & I payments are level over the life of the mortgage at the end of which time the occupant owns the house outright whereas the renter pays rent for the duration of occupancy and rent increases over time depending upon the market.

The relationship is not a simple one and depends on many unknowns. For example, should the unit require substantial repair, the costs of ownership will rise substantially. Furthermore, these costs may be substantially different for low income households who do not have ready access to the funds required for maintenance.

Before discussing some of these costs, an important distinction should be drawn between type of tenure and type of unit. Before the 1960's ownership units were generally single detached houses whereas rental units were in multiple unit structures. As a consequence, many of the benefits of single-detached dwellings, such as privacy, low density and direct excess to the street, were related more to the type of structure than tenure, although the two (tenure and structure) tended to become confused. In smaller urban areas, this differentiation still persists and most of the AHOP units, continue to be single-detached units. In contrast, in large metropolitan areas, an increasing proportion of ownership units are row and high rise condominiums so that benefit and

cost of ownership can be examined independent of tenure. What are these costs? Marcuse[1], in a thoughtful article in 1971 examined, on the basis of a priori reasoning rather than empirical observation, a number of the costs of ownership relative to rental, with particular reference to how these costs affect the low income households. In general, rental is cheaper if the resident moves within four years. Secondly, the costs of ownership, relative to income, are greater for low income households. Unfortunately, without any quantitative estimates of the respective costs, it is impossible to be any more definitive.

Within this broad framework, what can be said of the role of AHOP? The major effect of AHOP has been to reduce the capital cost to the home-owner by ensuring that they price of the unit is low and the down payment ratio is small, and by providing an IRL and, where applicable, a grant. In comparison to a non-AHOP situation, this was intended to reduce the overall cost of ownership relative to rental. However, the imposition of rent controls also reduced the cost of rentals. Consequently, it is impossible to say whether the net effect of AHOP and rent conrols together has been to lower or raise the relative costs of ownership.

In a more macro-economic sense, the increase in production of

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[1]Marcuse, P. "Home Ownership For The Poor", Urban Institute WP112-26, March 1971.

low cost housing under AHOP has had a dampening effect on the general rate of price inflation of owner-occupied units. In Chapter Three of this Report, it was estimated that the net increase in production due to AHOP was 25% of total AHOP starts or 0.4% of the total stock[1]. Assuming a price elasticity of one, the net effect would have been to reduce the average price by only 0.4%. This, however, is likely to be a low estimate for the short-term effect on prices. An upper estimate of the price elasticity of housing supply would be 10%, so that the effect on prices of a 0.4% increase in stock is to reduce prices by 0.4% below what they would otherwise have been.

The effect of this dampening on the rate of inflation in housing has been to reduce the investment gains from housing for those who are already home-owners and, consequently, reduce the capital cost of entry into home-ownership insofar as expected capital gains had inflated the price of housing. In early 1976, when the effect on house prices was not known, many buyers may have over-estimated the price escalation of housing and, as a result, are not as well off as they expected.

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[1]AHOP starts in 1976 were 36,000; total housing stock of owner-occupied units in 1976 were approximately 4 million units.

TABLE C.1

ILLUSTRATION OF PROFIT RATES IN HOUSING

	Actual Expenditures		Expenditures in 1975 $*	
	Down Payment	P & I	Down Payment	P & I
1969	$2,000	1648.56	$3,985	2764.80
1970		1648.56		2536.51
1971		1648.56		2327.08
1972		1648.56		2134.94
1973		1648.56		1958.65
1974		1648.56		1796.93
1975		1648.56		1648.56
Total		13539		19150
Principal Outstanding		15400		15400
Sale Price		50000		50000
Revenue		34600		34600
Profit Rate		151%		78%

* Assuming 9% discount rate.

Assumptions: Cost of Structure $30,000
Down Payment $ 2,000
Rate of Interest 8%

SOURCE: Calculation.

APPENDIX D

REVIEW OF OTHER STUDIES

D. Review of Other Studies

In this Appendix, four other approaches to the evaluation of home-ownership programs in Canada are reviewed. These are:

1. Monitoring efforts by CMHC local economists;
2. A user-participation evaluation of units built under the $200 million Program by McAfee;
3. An analysis of equity (fairness) of AHOP in 1973-75 by Dennis Kam at Treasury Board;
4. A brief look at AHOP as a social program by Pat Streich for the Canadian Council in Social Development.

D.2 McAfee Study

For her doctoral dissertation at the School of Community and Regional Planning, U.B.C., and with a CMHC Part Five grant, Ann McAfee undertook to apply a user-oriented evaluation of a 300 unit AHOP project developed in 1972 jointly by CMHC and the Greater Vancouver Regional District. The major thesis in the dissertation is the necessity to involve program recipients in the evaluative techniques rather than an evaluation of AHOP per se.

The first conclusion reached by McAfee is that AHOP users have a different perspective on evaluation than either local CMHC officers or National Office CMHC personnel. Not surprisingly, each is concerned with the perspective from which they operate. Nationally, the concern

is with the overall program costs, including the concern with Corporation's investment, and the ability of the program to meet aggregate need. The latter is different from the individual's social and economic requirements which are the primary concern of the recipient. Put another way, National Office is concerned with the number of households eligible for AHOP and likely to participate in the program whereas the individual AHOP recipient is concerned with his own ability to afford the unit and with the ability of the unit to satisfy his own needs and desires for shelter. The local CMHC office is concerned with its ability to adjust to changing situations and individual program areas, e.g., are vacancies too high to warrant an increase in the program? Are builders providing the units and, if so, at a reasonable value? In terms of evaluation strategy, recipients preferred to be interviewed by CMHC officials so that the official would be able to answer specific problems and concerns facing them, such as future policy regarding income and legal issues. The responsibility of the local office, as seen by the office, is initiating and processing new applications rather than evaluating approvals of a year ago.

While it is recognized that user information regarding problems and satisfaction ought to be a component of a comprehensive evaluation of AHOP, time did not permit the undertaking of such a survey. Also, trained staff were not available to undertake it to meet McAfee's contention that the survey be undertaken by persons able to answer, as well as ask questions.

D.3 Kam's Study for Treasury Board

Kam focussed primarily on the equity (fairness) in the AHOP program of 1973-75. As will be recalled, that program provided all grant and was completely income tested. Thus, the program is not strictly comparable to the AHOP program in 1976. Nevertheless, the Kam study is one of the most comprehensive study of the AHOP program yet generated and it is impossible to do it justice in the brief space available here.

Insofar as the amount of assistance is directly tied to household income, it is not surprising to find that, within any particular region, the program is equitable among recipients, with variation due only to the different houses actually purchased. However, between regions and between years, there appears to be inequity because price ceilings differ. Thus a household with $10,000 income in Toronto and purchasing a $45,000 house will receive more subsidy than a $10,000 household in Timmins where the house price is $32,000. As Kam recognizes, it would be incorrect to view this simplistically as inequity because the price limits were designed to adjust for nominal differences in income. The important question is how accurate are the price limits in reflecting these differences and not how "equitable" is the program, where inequity is defined independent of living costs.

The other major conclusion reached by Kam is that AHOP has merely accelerated the decision to purchase a new home, for at least one third of

the recipients. While a household might normally wait another two years before purchasing a new house, under AHOP it purchases now. AHOP, in so doing stablilizing the cycle in house demand and therefore is recognized by Kam as an important attribute of the program.

Not too surprisingly, Kam finds that very few recipients of AHOP come from the lowest strata of the income scale, i.e., from below the Statistics Canada poverty line. AHOP was not designed to meet that income band since the Corporation felt that rental programs, including public and non-profit housing, would be more appropriate to their needs. In other words, AHOP ought to be viewed as only one program in an overall housing strategy.

D.4 CCSD Review of Canadian Social Housing Policy

In January of 1977, CCSD published a review of several social housing policies[1]. Included in this Review, is an anyalysis of AHOP from 1973 to 1975. The review relies on published data as well as special tabulation from a data tape similar to the one made available to Kam. The Review can thus be seen as making available to the general public general information previously available only to government. The major features of the program emphasized in the Report are:

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[1]Canadian Council on Social Development, A Review of Canadian Social Housing Policy, Ottawa, 1977.

-recipients are young,

-most recipients had previous rent-to-income ratios below 20%,

-incomes lie between the Statistics Canada low-income line and median household income,

-most units are single-detached.

Not surprisingly, if viewed as a social program for low income households, AHOP does not appear in a very favourable light. Furthermore, failure to account for regional differences in price ceilings results in evidence of inequity. Thus, the CCSD reaches simplistic conclusions on the evaluation of AHOP; although unlike Kam, it does not show an appreciation of the constraints on the validity of these conclusions.

APPENDIX E

ECONOMIC STIMULATION: ANALYTICAL METHOD AND DETAILED CALCULATIONS

Introduction

The purpose of this appendix is to elaborate upon the method of analysis used in Chapter Three and to present the findings of that analysis, as they refer to the activities of institutional lenders, in greater detail. The appendix is divided into three parts: (i) the steps followed in the analysis; (ii) the findings for each institutional type; and (iii) the detailed specifications of the RDX2 model used in part of the analysis.

E.1 The Analytical Procedure

In essence, there are five steps in the analysis for estimating the additional number of units generated by AHOP. These are as follows:

(i) The actual total value of mortgage approvals in 1976 by each type of institution is compared to an estimate of what mortgage activity would have been without the introduction of government programs.

This estimate is arrived at by applying the equations developed for the RDX2 model, which is based on quarterly data. For example, if RDX2 estimates that:

$$M = a. + b.\ R$$

(Where M = value of mortgage approvals; R = interest rate; and a and b are estimated coefficients)

Then by using the average 1976 interest rate and multiplying it by "b" and adding the result to "a" an estimate (M) is gained of what the values of mortgage approvals would have been. If the actual value of mortgage approvals in 1976 was M, then the excess of M over M* can be attributed to the effect of government programs.

(ii) The proportion of the additional investment which can be attributed to AHOP is calculated in two stages. The first stage involves the proportion of the additional lending due to FHAP per se. While FHAP was not the only government program housing operating in 1976, it was by far the most important user of institutional mortgage financing. Other programs, such as HOME in Ontario, operated at a much lower level of activity. It seems safe to assume therefore that 90 percent of all additional can be attributed to FHAP.

The second stage involves estimating the share due to AHOP. Since both AHOP and ARP had approximately the same number of approvals in 1976 it can be assumed that one half of the additional 90 percent can be attributed to AHOP.

(iii) The third step involves trying to estimate any shift in mortgage funding away from existing housing (which does not generate new employment) towards new unit construction. For each institution the pattern of lending for a preceding period is used as the benchmark. This is then projected for 1976. Any switch from existing into new housing

can thus be attributed to government programs;

(iv) Once the estimates of the additional mortgage funding due to AHOP are made an estimate of the additional housing units can be made. This is done by dividing the total additional mortgage funds by $34,000, the average mortgage on an AHOP unit in 1976; and

(v) Since an AHOP unit can be built for less than a non-AHOP unit it seems reasonable to assume that more units can be built for the same amount of funds. Thus, that portion of AHOP activity which is non-incremental can be subjected to analysis to arrive at an estimate of units derived over and above those in (iv). Since data on the prices of conventionally - financed, non-AHOP units are not readily available, the prices of NHA-financed non-AHOP units were compared with AHOP units. On average non-AHOP units were 22 percent more expensive than AHOP units. Therefore the total number of AHOP units not identified as incremental is multiplied by 22 percent to give the additional units generated by the program.

Therefore, the procedure has in fact generated two estimates of additional activity due to AHOP:

(a) as explained in (iv) there is a straight forward "incremental effect"; and

(b) as explained in (v) there also is "price effect".

E.2 Estimation of Additional Activity Due to AHOP

This section presents the actual estimation of the additional activity in 1976 due to AHOP using the method described in the above section for each of the major lending constitutions: chartered banks, life insurance companies, and trust and loan companies.

E.2.1 Chartered Banks[1]

As can be seen in Table E.1, total approvals by chartered banks increased only slightly from 1975-76; although in the previous year, they rose by over 50%. What would have been the level of approvals in 1976 had the various policy initiatives not been implemented? On the basis of an RDX2 simulation, it is estimated that actual mortgage approvals are almost identical to estimated approvals, suggesting that AHOP has no effect on the level of total mortgage approvals by chartered banks. Total actual approvals were $2.816 billion[2].

Was there any evidence of a shift in approvals from existing to

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[1] Several banks also have their own mortgage loan companies. In December 1976, chartered banks had $9.0 billion in mortgage assets while mortgage loan companies associated with banks had $1.2 billion. It was decided to combine the latter with all mortgage loan companies, partly because of data constraints and partly because, as argued by D. Allen of CMHC's Program Requirements Division, the banks mortgage loan companies behave more like other mortgage loan companies than chartered banks.

[2] See Table E.2.

TABLE E.1

DISTRIBUTION OF MORTGAGE INSTRUMENTS
CHARTERED BANKS APPROVALS*

	Type of Mortgage	1971		1972		1973		1974		1975		1976	
		$	%	$	%	$	%	$	%	$	%	$	%
1.	Total	1,104	100	1,479	100	2,183	100	1,891	100	2,781	100	2,806	100
2.	New	851	77	1,021	69	1,217	56	995	53	1,564	56	1,630	58
	Existing	253	23	458	31	966	44	900	47	1,217	44	1,176	42
3.	New-NHA	694	63	795	54	566	26	328	17	765	28	1,067	38
	-non-NHA	157	14	226	15	651	30	667	35	799	28	563	20
	Existing - NHA	23	2	91	6	167	8	303	16	544	20	542	19
	- non-NHA	230	21	367	25	799	36	597	32	673	24	634	23

*All dollars figures are in millions of dollars.

SOURCE: CMHC Statistical Handbook, Selected months.

TABLE E.2

TOTAL MORTGAGE APPROVALS

Year by Quarter	Chartered Banks			Life Insurance Companies			Trust and Loan Companies		
	Actual	Estimated	Diff	Actual	Estimated	Diff	Actual	Estimated	Diff
1975 Q.1	426	315	111	186	51	135	910	811	99
Q.2	1081	471	610	545	88	457	1757	1423	324
Q.3	755	760	- 5	330	147	183	1538	1380	158
Q.4	389	836	-247	447	249	198	1468	1567	- 49
1976 Q.1	419	701	-282	394	312	79	1338	1253	85
Q.2	881	645	236	691	338	300	1600	1694	- 94
Q.3	789	694	95	514	289	225	1671	1394	277
Q.4	714	776	- 62	617	329	201	1517	1593	- 76
TOTAL 1975	2851	2382	469	1508	535	973	5673	5121	552
1976	2803	2816	- 13	2167	1268	805	6126	5934	192

[1]Estimated using RDX2 to 4Q72. All figures in millions of dollars.

SOURCE: Canadian Housing Statistics, 1976, and internal calculations.

new units in 1976? As can be seen in Table E.1, the proportion of existing to total mortgage approvals increased substantially from 23% in 1971 to 47% in 1974. It then stabilized at 44% in 1975. Thus, in Table E.3, the average pattern in the 1974-75 period is applied to total value of approvals in 1976 to determine what would have been the pattern in 1976. These calculations suggest that there would have been only $645 million in new NHA approvals, or $423 million less than actually occurred. However, most of this is due to a shift of $310 million out of new non-NHA units. Only $112 million of this can therefore be considered to represent a shift in approvals from existing to new units.

The second stage involves translating this figure into new approvals attributable to AHOP. This is done by taking 45% of $112 million. The resultant $50.4 million is then divided by $34,000, the average size of AHOP mortgages to arrive at a figure 1,482 additional units being built under AHOP as a result of the shift in lending from existing to new units.

The final stage is to calculate the price effect of AHOP. While chartered banks approved mortgages for 15,582 AHOP units, the price effect applies only to the mortgages for the 14,100 units that would have approved in any case. Since the AHOP units are 22% cheaper than non-AHOP units, this same mortgage money was able to finance 3,102 more units.

Summing up, AHOP did not increase the total volume of chartered bank approvals although it did result in a shift in approvals from existing to

TABLE E.3

ESTIMATION OF SHIFT FROM EXISTING TO NEW MORTGAGES[1]

	Type of Mortgage	1976 Approvals Actual	Distribution of 1974-75 Approval	Estimated Pattern of 1976 Approval[2]	Estimated Shift to New Mortgages[3]
		Dollars	Percent	Dollars	Percent
1.	Total	2,806	100	2,806	0
2.	New	1,630	54	1,518	112
	Existing	1,176	46	1,288	-112
3.	New-NHA	1,067	23	645	422
	-non-NHA	563	31	873	-310
	Existing-NHA	542	18	505	+ 37
	-non-NHA	634	28	783	-149

[1]Dollar figures in millions of dollars.

[2]Column (1) times column (2).

[3]Column (1) minus column (3).

SOURCE: CMHC Statistical Handbook, Selected Months.

new units of $112 million, or 1,482 units. In addition, because of the price effect, the monies allocated to AHOP were able to finance 3,102 more units than would otherwise have occurred.

E.2.2 Life Insurance Companies

Applying the RDX2 equations to life insurance companies, Table E.2 indicates that life insurance companies would have approved $1.268 billion or $805 million less than they actually approved. However, a large portion of this increase in mortgage activity is due to pressure put by the Minister in 1973 and 1974 on life insurance companies to put more money into residential mortgages. As can be seen in Table E.5, the proportion of total new funds going to new mortgages increased from $23 million in 1972 to $39 million in 1973. It is assumed that the estimate of $1.268 billion in approvals ought to be inflated by 39/23 in order to arrive at an estimate of approvals that include this increase due to Ministerial pressure. The net effect due to government programs in 1976 is therefore the difference between actual approval of $2.167 billion and adjusted approvals of $2.150 billion, i.e., $17 million.

The next stage involves identification of mortgage approvals from existing to new units. Applying in Table E.6 the average distribution of approvals over 1971-75 to the estimated $2.15 billion in approvals, it is estimated that total new residential approvals would have been $821 million, or $149 million below the actual 1976 pattern. However, $67 million of this

TABLE E.4

MORTGAGE ACTIVITY OF LIFE INSURANCE COMPANIES[1]

	Type of Mortgage	1971		1972		1973		1974		1975		1976	
		$	%	$	%	$	%	$	%	$	%	$	%
1.	Total	848	100	1,037	100	1,564	100	1,162	100	1,506	100	2,163	100
2.	New Residential	351	41	409	39	581	37	399	34	559	37	975	45
	Existing Residential	74	9	109	11	254	16	161	14	189	13	206	10
	Non-Residential	423	50	519	50	729	47	602	52	758	50	982	45
3.	New Residential-NHA	184	22	189	18	209	13	85	7	267	18	417	19
	-Non-NHA	167	20	220	21	372	24	314	27	292	19	558	26
	Existing Residential-NHA	3	-	4	-	6	-	7	1	6	-	6	-
	-Non-NHA	71	8	103	10	149	10	154	13	183	12	200	9

[1]In millions of dollars.

SOURCE: CMHC Statistical Handbook, Selected Months.

TABLE E.5

RATIO OF MORTGAGE LOANS TO TOTAL FUNDS
LIFE INSURANCE COMPANIES[1]

	Total Net Inflow of Funds	Net Mortgage Loans	Ratio of Mortgage Loans to Total Inflow
	$	$	%
1971	727	96	14
1972	945	224	23
1973	1,284	517	39
1974	1,479	550	37
1975	1,600	561	35
1976	2,061	705	35

[1]Dollar figures are in millions of dollars.

SOURCE: Bank of Canada Review, Selected Years.

TABLE E.6

ESTIMATED SHIFT IN APPROVALS FROM EXISTING TO NEW UNITS
LIFE INSURANCE COMPANIES[1]

	Type of Mortgage	(1) 1976 Approvals Excluding Net Increase	(2) Average 1971-75 Distribution of Approvals	(3) Estimated 1976 Pattern of Approvals	(4) Shift in Approvals from Existing to New
		Percent	Percent	Dollars	Dollars
1.	Total	2,150	100	2,150	--
2.	New Residential	970	38.2	821	149
	Existing Residential	204	11.4	245	- 42
	Non-Residential	976	45.4	1,083	-108
3.	New Residential - NHA	415	15.5	333	82
	- Non-NHA	555	22.7	488	67
	Existing Residential - NHA	6	0.4	9	- 3
	- Non-NHA	198	11.0	237	- 39

[1]Dollars are in million of dollars.

[2]Column (1) times column (2).

[3]Column (1) minus column (3)

SOURCE: CMHC Statistical Handbook, Selected Months.

is due to an increase in non-NHA approvals on new units, an amount that can not be attributable to AHOP.

Of the remaining $82 million dollars, some came from what would have been new non-residential construction. Since the latter also generates new employment, it is necessary to estimate the proportion of this $8.2 million that can be considered to be important in generating new employment. Since new NHA approvals account for 20% of total mortgage approvals, it is assumed that 20% of the $82 million, or $16.2 million, represents a net increase in new construction.

Thus, the total increase in mortgage actively due to government program in 1976 is estimated to be $17 million due to incremental mortgage activity and $16 million due to a shift toward new construction. The total effect is therefore an increase of $33 million.

The next stage involves allocating the $33 million to FHAP. As done with the chartered banks, assumed that 45% of the net increase, or $15 million is the incremental increase in mortgage activity due to AHOP. Given an average mortgage of $34,000, this represents 437 units.

The final stage involves estimation of the effect on approvals of the lower AHOP price. Since life insurance companies approved 2,214 AHOP units in 1976 and 437 units are incremental, they would have approved even without AHOP sufficient funds to finance 1,777 units. However, because of

the low AHOP prices, they could have used this money to finance 22% more units, that is, an additional 391 units.

Summing up, life insurance companies are estimated to have approved an additional $33 million in mortgages for new residential construction. Of this, $17 million are incremental and $16 million are due to the shift from existing to new units. This increase represents 437 units, or approximately one-quarter of the total 2,217 units approved by life insurance companies. In addition, the lower price of AHOP units permitted life insurance companies to finance a further 391 units with the same funds that they would otherwise have had to allocate to higher priced new units.

E.2.3 Trust and Loan Companies

The final major institutional lenders to be examined are trust and loan companies. Using RDX2, it is estimated that they would have approved $5.934 billion in mortgages whereas actual mortgages approval in 1976 amounted to $6.126 billion. The difference of $192 million as indicated in Table E.2, is due to substantially higher actual approvals in the third quarter of 1976. Unlike life insurance companies, trust and loan companies did not significantly increase the share of their assets going into mortgages as a result of Ministerial pressure. There, its estimated that the entire $192 million represents an increase in approvals resulting from government policy.

TABLE E.7

MORTGAGE APPROVALS BY TRUST AND LOAN COMPANIES[1]

	Type of Mortgage	1971		1972		1973		1974		1975		1976	
		$	%	$	%	$	%	$	%	$	%	$	%
1.	Total	2,386	100	3,122	100	4,435	100	3,760	100	5,625	100	6,205	100
2.	New Residential	1,126	47.2	1,413	45.3	1,781	40.1	1,399	37.2	2,370	42.1	2,851	45.9
	Existing Residential	897	37.5	1,272	40.7	2,072	46.7	1,937	51.5	2,796	49.7	2,940	47.4
	Non-Residential	363	15.3	437	14.0	582	13.1	424	11.3	459	8.1	414	6.7
3.	New Residential-NHA	658	27.6	697	22.3	624	14.1	295	7.8	1,132	20.1	1,514	24.4
	-Non-NHA	468	19.6	716	22.9	1,157	26.1	1,104	29.4	1,238	22.0	1,337	21.5
	Existing Residential-NHA	190	8.0	232	7.4	234	5.3	284	7.6	707	12.5	655	10.6
	-Non-NHA	707	29.6	1,040	33.3	1,838	41.4	1,653	44.0	2,089	37.1	2,285	36.8

[1]Dollar figures in millions of dollars.

With regard to the shift from existing to new units. Table E.8, shows that non-residential approvals declined by $338 million, with approvals for both new and existing units increased by $308 million and $130 million, respectively. There was, however, a significant shift from non-NHA to NHA in the existing and especially in the new unit market.

Since part of the non-residential construction would also have generated new employment, it is necessary to omit this amount and calculate only the shift from existing to new residential construction. As will be recalled in the case of life insurance companies this was done by multiplying the shift into new residential construction by the share of NHA-new residential approvals in total approvals. In the case of loan and trust companies, the latter figure for 1976 was 24.4%. Thus, the net effect of the shift from existing to new units is $75 million.

Thus, the net incremental effect or mortgage activity is estimated at $192 million while the shift effect is $75 million, for a total of $267 million. Assuming 45% of this is attributable to AHOP, it is calcualted that because of AHOP, trust and loan companies increased their mortgage approvals by $120 million. On an average mortgage loan of $34,000, this amounts to 3,529 units.

Thus of the 13,470 units which were approved by trust and loan companies. 3,529 were incremental. These companies would have provided sufficient funds to mortgage the remaining 9,941 units. However, because these units are 22% less expensive than non-AHOP units, these funds could be used

TABLE E.8

ESTIMATION OF SHIFT INTO NEW RESIDENTIAL CONSTRUCTION
TRUST AND LOAN COMPANIES

	Type of Mortgage	1976 Approvals Excluding Estimated Increment	1971-75 Averages Distribution of Approvals	Estimated Distribution of Approvals	Estimated Shift In Approval
		Dollars[1]	Percent	Dollars	Dollars
1.	Total	5,934	100	5,934	--
2.	New Residential	2,724	42.4	2,416	208
	Existing Residential	2,812	45.2	2,682	130
	Non-Residential	298	12.4	736	-438
3.	New Residential - NHA	1,448	18.4	1,092	356
	- Non-NHA	1,276	24.0	1,324	-148
	Existing Residential - NHA	629	8.2	487	142
	- Non-NHA	2,184	37.0	2,195	- 11

[1]All dollar amounts in millions.

TABLE E.9

MORTGAGE APPROVALS ATTRIBUTABLE TO AHOP[1]

Institutions	Total Mortgage Approvals 1976	Increment in Mortgage Lending Due to AHOP	Shift in Mortgage Lending into New Construction	Total Increase in Mortgage Activity[2]	Increase in Activity Attributable to AHOP
Chartered Banks	2,806	0	112	112	50
Life Insurance Companies	1,181	17	16	33	15
Trust and Loan Companies	6,205	192	75	267	120
Total	10,192	209	203	412	185

[1] In millions of dollars.

[2] Column (2) plus column (3).

[3] Column (3) times 0.45.

SOURCE: See Text.

TABLE E.10[1]

NEW CONSTRUCTION ATTRIBUTABLE TO AHOP

Institutions	Total AHOP Eligible Approvals	Estimated Increase Due to Increase in Mortgage Lending	Estimated Increase Due to Low AHOP Prices	Total Estimated Increase
Banks	15582	1482	3102	4584
Life Insurance	2214	437	391	828
Trust & Loan Companies	13470	3529	2187	5716
Total of Above	31266	5448	5680	11128

[1]In dwelling unit.

SOURCE: Internal Estimates.

to finance construction of a further 2,187 units.

E.2.4 Summary

In Tables E.9 and E.10, the estimated effect of AHOP on mortgage approvals and units constructed are present. In terms of mortgage activity, AHOP resulted in a net increase of $185 million in total mortgage approvals, slightly under 2% of all mortgage activity in 1976. In terms of units, this amounted to 5,448 units. In addition, because of the price effect, AHOP increased the number of units built with available funds by 5,680. Therefore, the total combined impact of both effects on the national housing market was 11,128 units in 1976.

E.3 RDX2 Equations[1]

This section presents the equations used to estimate mortgage approvals in Chapter III. The equations will be presented in the next sub-section; the variable definitions will be in the Section E.3.2.

E.3.1 Equations Used

1. Chartered Banks

HAPB= -30.498 -0.11386 (A)(QC1) +0.11005 (A)(QC2) + 0.0059 (A)(QC3) -JW (HAPB) + JW ((RMB-RMS) (A)) + JW (A) - J1L (ABLM/1000)

t	JW(HAPB)	JW(RMB--)	JW(A--1)
0		-0.02851	0.41675
-1	0.39806	0.01578	0.00590
-2	0.33853	0.03530	-0.20051
-3	0.20584	0.03004	-0.2024

A = 0.001 (ABT) (RABEL)

2. Life Insurance Cos.

HAPLI = -8.4611 -0.0022 (QC1 (ALI-APLLI)) +0.00442 (QC2 (ALI-(APLLI)) - 0.00003 (QC3 (ALI-APLLI)) + JW(ALI-APLLI) - 1.7007 J4D(APLLI) - 0.03698 J1L (ALIM) - 0.27530 HAPB

t	JW(ALI--)
0	0.02233
-1	0.01256
-2	0.00558
-3	0.00140

---

[1] Equations of RDX2 Revised and Estimated to 4Q72, Bank of Canada Technical Report 5, 1976.

3. Trust and Loan Cos.

HAPTL= 0.50274 - 0.00590 (QC1(ATL)) + 0.01333 (QC2(ATL))
-0.00199 (QC3(ATL)) + (JW(ATL) - 0.09628 J1L (ATLM))
+JW ((J1L(1NT-RMS)) ATL)- 0.0031 (1NT-PCP1CE) AT2

t	JW (ATL---)	JW(J1L (INT--)
0	0.05135	-0.00026
-1	0.02888	0.00393
-2	0.01284	0.00537
-3	0.00321	0.00406

E.3.2 Variable and Operator Definitions

Operators

JW - distributed lag
JiL - lag of i quarter
JiD - i - quarter lag

Variables

A = 0.001 (ABT)(RABEL)
ABLM - Chartered Bank mortgage loans outstanding
ABT - Total chartered bank assests
ALI - Assets of life insurance companies
ALIM - Mortgage assests of life insurance companies
APLLI - Life insurance company policy loans
ATL - Assets of trust and loan companies
ATLM - Mortgage assets of trust and loan companies
HAPB - Mortgage loans approved by chartered bank
HAPLT - Life insurance company mortgage approvals
HAPTL - Trust and loan company mortgage approvals
INT - unweighted average of conventional and NHA mortgage interest rates
PCPICE - Expected annual rate of change in CPI
QC1 - First quarter dummy variable
QC2 - Second quarter dummy variable
QC3 - Third quarter dummy variable
RABEL - chartered bank ratio of "free" liquid assets to total assets
RMB - Chartered bank mortgage rate
RMS - Average yield in Canadian Government banks, 3-5 years

E.3.3 Data

Data for the above variables were derived from a special tabulation by the Bank of Canada. In many cases the data were still preliminary and might therefore be revised.

APPENDIX F

ROYAL TRUST SURVEY OF HOUSE PRICES

F. Royal Trust Survey of House Prices

Royal Trust Survey of House Prices as at December 1, 1976

The Survey

The Royal Trust Survey of House Prices is published three times a year and is designed to provide the public with comparison information on the Canadian housing market. Two homes are surveyed, and while we use a bungalow and two storey house comparison values will generally be similar for other types of detached housing with the same accommodation. In the survey, we have not included recreation rooms or appliances and there is no mortgage financing. There are many regional construction variances across Canada and adjustments have been made as required. The two survey houses are different, not only in size and style, but in the quality of location as well. In many cities, in fact in various locations within the same city, location accounts for a large part of the price difference between two houses.

The survey reflects our estimate of "Fair Market Value" in each location and is based on opinion and data supplied by Royal Trust Real Estate personnel across Canada

Employee Relocation Service

The Royal Trust Company offers employers and employees complete relocation assistance throughout North America. In Canada, relocation homes are marketed through over 160 Royal Trust Real Estate offices and administered from relocation offices in Calgary, Toronto and Montreal. In the United States, relocation homes are marketed and administered for Royal Trust by Homequity Inc.

Our Relocation Service, in addition to handling the disposal of employees' homes, features housing differential studies, "group move" capabilities, assistance in "home finding" in virtually all locations, and in most major markets can show your employees, using our Videosonics equipment, a colour film on the city they are moving to.

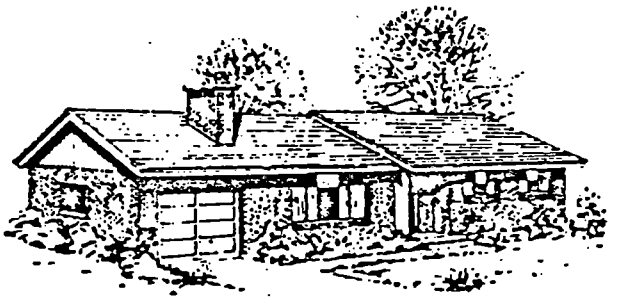
Additional copies of this survey are available on request and we welcome your comments.

Royal Trust

REALTOR Royal Trust

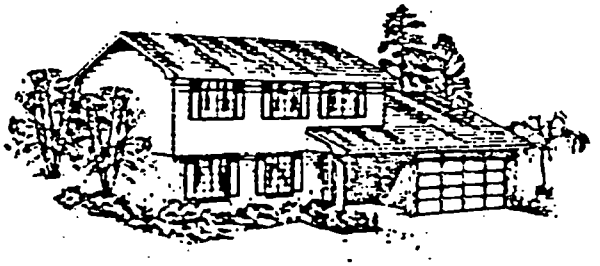
Survey Houses

House 1



This is a detached three bedroom brick bungalow, five to eight years old, 1½ bathrooms, 1 car attached garage, full basement but no recreation room, fireplace or appliances. Using outside dimensions (excluding the garage), the total area of the house is 1,200 square feet and it is situated on a fully serviced 6,000 square foot lot. The neighbourhood itself is average, within average commuting distance to the city centre, and this home is typical of others in the neighbourhood.

House 2



This is a detached 2 storey, four bedroom brick house, five to eight years old, 2½ bathrooms, main floor family room, 1 fireplace, 2 car attached garage, full basement but no recreation room and no appliances. Using outside dimensions (excluding the garage), the total area of the house is 2,000 square feet, and it is situated on a fully serviced 7,500 square foot lot. The neighbourhood is prime residential, within average commuting distance to the city centre, and this home is typical of others in the neighbourhood.

House 1

CITY	PRICE DECEMBER 1976	TAXES	PRICE AUGUST 1976	PRICE DECEMBER 1975
THE MARITIME PROVINCES				
Corner Brook	$54,000	$650**	$54,000	$54,000
Halifax	50,000	800	50,000	49,000
Dartmouth	48,000	770	48,000	48,000
Fredericton	45,000	600	47,000	38,000
St. John's, Nfld.	43,800	380	44,500	45,500
Saint John	41,000	670	41,500	41,500
Charlottetown	40,000	600	40,000	38,000
Moncton	37,000	600	38,000	38,000
Bridgewater	30,000	350	31,600	32,000
THE PROVINCE OF QUEBEC				
Town of Mount Royal (Montreal)	$65,000	$1,200	$65,000	$65,000
Hudson (Montreal)	53,000	580	53,000	55,000
St. Lambert (Montreal)	46,500	725**	45,000	42,000
Ste-Foy (Quebec City)	45,000	1,250**	45,000	43,000
Hull	42,000	825**	40,000	40,000
Charlesbourg (Quebec City)	40,500	920**	40,000	40,000
Longueuil (Montreal)	40,000	980**	39,000	35,000
St. Bruno (Montreal)	39,000	850**	37,000	34,000
Beaconsfield (Montreal)	38,000	950**	38,000	36,000
Brossard (Montreal)	38,000	780**	37,000	35,000
Pointe Claire (Montreal)	37,500	925**	39,000	38,000
Saguenay	37,000	960**	37,000	
Boucherville (Montreal)	35,000	750**	37,000	35,000
Laval (Montreal)	33,000	950**	33,000	33,000
Beloeil (Montreal)	33,000	700**	33,000	32,500
Sherbrooke	32,000	900**	32,000	28,000
Pierrefonds (Montreal)	31,500	1,100**	32,000	32,000
Trois-Rivieres	31,000	710**	29,500	27,000
Chateauguay (Montreal)	27,000	870**	27,080	26,500
THE PROVINCE OF ONTARIO				
Toronto (Central)	$76,000	$ 790	$76,000	$71,000
Thornhill (Toronto)	78,000	750	73,000	71,000
Mississauga (Toronto)	66,000	694	69,000	69,000
Oakville	65,900	750	65,900	64,000
Scarborough (Toronto)	65,000	750	68,000	63,000
Ottawa	60,300	1,089	61,800	57,000
Thunder Bay	60,000	650	60,000	52,000
Richmond Hill (Toronto)	60,000	690	57,000	58,000
Burlington	58,500	720	60,000	56,000
Hamilton	58,000	800	60,000	56,000
Sarnia	57,500	850**	59,000	56,500
Guelph	55,000	725	55,000	52,000
Oshawa	54,500	650	52,000	53,000
Kitchener	53,000	600	53,000	51,000
Sudbury	52,000	1,075	49,800	48,000
Windsor	49,000	980	49,000	48,000
Sault Ste. Marie	49,000	660	49,000	48,000
Peterborough	47,000	740	46,975	46,500
Cornwall	46,500	660	45,000	42,500
St. Catharines	46,000	675	47,000	42,500
London	46,000	600**	46,000	45,000
Kingston	45,500	550	45,500	43,000
Barrie	44,500	620	45,500	45,000
Niagara Falls	43,400	620	42,500	41,000
North Bay	41,500	600	41,500	40,500
THE PRAIRIE PROVINCES				
Edmonton	$68,500	$ 580	$71,000	$61,500
Calgary	65,000	600	68,500	61,000
Regina	58,000	900	62,000	49,000
Lethbridge	59,500	546	58,500	44,000
Saskatoon	56,000	620	57,000	55,000
Winnipeg	51,000	770	51,000	46,500
THE PROVINCE OF BRITISH COLUMBIA				
Kerrisdale (Vancouver)	$93,000	$1,250	$93,000	$87,000
West Vancouver	*75,000	1,290	75,000	74,000
North Vancouver	71,900	1,080	73,000	71,000
Victoria	64,000	950	66,000	62,000
Richmond (Vancouver)	60,000	800	60,000	60,000
Surrey (Vancouver)	53,000	800	53,000	52,000
Kelowna	47,700	740**	45,700	44,000

*Location not Surveyed

**Lot servicing costs not prepaid, costs recovered through taxation.

House 2

CITY	PRICE DECEMBER 1976	TAXES	PRICE AUGUST 1976	PRICE DECEMBER 1975
THE MARITIME PROVINCES				
Corner Brook	$100,000	$1,550**	$100,000	$92,000
Halifax	93,000	1,400	93,000	88,000
St. John's, Nfld.	75,000	705	77,200	79,000
Fredericton	75,000	800	70,000	65,000
Saint John	74,500	750	73,500	73,000
Dartmouth	72,000	1,100	72,000	67,000
Charlottetown	70,000	1,100	70,000	68,000
Moncton	60,000	1,000	62,000	62,000
THE PROVINCE OF QUEBEC				
Town of Mount Royal (Montreal)	$100,000	$1,800	$100,000	$100,000
Ste-Foy (Quebec City)	87,500	2,645**	87,500	87,500
Charlesbourg (Quebec City)	76,500	1,740**	•	•
Hudson (Montreal)	75,000	800	75,000	74,000
St. Lambert (Montreal)	70,000	950**	68,500	66,000
Hull	70,000	1,200**	67,000	69,000
Beaconsfield (Montreal)	70,000	1,600**	70,000	69,000
Pointe Claire (Montreal)	68,500	1,550**	70,500	72,000
Laval (Montreal)	65,000	1,700**	65,000	65,000
St. Bruno (Montreal)	64,000	1,350**	64,000	63,000
Beloeil (Montreal)	63,000	1,200**	63,000	63,000
Sherbrooke	62,000	1,400**	60,000	55,000
Dollard Des Ormeaux (Montreal)	61,000	1,700**	61,000	59,000
Boucherville (Montreal)	60,000	1,200**	65,000	61,000
Longueuil (Montreal)	60,000	1,300**	59,000	60,000
Saguenay	54,000	1,200**	•	•
Trois-Rivieres	52,000	1,200**	52,000	50,000
Brossard (Montreal)	51,000	1,050**	50,000	52,000
THE PROVINCE OF ONTARIO				
Toronto (Central)	$120,000	$1,550	$120,000	$112,000
Scarborough (Toronto)	98,000	1,200	100,000	94,000
Oakville	91,500	995	91,500	89,000
Thornhill (Toronto)	90,000	1,700	90,000	89,000
Burlington	88,000	1,100	90,000	86,000
Mississauga (Toronto)	87,000	900	89,000	89,000
Ottawa	87,000	1,270	89,500	84,000
Richmond Hill (Toronto)	87,000	1,100	87,500	88,000
Sarnia	86,500	1,250**	91,000	86,500
Thunder Bay	82,500	850	82,500	75,000
Guelph	79,000	1,050	79,000	76,000
Peterborough	78,400	1,112	78,300	75,500
Hamilton	77,000	1,200	80,000	77,000
Sudbury	76,250	1,505	74,500	72,000
Sault Ste. Marie	75,000	935	76,000	74,000
Windsor	74,000	1,420	71,000	68,000
Kitchener	73,500	890	73,500	70,000
Oshawa	71,000	875	67,000	72,000
London	71,000	960**	71,000	70,000
Cornwall	70,000	925	67,000	63,000
Niagara Falls	69,500	950	73,000	72,000
Barrie	69,500	800	65,000	58,000
St. Catharines	66,500	875	67,000	63,000
Kingston	64,000	770	64,500	63,000
North Bay	63,000	840	63,000	59,000
THE PRAIRIE PROVINCES				
Edmonton	$104,500	$ 800	$106,000	$94,000
Calgary	107,800	946	119,000	98,000
Regina	86,000	1,200	90,000	80,00C
Lethbridge	99,500	1,200	93,000	79,50C
Saskatoon	88,000	1,100	88,000	78,50C
Winnipeg	76,500	1,650	76,500	72,00C
THE PROVINCE OF BRITISH COLUMBIA				
Kerrisdale (Vancouver)	$150,000	$1,800	$150,000	$150,000
West Vancouver	115,000	1,790	115,000	112,000
North Vancouver	95,000	1,453	95,000	92,000
Victoria	90,000	1,300	90,000	84,000
Richmond (Vancouver)	86,000	1,100	86,000	86,00C
Surrey (Vancouver)	70,000	1,200	70,000	72,00C
Kelowna	70,000	900**	70,000	70,00C

*Location not Surveyed

**Lot servicing costs not prepaid, costs recovered through taxation

APPENDIX G

A POSSIBLE METHOD OF UPDATING THE MHP

G. A Possible Method of Updating the MHP

The current practice of modifying the MHP is based on internal pressures and ad hoc decisions. While such a system provides for a great deal of necessary flexibility, it is also subject to the criticisms of being unfair and, at times, irrational. In this Appendix, the possibility is explored of changing the MHP's in a more formalized basis. This could be used to supplement, rather than replace, the current system.

The suggestion involves using a mathematical equation that relates changes in the MHP to changes in variables that represent the program goals. These latter variables are:

(i) the price of identical housing, as measured by the Royal Trust Price of house type 1[1].

(ii) the current vacancy rate in the city: the higher the vacancy rate, the less likely the AHOP units will be purchased so that there ought not be any incentive to build more AHOP units.

(iii) the level of new construction, as measured by housing starts, per increase in population in the previous year: if starts are high, there is no need for further incentive under AHOP.

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[1]See Appendix F.

(iv) the rate of growth in employment in the city for 1971 to 1975 if the growth rate is high suggesting a prosperous economy, the MHP should be relatively lower since new construction need not be encouraged.

The procedure is to estimate a regression equation across those cities for which data for all of the above variables are available. This will provide an estimate of the relationship between these variables and the Maximum House Price as it existed in 1976. Should the particular coefficient values that are derived not be acceptable, they can of course be changed.

The following is the equation that has been estimated[1] where:

MHP is the Maximum House Price for the city

RT is the Royal Trust Price for House Type I in that difference between vacancy rate in the

v is the vacancy rate in the city minus the average vacancy rate across all cities

h is the ratio of starts in 1976 to population change, in thousands of persons in the city over 1971-76, minus the same ratio averaged over all the cities

m is the percentage growth in employment 1971 -75 minus the average percentage growth in employment in all cities

$$MHP - RT (0.754 - 0.122\ v - 0.0035\ h - 0.18\ m)$$

---

[1]The R^2 is 36% over 20 Observations.

If the above equation is used and the Royal Trust price increase by 5%. If the deviation of the vacancy rate from its average increases by 2 points, then the MHP will increase by $0.0922 or 9.2%.

Applying the above equation to the set of possible cities, it can be seen in Table G.1 that there are not a substantial differences between current MHP's and those estimated using the above equation. This is not surprising since, as pointed out in Chapter VI, the MHP's do reflect the particular goals implicit in the equation.

TABLE G.1

COMPARISON OF PRICE CEILINGS (1976)

MARKET AREA	CURRENT CEILING[1]	ESTIMATED FROM EQUATION[2]	DEVIATION
EDMONTON	41,000	46,000	-11,000
CALGARY	41,000	42,000	-13,000
REGINA	38,000	40,000	-1,000
SASKATOON	38,000	38,000	-2,000
VICTORIA	45,000	45,000	
SUDBURY	34,000	40,000	
HAMILTON	43,000	44,000	
KITCHENER	38,000	37,000	
WINNIPEG	37,500	39,000	
WINDSOR	36,500	35,000	
LONDON	35,000	34,000	
HALIFX	38,500	36,000	
VANCOUVER	47,000	43,000	
NIAGARA-ST.CATHERINES	34,000	34,000	
QUEBEC CITY	33,000	30,000	
TORONTO	47,000	49,000	
SAINT JOHN	34,500	34,000	
ST. JOHN'S	38,000	36,000	
OTTAWA-HULL	38,000	41,000	
MONTREAL	33,500	33,000	

[1]As of Dec 31, 1976.

[2]Rounded to nearest thousand

SOURCE: PEU Calculation.

APPENDIX H

SELECTED PROBLEMS IN AHOP

H. Selected Problems In AHOP

In this Appendix, a number of issues involved in the delivery of AHOP will be reviewed. Most of these issues have been raised by officials involved in the delivery of the program. The purpose of this Appendix is primarily to review these issues rather than offer new insights. Because of this focus, this Appendix should be viewed more as a compendum of issues rather than as a systematic treatment within an acceptable framework. The four areas to be addressed are:

1. Extension of AHOP to existing dwellings,
2. The effect of program rules and regulations,
3. Condominium Regulation,
4. Administrative Backlog.

H.1 Extension of AHOP to Existing Dwellings

Virtually all of the provinces, as well as CMHC Regional Directors, have requested that AHOP be extended to existing dwellings. Limiting assistance to new dwellings induces lower income households to purchase expensive housing units than they would otherwise.

Such an extension to existing homes would be too costly for the government. Gill has recommended that the demand for existing units could be limited by setting MHP for existing dwellings at 85% of the current

MHP[1]. He estimates that a maximum of 38,000 units might be eligible for such assistance in any one year: varying from 30% of the stock in Montreal to 2% in Vancouver. Assuming an average IRL of $1,000 per unit and average grant of $750, the cash flow required for the program would be $66 million in the first year.

While AHOP in existing units would be able to reach lower income households because of the lwer MHP. Gill has argued that very few actual or potential tenants of public housing would be eligible for the program because their incomes would still be too low to qualify. This is espeically true in expensive markets such as Toronto or Vanouver. Because rents are generally low relative to ownership costs, Gill suggests, that rent supplements would be the cheapest way of assisting the very low income households.

H.1.1 AHOP-Existing In Neighbourhood Improvement Areas

The Neighbourhood Imporvement (NIP) section has argued that AHOP should at least be extended to existing dwellings within NIP areas. This would not be extremely costly since the number of eligible units would be substantially less than under a universal AHOP-existing program.

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[1]C. Gill Provision of Ownership Assistance to Low Income Families; CMHC Program and Market Requirements, October, 1976.

Furthermore, it would enabe lower income households to live in NIP areas rather than being replaced by the higher income households that tend to move into such areas.

The NIP section is currently undertaking an evaluation of NIP, including an analyses of the extent of housing turnovers in NIP areas and of the purchasers of housing in this area. Pending the results of this evaluation, it is impossible to say whether the problem is real or imaginary, and whetherthe prices housing in NIP areas is sufficiently low to enable them to qualify for AHOP.

H.1.2 Resales

A problem raised in Toronto, and relevant elsewhere, is that AHOP assistance is not transferable from the original owner to the new purchaser when the house is resold. A household purchasing a in an AHOP unit for $38,000, for example, and moving after one year would have to get $38,000 for it (encountered by a $36,100 mortgage at 11½ percent) just to break even. At the same time in the Toronto area, there are a large number of similar, as yet unoccupied units for which a purchaser can get an 8% mortgage. It is not surprising to find that pruchasers prefer the latter since P & I are $3,310 per year, or 25% cheaper than the $4, 323 required on the resale of the house. To be able to sell the house, the regional purchaser will have to reduce his asking price by approximately 25%.[1]

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[1] 25% is an upper figure since the IRL is a loan, not a grant,and declines over five years.

While CMHC does not require repayment of IRL if the purchaser cannot recoup his original equity; it does not quarantee the return of his equity. Being unable to sell at a price that would recover equity recipients have decided to default or quit-claim.[1]

What would be the cost of permitting the owner to transfer to the new purchaser the right to an IRL?[2] On the basis of experience with AHOP in 1970-71, approximately one-quarter of original recipients have resold their home. If these resales are spread evenly over the five year period, the subsidy cost of permitting the transfer to IRL would be $2.6 million.[3] (This figure, it should be noted, was not subtracted from the original program cost estimates in Chapter V).

If the above cost estimates seem to high to justify transfer or the IRL ot second purchasers, it might be left to the discretion of the CMHC Manager to decide whether a unit is eligible, on the basis of the local housing market situation.

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[1]A quit-claim involves signing over to the lender all claims on the house.

[2]It is assumed that it would be too complicated to transfer the grant, if eligible.

[3]The average subsidy cost of the IRL' as will be recalled from Cahpter II, is $950. Assuming one-quarter of the 22,000 recipients move, 5500 units will be affected. If spread evenly, the cost is: ($2.6 million).

H.1.3 AHOP On MIF Properties

As a result of defaults CMCH, through its mortgage insurance fund, has come into possession of a large number of units which might sell at below the MHP. To encourage sale of these units. Mortgage Administration Division has suggested that AHOP assistance be applied. For consistency if AHOP is extended to resales, it should also apply to CMHC sales, and vice versa.

H.2 Program Rules

In establishing AHOP, several somewhat arbitrary rules have been established. In many cases, these rules were based on a conscious choice; in other cases they would appear to be quite arbitrary. For example, it is hard to justify the use of 8% as the point at which IRL ceases and grant begins. It might have been 9% or 7%.

The use of a 25% GDS ratio, although it has a longer tradition, appears to be almost as arbitrary, there is no reason why a new purchaser should not have to pay 27% or even 30%.

One rule that has somewhat more rationale is the decision to require grant recipients to have at least one child -- the reason being

that it would reduce program costs without undue hardship. Based on 1976 experience, 8% of all recipients had no children and approximately one-half of these would have qualified for assistance. Since the present value of assistance for grant recipient is $1,063 higher than for IRl-only recipients,[1] the saving has been almost $1 million.

A second rule of interest is not to check income after the original application. As mentioned in Chapter VII, it was felt that there would not be sufficient deceit to justify the costs of a check. For similar reason, it was felt that income situations would not change os dramatically as to require periodic checks in income. For a $240 decline in assistance, income would have to rise by $960 each year to enable the household to remain at a 25% GDS ratio. Since the average income of AHOP grant recipients is $12,000, this amounts to exactly 8% in the first year.

It is however possible, under certain situations for income to rise substantially faster. For example, if the purchaser is a student

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[1]Net present value of assistance for grant recipients is $2,105; for IRL-only recipients it is $942. See Table 2.9 in Chapter II.

or the spouse gets a job, there is a high liklihood that income would rise so as not to require further grant assistance. However, the cost of establishing an income check beyond the first year probably does not justify the reduction on grant payments that would ensue.

H.3 Condominiums

With regard to condominiums, it has been CMHC policy not to give AHOP assistance until the project is registered. In the interim, the household is paying a "rent" equal to its P & I payments. As a result, many households faced interim affordability problems.

H.4 Administrative Backlog

In several large branches, a backlog of AHOP applications has accummulated. In some cases, this is due to insufficient local staff. In other cases, the problem results form miscalculations; e.g.one of the forms has been printed too small to easily accommodate the typeset of standard typewriters to that the form must be retyped several times. These, however,are issues concerned with general program administration, and not directly of concern to this evaluation.