

# **1993 Policy and Research Initiatives**

**Aussi disponible en français sous le titre**  
*Initiatives en matière de propositions et de recherche pour 1993.*

## **Foreword**

Innovative ideas, backed by solid research, have contributed to Canada Mortgage and Housing Corporation's role as a leader in the field of housing.

For almost 50 years, the Corporation has worked towards improving the housing and living conditions of all Canadians. We have worked together with other government agencies, the home building, renovation and sales industries, social housing groups, various research-based organizations and the academic community. The National Housing Research Committee, created and chaired by the Corporation, helps to co-ordinate research undertaken by CMHC and these other organizations. Through its activities, this Committee identifies common priorities, initiates joint projects and disseminates results to improve the benefits of research for Canadians.

As part of our commitment to improve housing and living conditions in Canada, our research covers all aspects of housing. Initiatives range from promoting housing choices to meet the needs of groups such as seniors and people with disabilities, to environmental and technical research.

We believe that by demonstrating the results of our research, and by sharing our findings as widely as possible, we are working to ensure that the industry is sound and competitive, research continues to be world class, and Canadians remain among the best-housed people in the world.

**E. A. Flichel**  
**President**  
**Canada Mortgage and Housing Corporation**

## **Introduction**

Canada Mortgage and Housing Corporation (CMHC), a Crown corporation, is the federal government's housing agency. We promote the construction of new houses, the repair and modernization of existing homes, and the improvement of housing and living conditions for all Canadians. CMHC has been helping to house Canadians for the past 47 years.

CMHC is responsible for administering the *National Housing Act*. Under Part IX of the Act, the Government of Canada provides funding to CMHC for research into the social, economic and technical aspects of housing. The Corporation also publishes and distributes the results of this research.

This document outlines CMHC's planned policy and research initiatives under Part IX for 1993.

The three main sections of this report reflect themes identified in CMHC's *Strategic Plan*. Each theme encompasses a wide variety of topics and issues. The remaining sections describe activities which cut across all three themes.

### **Promoting Good Living Environments**

Housing is an important element in the quality of our living environment. In 1993, CMHC's work will focus on a number of topics, including sustainable development issues related to settlement trends and housing technology, the special problems of high-rise and multiple-unit buildings, northern and remote housing, indoor and outdoor environmental contaminants, renovation, technological innovation, safety and security, and construction practices.

### **Pursuing Effective Mortgage and Housing Markets**

CMHC remains committed to making houses both affordable and financially accessible for all Canadians. That goal can best be achieved by ensuring that private housing and mortgage markets function as efficiently as possible. As part of that effort, CMHC's 1993 activities will focus on market research, housing in the national and international economy, housing affordability and accessibility, housing for seniors and persons with disabilities, housing finance and rental markets.

### **Helping Households in Need**

CMHC helps to provide housing assistance to Canadians in need, including various social groups such as ethnic communities, Canada's First Nations, and the homeless. In 1993, research will focus on two new areas, families and multiculturalism, and will continue to include self-help and a commitment to the Global Strategy for Shelter to the Year 2000. This year, the Corporation will also observe the United Nations' **International Year for the World's Indigenous People**.

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## Promoting Good Living Environments

CMHC's role in advocating housing quality and good living environments includes a prominent housing-technology component: identifying flaws in materials and practices, conducting diagnostic investigations, finding and demonstrating remedies, upgrading standards and publishing information. It also touches on broader areas, such as the special housing needs of people in remote and Northern communities, and the environmental impact of housing and human settlements.

### Sustainable Development

Housing has a substantial effect on the environment in direct and indirect ways. Our homes — and the roads, services, sewage systems and other infrastructure required to support them — consume huge amounts of land, energy, water and other natural resources. They also produce considerable waste. Efforts to make housing more sustainable must be conducted on both a broad level — dealing with the environmental effects of cities and other human settlements — and a narrower level related to the environmental impact of the technology used in individual dwellings.

**Settlement Issues:** The challenge of sustainable development is to sustain world economic development while maintaining the essential integrity of the earth's ecological and social systems. This challenge is largely an urban one, given the dominance urban areas hold in the production and consumption of goods and services which affect the environment.

It has been estimated that by the year 2000, over half of humanity will live in cities. Global population could reach between 8 and 14 billion in the next century. These growth rates will represent a colossal new burden on both humanity and the ecosphere.

Canada's residential sector has a key role to play in achieving the necessary changes that can help reduce environmental risk. For instance, more compact housing developments make better use of existing infrastructure and municipal services, and also facilitate the protection of nearby natural resources.

#### Activities:

- Conduct research on the social, economic and environmental costs of residential development.
- Examine conventional suburban development patterns that have successfully incorporated innovative engineering standards into their designs.

- Study “environmentally-preferred” urban forms, focussing on the social, economic and environmental advantages and disadvantages of continued urban sprawl versus recent community planning concepts.
- Look at consumer satisfaction with housing density intensification initiatives.

**Housing Technology:** To be sustainable, housing must use renewable and non-renewable resources efficiently. CMHC has already been actively involved in many of the technical issues surrounding sustainable housing, such as pioneering work in embodied energy, water conservation, passive solar energy, the environmental impact of material production, integrated energy systems, reduction of on-site construction waste, and surveys of consumer attitudes towards more environmentally-responsible housing.

CMHC is also involved in studies on energy usage as an active member of the National Round Table Subcommittee on Indicators of Energy Production and Use. The Corporation’s Healthy Housing Design Demonstration encourages the development of houses which are environmentally sustainable, healthy and affordable.

**Activities:**

- Examine ways of minimizing the environmental impact of housing, including: minimizing embodied energy, the use of recycled materials, design for dismantling, water conservation, and flexible house designs that are adaptable and use space efficiently.
- Advance and promote recycling of construction materials.
- Continue work on the evaluation, monitoring and transfer of information related to the Healthy House Demonstration.
- Examine how environmentally sensitive technologies can be applied to the existing stock.
- Study possible obstacles to the use of “green” technologies.

**High-Rise and Multiple Residential Buildings**

Over the past few years, CMHC has invested resources and taken the lead in advocating improved design and construction of high-rise residential buildings aimed at avoiding cladding failures. The industry response has been favourable and research has expanded in recent years to include such other issues as air tightness, noise control and heating and ventilation systems.

**Cladding:** Cladding, or the outer surface of a structure, is a major source of problems in high-rise buildings. A recent study by CMHC and the Ontario New Home Warranty Program found that 95 per cent of the 52 problem buildings surveyed had problems related to water penetration due to rain or air leakage.

**Activities:**

- Carry out a project to ensure that the more economical and affordable forms of Exterior Insulated Finish System (EIFS) are less vulnerable to failure.
- Continue research on rain control. One study will focus on determining wetting patterns of rain on buildings. The project will look into the possibility of developing technologies that could prevent the wetting of large portions of buildings. The other will complement existing rain-screen work, involving the compartmentalization of building facades. The results of these projects will be integrated into the RAINSCREEN computer program.
- Develop workshops for architects, engineers and builders on the prevention of rain penetration.

**Air Tightness:** Air leakage is probably the most important source of energy loss in high-rise buildings. It is also the major cause of premature degradation of the building envelope.

The building envelope is less likely to break down if warm moist air from inside, and rain and moisture from outside, are unable to penetrate the walls. The National Building Code of Canada requires the use of an air barrier in outside walls to prevent air penetration and moisture problems. However, little information exists on what materials to use or how to create an effective air barrier.

**Activities:**

- Develop on-site diagnostic tools to determine how moisture is entering wall cavities.
- Initiate a project to determine the optimum location of the air barrier. Results of this work will be summarized in a document on building design for architects, engineers and builders.
- Investigate air leakage in walk-ups, three-storey quadriplexes, triplexes and stacked housing buildings.



**Noise:** Poor sound control between dwellings in multiple-unit buildings tends to reduce both the value of the units and the demand for this type of housing.

**Activities:**

- Update and revise publication on road and rail noise.
- Continue research on flanking noise, the phenomenon by which noise travels through the building structure to some other point in the building, as opposed to going directly through the walls and floors.

**Heating and Ventilation:** Progress and innovation in mechanical heating, ventilation and air conditioning (HVAC) systems in high-rise residential buildings has often lagged behind developments in low-rise housing or in commercial buildings. For instance, cogeneration units, which provide simultaneous heating and electrical energy, are becoming common in some commercial buildings but are not used extensively in high-rise residential buildings.

Alterations to mechanical systems in high-rise residential buildings have a major effect on the amount of energy consumed, the carbon dioxide generated and the indoor air quality levels achieved.

**Activities:**

- Publish and release three new manuals. The first will be aimed at designers, explaining good HVAC design for new buildings. The second will be aimed at operators, outlining proper maintenance procedures for high-rise ventilation systems. The third will educate tenants on the use of the ventilation system in their apartment unit, the effects on their health if they fail to use the system properly, and the benefits of energy conservation.
- Initiate projects to demonstrate, monitor and report on the performance of cogeneration units in multi-family buildings. Another study will investigate air quality in older multi-family buildings.

**High-Rise Renovation:** Many high-rise buildings are likely to need major renovations in the near future. Older buildings, for example, will have to be made more energy efficient. Utility companies such as Ontario Hydro are planning programs to reduce the energy consumption of buildings through subsidy programs.

**Activities:**

- Develop criteria and guidelines for good high-rise renovation practices.

- Develop a strategy for assessing renovation work, including methods of testing the building envelope, the structural capacity and energy consumption.
- Demonstrate an integrated renovation of an existing high-rise building for air-tightness, ventilation, indoor air quality and acoustics.

## **Restoration of Structural Concrete**

Structural concrete is widely used in high-rise buildings, parking garages and other large structures. In recent years, there has been increasing concern about failures of steel-reinforced structural concrete. Alleviating these problems can be expensive, with commercial activity on concrete restoration estimated at about \$100 million a year.

CMHC has played a lead role in determining some of the causes of the problems, including salt attack, carbonation and corrosion of reinforcing tendons.

### **Activities:**

- Update research on maintenance, inspection and cost-effective repair strategies.
- Identify alternative uses of non-corroding fibre-reinforced plastic in concrete in buildings.

## **Northern and Remote Housing**

Building products, systems and construction techniques used in southern and urban areas of Canada do not necessarily perform well in Arctic and remote locations. The severe environmental conditions in the North can result in rapid degradation of building components. Costs of labour, building materials, operation, maintenance and repair are higher in northern and remote areas as a consequence of having to import construction materials, fuel and labour from the South.

### **Activities:**

- Develop an information brochure to increase consumer awareness of good building practices and of products that can endure the harsh northern and remote winters.
- Display the barrier-free "Open" House in the North and prepare specific materials for people with disabilities living in harsh winter conditions.
- Launch a demonstration project to encourage comprehensive community planning in northern communities.

## **Toxic Lands**

The term "toxic lands" refers to sites where there has been soil or groundwater contamination. In response to public concerns, federal and provincial environmental law in many jurisdictions has extended liability for the clean-up of contaminated property from the polluter to those who own, occupy and manage a contaminated property.

### **Activities:**

- Monitor the development of provincial and federal environmental policy and legislation.
- Continue to investigate site-assessment procedures and remedial measures for affected houses, and integrate findings into CMHC publications.
- Continue research into the international experience with residential environmental hazards.

## **The Indoor Environment**

The indoor environment is now being recognized as a potentially greater threat to health than the outdoor environment. This is in part due to the variety and toxicity of materials found in houses, and in part due to the greater amount of time that most people spend indoors. (It is estimated that most people spend 90 per cent of their time inside buildings or vehicles.)

Especially at risk are hypersensitive individuals, who can react to extremely low levels of contaminants or to substances which are innocuous to the general population. The symptoms experienced can be generalized or specific and the health problems can range from mild discomfort to complete debilitation.

### **Activities:**

- Publish the results of recent research on ventilation.
- Revise and update CMHC publications on ventilation.
- Produce consumer publications on air quality, ventilation, and combustion spillage. Training seminars on combustion spillage will continue.
- Conduct a study on energy retrofit programs offered by provincial electrical utilities, to determine whether air quality needs are considered.

- Continue research examining the health risks associated with lead in housing.
- Produce a guide on lead-safe renovations and update existing publications on lead.
- Conduct research on current combustion standards through the testing and analysis of vent caps, clearances and fireplace glass doors.
- Study the potential for timber piles treated with creosote to contaminate buildings through offgassing.
- Conduct research on the special requirements of the environmentally hypersensitive, including the development of a protocol to evaluate air quality conditions in existing homes, to identify the sources of contamination, and to resolve the problems.

## **Moisture**

Moisture in housing needs to be controlled. High levels of indoor air moisture can lead to discomfort, material degradation, increased material emissions, and health problems, usually related to biological pollution. Excessive moisture in the structure of the house can lead to increased energy use, deterioration of finishes, rot, and loss of structural strength.

CMHC's research and expertise concentrates on the proper moisture balance within house air, and on preventing damage to structure of the house.

### **Activities:**

- Develop a construction moisture seminar to be delivered to builders and renovators in the Atlantic Region. A video on moisture and housing will also be developed to complement the seminar.
- Help the Canadian Standards Association to prepare an advisory document and performance standards for cast-in-place concrete basements.
- Develop and promote user-friendly humidity sensing devices designed to maintain a proper humidity level in the home.

## **Innovation**

The globalization of the world's economies creates both opportunities and threats for Canadian industries. In the past, residential construction has enjoyed a measure of protection from foreign competition due to the nature of the technology. Trends in

technology toward increasing factory assembly of components both reduces this protection and provides opportunities for foreign trade.

Innovative housing technologies provide an opportunity to enhance Canadian competitiveness. They also offer the potential for more consumer choice, improved quality and lower production costs.

CMHC has encouraged innovation for many years, through initiatives such as the Housing Technology Incentives Program and the activities listed below.

**Activities:**

- Continue research to identify emerging, innovative housing products and systems that would be most exportable and to determine the most appropriate markets.
- Publish a guide on how to introduce new products to the market.
- Publish a document on promising new products.

## **Housing Renovation**

CMHC has realized for years that Canada's housing stock is a national asset that is of major importance to the country's welfare. The level of attention that houses receive through maintenance and repair, as well as the quality of this renovation, is of major concern.

**Activities:**

- Conduct a survey of renovators that could be used to provide information on renovation for market analysis and to determine the business and technical training requirements of renovators.
- Assist Statistics Canada to develop and conduct surveys on renovation by homeowners and landlords.
- Evaluate the potential for a Renovation Code, similar to the National Building Code, which would provide consistent renovation standards for the industry.
- Study the potential of inspection services for consumers who are considering renovating their homes.
- Conduct a study on the quality of the renovation work performed by homeowners.

- Continue to develop new training materials and programs for the renovation industry and to update existing ones.
- Continue to provide resources and advice to publications and television and radio programs about renovation.

## Safety and Security

CMHC has extensively promoted safety and security in areas such as burglary prevention, fire safety and earthquake preparedness. The Corporation has produced publications such as *Protecting Your Home Against Burglary*, security videos, and exhibits. CMHC has used its expertise in trying to reduce fire fatality rates by promoting the proper use of smoke detectors and by sponsoring the Canada Safety Council's National School Fire Safety Week Campaign. Similarly, the Corporation is developing a construction guide for improving the earthquake resistance of homes and a consumer information pamphlet on earthquake preparedness.

### Activities:

- Conduct research on the incidence and type of crime occurring in multiple-unit buildings, to improve design guidelines. Closer partnerships with police associations across the country will continue, along with the promotion of videos and exhibits.
- Investigate manual delay mechanisms for smoke detectors.
- Produce and promote publications and exhibits on fire safety.
- Disseminate publications addressing safety and security issues related to renovation hazards.
- Disseminate consumer information in areas of earthquake risk, and continue to promote wood-frame construction for high-risk areas.

## Construction Practices

In association with the Canadian Home Builders Association, CMHC has developed a series of Builders' and Renovators' Workshops to improve the standard of Canadian construction practice. This effort will continue in 1993.

### Activities:

- Produce a video, *Proper Window and Door Installation Procedures*, to complete the existing Builders' Workshop series.

- Release a Builders' Workshop Series booklet on flooring problems, based on the manual produced by the Saskatchewan Research Council for a multi-agency group, including CMHC, in 1992.

## Pursuing Effective Mortgage and Housing Markets

CMHC's market housing objectives are to assist the development of a stable private housing market that can function effectively, and to promote security of tenure through homeownership and an adequate supply of rental accommodation.

### Market Intelligence

CMHC is the key source of housing market information and analysis which enables industry and government to better understand and plan for the future. The Corporation's expertise is often called upon for projections of long-term potential housing demand, short-term national economic and housing forecasts, local market forecasts, and migration patterns. CMHC's computerized Potential Housing Demand model is an important tool in forecasting the demand for new housing.

In 1993, efforts will be devoted to obtaining better data in the areas of renovation, the mortgage market, migration and housing affordability.

#### Activities:

- Develop revisions to Statistics Canada's Homeowner Expenditure Survey on interior and exterior types of renovation.
- Support a Statistics Canada survey on landlord renovation.
- Update demographic projections of population, household growth and housing requirements.
- Continue the focus-group series on consumer preferences for housing by various market groups.
- Upgrade information and forecasts on international, intraprovincial and interprovincial migration.
- Establish a socio-economic profile of immigrants, including household size and location.
- Expand information on client needs in homeowner renovation and new construction costs in different markets.



## **Housing in the National and International Economy**

For housing markets to work well, people must be well-informed about the consequences of current and proposed government policies in the housing sector. Immigration policies and patterns, for example, have a major influence on the demand for housing. International trade policies and regional development policies affect the competitiveness of industries and regions, causing a profound impact on local housing markets. The Canada-US Free Trade Agreement (FTA), the North American Free Trade Agreement (NAFTA), the European economic union, and the movement towards a free-market economy in Central and Eastern Europe are all important factors with the potential to influence the Canadian housing sector.

The relationship between the housing sector and the economy also works in the opposite direction: housing is an important influence on the larger economy and social fabric. It is a major source of employment and investment activity. In fact, one in 10 jobs in the economy depends on residential construction. Housing is also a valuable asset for all Canadians, with residential real estate accounting for close to 35 per cent of our total assets.

### **Activities:**

- Study the impact of the FTA, NAFTA and European economic integration on the Canadian housing sector.
- Study the impact of increased imports of prefabricated building components resulting from trade liberalization, especially on communities bordering the United States.
- Review CMHC's assessment of housing conditions, needs and priorities in Central and Eastern Europe and examine the results of CMHC's study of commercial opportunities for the country's housing sector.
- Implement a Canada-Poland Housing Finance Project, which will assist Poland in establishing a free-market mortgage market.

## **Housing Affordability**

In some markets, housing prices have risen faster than family incomes. As a result, people are spending a greater portion of their income on housing expenses, including mortgage payments, taxes and utilities. Some reasons for rapidly rising house prices are exclusionary zoning, excessive site development standards and inflexible building codes.

**Activities:**

- Continue funding under the Affordability and Choice Today (ACT) Program to encourage municipalities to accept innovative forms of new and rehabilitated housing, and to streamline regulatory approval processes.
- Undertake research to examine the comparative cost-effectiveness of approaches resulting from the ACT Program.
- Explore ways to improve the efficiency of delivering infrastructure services, including case studies of municipalities' experiences with new materials and technologies, as well as their availability and capabilities.
- Study the transaction costs incurred in buying and selling a home, including legal fees, surveyors fees, the cost of inspections, appraisal costs and real estate brokerage fees.

**Housing for Seniors**

By the year 2031, the proportion of the Canadian population over 65 years of age will have risen from approximately 11 per cent to 25 per cent. During this decade alone, the number of people over age 75 will almost double.

Recent studies on the impacts of socio-demographic change, documented by the 12 member countries of the Organization for Economic Cooperation and Development, have illustrated various social and economic implications of this trend. These include the strong preference of seniors to continue to live in their own homes or communities for as long as possible, the need to design and adapt homes and neighbourhoods to meet changing needs and to provide older people with appropriate services to help them maintain their independence, and the diminishing traditional sources of informal care for seniors.

**Activities:**

- Continue to work through the advisory committees on seniors' housing to raise awareness of options that could be available to seniors, and to identify areas of potential cooperation between the public, private and non-profit sectors in the areas of housing and support services.

- Conduct joint studies, involving the housing, health and social-service sectors, on the socio-economic implications of alternative combinations of accommodation and services, and evaluate alternative methods of delivery. This work will address ways seniors can remain in their own homes, options that enable them to live close to family members (e.g. garden suites) and various types of supportive housing.
- Complete work on the impact on seniors of being displaced from affordable private rental projects and alternatives which would allow them to remain in their communities.
- Develop a guide document on the management and adaptation of seniors housing and the provision of services for the occupants.
- Develop a guide document on ways of delivering community-based home maintenance, repair and adaptation programs for seniors.
- Continue work on the development of a model to provide forecasts of the socio-economic and health characteristics of future elderly populations.
- Complete the publication, *A Guide to the Development of Seniors' Housing*.
- Complete the second phase of a computerized tool set to help rural communities assess the housing and service needs of their senior populations, and promote the use of these tools to develop a range of case studies for evaluation of rural options.
- Continue work to identify and evaluate housing options for seniors who wish to remain in small, isolated communities.

## **Housing For People with Disabilities**

People with disabilities wish to live as independently as possible in the community at large, rather than in institutional environments. They seek a greater choice of housing to allow them to settle in their preferred communities and neighbourhoods, and to minimize restrictions on their lifestyles. They seek barrier-free environments that do not restrict their access to housing and public places, and the development of technologies that can assist them in their daily activities.

Unfortunately, people with disabilities are generally faced with a limited choice of housing options. Few private sector options exist, and many of the social housing dwellings that are specifically designed for people with disabilities are located in

seniors' developments. This makes it difficult for younger people with disabilities to obtain suitable accommodation.

Recognizing the significance of these issues, the federal government is funding a wide variety of initiatives, involving several government departments and agencies, through the **National Strategy for the Integration of Persons with Disabilities**. CMHC has been allocated funding to undertake housing research and development activities.

**Activities:**

- Continue working with groups representing people with various types of disabilities to determine the types of housing that this sector needs and prefers, as well as the design features and facilities that should be incorporated into various types of residential buildings.
- Determine the most cost-effective ways of incorporating design features and facilities into various types of residential buildings, in conjunction with the private and non-profit housing sectors.
- Pilot test and demonstrate the most promising design features and technologies in actual residential projects.
- Continue working with the Canadian Automated Building Association (CABA) and other agencies to identify opportunities and promote the development of technologies, including "smart house" technology, that could assist people with disabilities in their daily activities and in maintaining their independence.
- Conduct further evaluations on the effectiveness of home adaptations in assisting people who are frail or disabled to remain in their homes.
- Develop and publish information on housing choices, designs, technology and potential markets.
- Continue displaying the barrier-free "Open" House exhibit across the country.
- Produce videos to raise awareness and assist homebuilders in marketing and promoting technologies and housing designs.

## **Housing Finance**

Three factors affect Canadians' ability to own their homes: affordability, accessibility and security. **Affordability** is generally determined by housing prices relative to income. **Accessibility** refers to the availability of financing and the related mecha-

nisms, terms and conditions. **Security** refers to the ability of a homeowner to maintain homeownership tenure over time.

All three factors are affected by the changing housing finance market. Increased market share for mortgages and their derivative instruments, and the trend towards packaging of mortgages as financial assets or securities for marketing to non-traditional investors, are both important factors influencing the supply and price of mortgages.

Other changes are occurring as a result of the modernization of the regulations governing financial institutions. Internationally, Canada has adopted the Bank for International Settlements (BIS) framework, while domestically, reform of legislation pertaining to federally-regulated financial institutions has been completed.

**Activities:**

- Determine the impact which interest rate prepayment and liquidity risk might have on financial institutions' capitalization requirements.
- Continue public consultations on shared equity financing, which allows borrowers to trade off a share of future capital appreciation in return for an interest rate reduction or downpayment assistance or both.
- Initiate a study on housing access and affordability. This study will identify feasible financial alternatives with applications for rental housing, home ownership and third-sector housing. It will also gather information on supply-side factors affecting affordability (municipal finance, regulatory process, quality standards, industry efficiency, property pricing and national economy).
- Launch a comprehensive study on a wide range of warranty issues.
- Continue the public consultation on home-equity conversion, designed to preserve home ownership security by enabling older homeowners to finance part of their retirement through divesting accumulated equity while still enjoying the benefits of home ownership.
- Examine the Index-Limited Mortgage (ILM) as it applies to homeownership, rental and non-profit housing. The ILM is a mortgage which allows the real burden of mortgage finance to be held relatively constant over time, as opposed to equal payment mortgage, where the real burden of payments is highest in the initial years of the loan and subject to potentially significant changes upon mortgage term renewal.

## **Rental Markets**

A well-functioning rental market, capable of balancing demand at prices commensurate with income levels, is a necessary component of a healthy housing sector. About 32 per cent of Canadian households rely on private rental housing. The rental market also plays an important interim housing role for young households who cannot yet afford homeownership.

### **Activities:**

- Continue work on a comprehensive review of rental markets, examining the reasons for the current rental situation, and what governments can do to achieve and sustain a desirable market configuration.
- Produce a guide for renters on choosing accommodation.



## Helping Households in Need

One of CMHC's most important tasks is to assist in the development of housing for people who are unable to adequately house themselves. In 1993, CMHC will concentrate on issues of housing needs and housing assistance, life-cycle costing, self-help housing and multiculturalism. This year, the Corporation has included two new focus areas: **Native Housing**, which responds to the implications of Native self-government and the 1993 International Year for the World's Indigenous Peoples, and **Family Issues**, which responds to CMHC's involvement in the International Year of the Family in 1994.

### Housing Assistance

There are five areas of concern within the broad area of housing assistance. They are: alternative forms of assistance; assistance in rural and northern areas; social housing improvements; geographic concerns; and financial alternatives.

**Alternative Forms of Housing Assistance:** The federal government has used the current system of housing assistance for two decades, with only minor policy changes in that time. Other interested parties support different methods of delivering housing assistance. The federal government must be assured the current system is the best available.

#### Activities:

- Continue to explore ways to house needy Canadians in the future.
- Review housing needs, housing assistance policies and social policies in other countries which are relevant to Canada.

**Housing Assistance in Rural and Northern Areas:** Housing assistance in Canada has traditionally focused on urban solutions. However, the incidence of need is greater in rural and remote areas, particularly among certain populations of Canada's Native people.

#### Activities:

- Develop case studies on how to improve the capacity of remote communities to develop and care for their own housing.
- Investigate the dynamics of housing in rural locations, including declining communities and single-resource towns.



**Social Housing Improvements:** CMHC provides a number of programs to help low-income Canadians. Both the programs themselves, and features of individual programs, are constantly being reviewed in order to find ways to make them more effective and efficient.

**Activities:**

- Publish findings on tenant involvement and physical upgrading of existing neighbourhoods.
- Conduct further research on access to services for tenants of social housing through the public housing consultation and policy development process.
- Carry out demonstration projects to assess and improve community and client acceptance of manufactured and moveable social housing units.

**Geographic Concerns:** The overall cost of a social housing project can be reduced by locating it on low-cost land. This can lead to concentrations of social housing developments in neighbourhoods where land prices are lower. Since 1986, there has been a policy for projects to be smaller and more dispersed. Land values and the availability of vacant land, however, still occasionally lead to the development of many projects in the same neighbourhoods. Similarly, some projects have been developed in areas of higher land values and have not been as cost-efficient as they could have been.

**Activities**

- Complete a review of the full costs, benefits and geographical impact of current social housing location decisions, distinguishing between seniors and non-seniors housing.
- Continue work on the public perception of the impact of social housing on local neighbourhoods.

**Financial Alternatives:** Financial tools exist which may be more cost-effective or flexible than the current financing mechanism. These could be used more widely for social housing.

**Activities:**

- Further examine alternative financing for social housing, including policies for direct lending, taking into account all operating costs, such as taxes and energy expenses.

## **Life-Cycle Costing**

There is increasing concern that the emphasis now placed upon controlling the initial capital costs of housing is having a detrimental effect on ongoing costs. There is interest in having the principles of life-cycle costing — the combination of capital and ongoing costs over the life of a project — reflected in the development process.

The analytical model developed by CMHC uses life-cycle costing to evaluate materials and systems to determine which have better viability over the life expectancy of a building or mortgage.

### **Activities:**

- Continue work to refine the Life Cycle Costing model and to determine its distribution potential.

## **Self-Help**

Self-help involves the utilization of people's time and expertise, on a voluntary, non-remunerated basis, to improve their own shelter. Self-help covers a wide range of activities and levels of involvement, including new construction, renovation and tenant management, in both social and market housing. Self-help has been shown to be cost-effective in producing new housing and in redeveloping older housing. In some areas of the country, especially rural portions of the Atlantic region, self-help construction and renovation represents a significant proportion of overall activity.

### **Activities:**

- Develop an information awareness package, listing sources on the self-help process, as well as the organizational abilities and skills required.
- Continue work on a feasibility study of self-help in urban areas.
- Develop instructional materials on home maintenance.

## **Housing Needs**

Comprehensive and timely information on housing needs is essential if government resources are to be effectively deployed. Housing needs data are required for policy development, strategic planning, program evaluation and program planning purposes. Current estimates of core housing need are used to ensure that each province is allocated a fair share of social housing funds, in accordance with need.

**Activities:**

- Analyze survey results on housing needs of Canada's First Nations.
- Analyze survey results on housing needs of persons with disabilities.
- Develop housing needs estimates for a general housing monograph, based on the results of the 1991 census, in conjunction with Statistics Canada.
- Continue to encourage the introduction of improvements in the measurement of core housing need.

**Global Strategy for Shelter to the Year 2000**

As a follow-up to the 1987 International Year of Shelter for the Homeless, the United Nations Assembly adopted a "Global Strategy for Shelter to the Year 2000" (GSS) in 1988. Its main objective is to facilitate the provision of shelter for all by the year 2000. The UN has also urged each member country to observe the first Monday of October as World Habitat Day.

At the UN Conference on Environment and Development in June 1992, Agenda 21, one of the main documents arising from the conference, included a chapter on human settlements which made specific recommendations related to the GSS. These include strengthening national shelter strategies and supporting the shelter efforts of, and financing schemes for, the urban and rural poor. CMHC is responsible for coordinating Canada's activities related to the GSS and the recommendations from Agenda 21 as they relate to housing.

**Activities:**

- Monitor developments in Canada that contribute to the implementation of all aspects of the GSS and its related recommendations. Partnerships will be explored among the public, private and community sectors in the development of specific activities, including those to mark World Habitat Day.
- Establish closer links with the Canadian International Development Agency (CIDA), Environment Canada and other agencies to support projects related to the GSS.
- Prepare Canada's report for presentation to the 14th UNCHS meeting in Nairobi, Kenya in April 1993.

## **Multiculturalism**

The multicultural nature of Canada has impacts on housing which have not been fully explored. Some information is available, including the fact that the number of immigrants in social housing is growing.

The benefits and problems of close cultural groupings, whether in social or private housing, are not well understood. Today, ethnic segregation in social housing is a fact of life in larger metropolitan centres. Information is required to determine whether the support that newcomers and visible minorities receive from living within their own communities outweighs the negative effects of ghettoization and possible isolation.

### **Activities:**

- Investigate links between immigration policy and the demand for social housing.
- Complete research into issues affecting racial and ethnic minorities in the housing sector.

## **Homelessness**

The results of the 1991 special survey on homelessness are expected to be published by Statistics Canada in 1993.

### **Activities:**

- Publish a condensed version of existing research on hostel design and housing for singles, to be used by project sponsors and design professionals.
- Analyze 1991 census data on the homeless.
- Consolidate available information on the housing needs of homeless Canadians.
- Complete analysis of the products of the 1992 study of community-based solutions to homelessness.

## **Family Issues**

CMHC's social housing tenants and mortgage insurance clients are mainly families. The Corporation will support the 1994 International Year of the Family through family-related research and policy development.

**Activities:**

- With Statistics Canada, develop a research monograph describing families and their housing, based on 1991 census data. This study will examine issues around housing needs and affordability and how they have changed since 1981.
- Update advisory documents developed by the Children's Environments Advisory Service.
- Conduct research to assess the extent of discrimination against families in rental markets. Ways of addressing the problem will also be explored.

## **Native Housing**

Since 1993 is the International Year for the World's Indigenous People, CMHC will further contribute to the development of Native capability to assume increased responsibility in housing delivery, and to improve Native housing conditions.

**Activities:**

- Develop instructional print and video material on self-build house construction, home maintenance in rural areas, and home safety.
- Prepare case studies on successful Native delivery agents and arrangements to serve as examples of Native involvement in the delivery of housing.
- Examine how the size and composition of the aboriginal population in Prairie cities is likely to change, and how this will affect housing and social needs.

## **The Centre for Future Studies in Housing and Living Environments**

The objective of the Centre for Future Studies is to identify factors which will influence housing and living conditions over the long term, to develop a deeper and broader understanding of these factors and influences, and to monitor their evolution.

By identifying, tracking and evaluating key influences, the Centre attempts to develop an assessment of possible future conditions and challenges.

Over the past two years, the Centre has identified areas which require further research. They include: global and domestic economic restructuring, including global financial markets; future global immigration patterns; innovation and implementation of various technologies and behavioral changes; and shifts in values. There is also a lack of adequate data to study the dynamics of housing consumption and its influence on the socio-economic activity of households.

### **Activities:**

- Develop and publish, in co-operation with Statistics Canada and other federal departments, a longitudinal data base to examine the dynamics of income, employment and family change among social housing residents in comparison with those living in private market housing.
- Examine potential futures for the size and composition of the aboriginal populations in Prairie cities, as well as the possible implications for housing and social needs and the urban fabric of these cities. This study will include an analysis of the 1991 Census and Post-Census Survey of Aboriginal Peoples.
- Carry out follow-up work on analysis of the spatial and socio-economic impacts of global restructuring. The focus will be on global financial markets, with an emphasis on the democratization process occurring in Eastern Europe.
- Study issues related to internal migration and the distribution of population in Canada.
- Consolidate and communicate the results of past research on sustainable development.
- Develop and distribute a quality-of-life model.

- Research the factors that will influence the nature of future demand and types of residential structures, including potential technological requirements and performance for future buildings.
- Continue research on the potential implications of an increased incidence of home-based businesses on housing and living environments.

## Program Evaluation

In line with federal government policy, CMHC periodically reviews the relevance, success and cost-effectiveness of its programs. As a result of these reviews, and of ensuing policy and program development work, programs may be confirmed, modified or discontinued. Social housing programs, which are cost-shared with the provinces and territories, undergo joint federal-provincial-territorial evaluations.

In 1993, the Program Evaluation Division intends to continue work on its evaluations of the following programs:

- the **Urban Social Housing Programs**, comprised of the Urban Native, Non-Profit and Rent Supplement Programs, which provide housing assistance to low-income households residing in urban areas;
- the **Research, Information and Communications Program**, which investigates social/economic and technical problems and solutions, and communicates such information to a variety of clients throughout Canada;
- **Project Haven**, which provides temporary accommodation for victims of family violence; and
- CMHC's contribution to the **National Strategy for the Integration of Persons with Disabilities**, comprised of the Home Adaptations for Seniors Independence Program (which provides assistance to physically-challenged seniors to modify their homes so that they may live independently) and of research into solutions to housing problems faced by disabled persons.

In addition, the Division will begin the evaluation of the **Chattel Loan Insurance Program**, which provides default insurance on loans provided to purchasers of mobile homes situated on lands with short-term leases.





## **Responsive Programs**

In addition to its directed policy and research program, CMHC supports a number of activities which are aimed at developing housing expertise and knowledge in Canada, through responsive programs. In 1993, those activities will include:

### **External Research Program**

CMHC's External Research Program provides grants to help individuals undertake innovative and high-quality research investigations into a broad range of housing topics. A committee with representatives from industry, academia, government and the professions chooses the best applications through an annual national competition.

### **Scholarships Program**

CMHC scholarships are available to assist Master's-level students who specialize in studies related to housing and community planning. Fields of study can range from engineering to law, and include multidisciplinary programs. Candidates are selected by committee in an annual competition.

### **1994 Housing Awards Program**

This biennial program encourages innovation and recognizes excellence in all fields of activity that influence the provision of adequate, affordable housing for Canadians, centred on a user-group theme.

### **Experts in Residence Program**

This program gives people knowledgeable in housing-related fields the opportunity to work at the Centre for Future Studies for six months to a year. Appointees develop and undertake projects of their own design exploring issues that will affect housing and living environments in the future.

### **Housing Technology Incentives Program**

Provides grants to encourage research and development of new products and systems in housing technology.

### **Job-Site Innovator Awards Program**

Provides modest grants and "Innovator of the Year" awards to encourage home builders and tradespeople to develop and share new construction techniques.



## **Institutional Support**

### **Intergovernmental Committee on Urban and Regional Research (ICURR)**

ICURR facilitates the exchange of information, opinions and views on urban and regional issues, and provides a focus for the development of policies on settlement change in Canada. ICURR achieves its mandate by providing information services to all levels of government, undertaking research programs on issues of national importance and organizing workshops and conferences.

### **Canadian Housing and Renewal Association (CHRA)**

CHRA acts as a national focus of information and advice to the federal government, a vehicle for housing and renewal information exchange and research, and a "window" between senior levels of government and practitioners working to deliver non-profit housing and rehabilitation assistance.

### **Housing Research Institutes**

The Rural and Small Town Research and Studies Program (RSTRSP) at Mount Allison University, and the Institute of Urban Studies (IUS) at the University of Winnipeg, carry out programs, research, academic courses and outreach within their respective regions. RSTRSP specializes in rural housing and community development issues in the Atlantic region, while IUS focuses on urban and northern issues on the Prairies.

### **United Nations Centre for Human Settlements (UNCHS)**

CMHC provides financial support to the Centre, which is currently responsible for disseminating information relating to human settlements, monitoring developments in technology, research and training, and communicating this information as required through the United Nations system.



## **Information and Technology Transfer**

CMHC will continue to transfer information through existing and new forums. In 1993, information and technology transfer initiatives will include the following:

### **National Housing Research Committee (NHRC)**

Representatives drawn from industry and consumer organizations and all levels of government will continue with regular and working-group meetings in 1993. The Committee will focus its efforts on the identification of priority research issues in housing and on information sharing and joint research projects. Items of particular interest will continue to be featured in the NHRC newsletter.

### **Canadian Housing Information Centre (CHIC)**

CHIC will continue to operate as Canada's primary housing resource centre. The results of all research undertaken by the Corporation are available to the general public, and research outputs are listed in a nation-wide database available to researchers with other levels of government, the private sector, and universities. CHIC has access to all major housing reference sources, both computerized and printed, through an integrated automated library system, and its photo library contains extensive holdings of slides, photographs and videos documenting all aspects of housing. The user's guide to the Centre provides a comprehensive directory of all holdings.

### **Marketing of CMHC Research and Development Products**

Conferences, workshops, seminars, demonstration products, along with radio, television and the print media, will be used to transfer information to various audiences, including builders, renovators, engineers, architects, service people, inspectors, self-helpers, and consumers. This includes further development of advisory documents, videos, factsheets, catalogues, pamphlets, articles and presentation modules.