

**1991
POLICY AND
RESEARCH
INITIATIVES**

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INTRODUCTION

For the past forty-five years, as the federal government's housing agency, with a mandate to promote good living conditions throughout the country, CMHC has been helping to house Canadians.

The strategies CMHC is pursuing now, rely not just on expenditure programs or supplying insurance products but also increasingly on other techniques such as research, demonstration, consultations, information transfer and partnerships. This shift fits the new realities that now prevail in government, in society, and in housing generally.

This paper describes CMHC's planned policy and research initiatives for 1991. These are funded under Part IX of the National Housing Act which requires CMHC;

"to cause investigations to be made into housing conditions and the adequacy of existing housing accommodation in Canada or in any part of Canada and to cause steps to be taken for the distribution of information leading to the construction or provision of more adequate and improved housing accommodation and the understanding and adoption of community plans in Canada."

The list of activities are those against which Part IX funds will be committed in 1991. The products of these investigations may not be available for a year or more. In addition there are studies launched in previous years which will produce results in 1991. This booklet summarizes those policy and research activities which will be extended or initiated in 1991.

This document uses six categories to describe the issues and activities within the Policy and Research Plan. CMHC's policy and research activities are a principle vehicle for implementing the Corporation's strategic directions. As a result, these headings reflect CMHC's 1991-1995 Strategic Plan.

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Sincerely,
 [Name]
 [Title]

PROMOTING GOOD LIVING ENVIRONMENTS

In promoting good living environments the federal government needs to meet two key challenges:

- ensuring that housing and its supporting urban framework combine to produce good quality of life in urban environments; and
- developing more effective solutions to the housing problems of Canadians in rural and remote areas.

ISSUE

1. Sustainable Development

RATIONALE

All sectors of our society now recognize that the rapid rate of economic progress achieved in recent decades has a far higher price than previously acknowledged. Unless society quickly modifies its impact on the natural environment, the quality of life and options for future generations will be jeopardized. Housing has a very substantial impact on the natural environment in direct and indirect ways.

ACTIVITY

- Develop a preliminary definition of the terms "sustainable house" and "sustainable housing" and determine performance criteria, design criteria and methodologies by which the performance criteria can be met.
- Examine urban development and redevelopment alternatives.
- Initiate a competition for the design of houses which are more sustainable and healthier for the inhabitants and the global environment.
- Evaluate the sustainability of building methods, materials, components and design, some of which may not yet be commercially available or acceptable within present codes.
- Continue to work with industry to identify opportunities to reduce, re-use or recycle construction waste. Transfer lessons learned in the construction waste management demonstrations to industry through workshops and seminars.
- Complete research on water conservation, rationalized house energy systems, consumer housing choices, and material selection for sustainability.
- Initiate work on community energy systems and basic housing energy needs.
- Initiate the second phase of an environmental impact study for housing, including technology assessments.

- Continue to work internationally with the United Nations Commission on Human Settlements (UNCHS); the Organization for Economic Cooperation and Development (OECD) Group on Urban Affairs; and the United Nations-Economic Commission for Europe (UNECE) Committee on Human Settlements to focus their work on the role of cities in sustainable development and to act as a conduit for information exchange.
- Determine domestic and international sources of research material on comprehensive approaches to housing, social, and economic problems through integrated community strategies.

ISSUE

2. Settlement Issues

RATIONALE

The Corporation's activities involve it in a number of issues related to human settlements which require background research and in some cases, contributions to other research programs.

ACTIVITY

- Examine rural planning/housing issues which may contain future housing development.
- Conduct an analysis of sample municipalities' debt positions, borrowing capacity, and expenditures on "hard" versus "soft" services.
- Investigate existing urban indicators and their potential for expansion to provide national indicators with respect to quality of life.
- Examine the potential for the development of an inexpensive sampling protocol to facilitate the environmental screening of affordable redevelopment sites.
- Examine ways to reduce land costs for home ownership.
- Examine ways to coordinate and reconcile the linkage between urban transport and urban land-use.
- Examine the potential of the emerging European concept, "urban ecology" as a framework for improving sustainability in Canadian land use planning.

ISSUE

3. Global Strategy for Shelter to the Year 2000

RATIONALE

In December, 1988, the United Nations General Assembly adopted the Global Strategy for Shelter to the Year 2000 (GSS). The main objective of the GSS is to facilitate the provision of shelter for all by the year 2000. Each member state of the United Nations is responsible for

developing and monitoring a plan to implement this strategy. Developed countries are encouraged to contribute expertise, information and/or financial assistance to developing countries.

Canada has expressed public support for the GSS. CMHC, as the lead federal agency on human settlement matters and as advisor to the federal government on urban issues, is the active domestic agency for coordinating Canada's plan for the GSS, in co-operation with other departments, all levels of governments, non-governmental organizations, academics and the UNCHS.

ACTIVITY

- Continue to address GSS goals through implementing federal housing policy, and supporting an international aid component, co-ordinated by the Canadian International Development Agency (CIDA).
- Provide Canadian expertise and information on selected topics (e.g. mortgage financing) as required.
- Prepare a progress report for the 13th Session of the Commission on Human Settlements to be held in Harare, April 1991.
- Initiate activities which encourage Canadian contribution of expertise, information and/or financial assistance to developing countries in the context of the GSS, in co-operation with CIDA.

ISSUE

4. Multiculturalism

RATIONALE

Under the new Multiculturalism Act (1988) federal agencies are required to make multiculturalism part of their own policies and programs. The Secretary of State, in notifying CMHC of its responsibilities under the Act, has initiated discussions about racial discrimination in housing. Current public housing policy development work has identified racial segregation as a concern in larger, urban public housing projects.

ACTIVITY

- In co-operation with the Secretary of State, conduct a study of racial discrimination in housing in order to determine the nature and extent of any potential problems, and possible solutions.

ISSUE

5. Future Studies

RATIONALE

The Centre for Future Studies will examine potential changes in demographic, social and economic structures, the future relationship between housing and social policy, and the changing living conditions in urban and rural areas.

ACTIVITY

- Explore the relationship between economic growth and population growth examining the impacts on housing; for example, examine the relationship between sustained economic growth and the supply of affordable housing.
- Examine the longer term implications of changes in the nature of work, including the growth of the service sector, and the potential implications for housing and the spatial nature of settlements.
- The factors affecting both the demand and supply of rental housing to determine the future of the rental market.
- Explore the link between shelter and economic/social development. Is there a trend toward increasing and long term levels of dependency? Initiate longitudinal research into these issues. Explore opportunities to create incentive for active economic and social participation.
- Evaluate the importance of quality of life as a locational determinant. What are the factors contributing to quality of life. How do Canadians identify quality of life? Can this be quantified and to what extent have models measuring quality of life been developed? What new data is necessary to enhance the measurement of quality of life?
- Explore the emergence of the major-city in Canada. What is too big? What are the implications of concentration in Canada's three largest centres? Concurrently, what is the role of the "second tier" city?
- Determine the extent to which rural depopulation continues and examine the implications for both the place of origin (rural) and destination (urban). What happens to rural migrants - are they integrated into the urban labour force or the urban welfare roll? What incentives (economic development opportunities) exist to stabilize rural communities?

ISSUE

6. Safety and Security

RATIONALE

Consumer interest in existing CMHC information on protection from burglary indicates a need for wider dissemination of this material.

Through its research, CMHC has identified that some households will unnecessarily experience property damage and loss of life due to the absence of operational smoke alarms.

CMHC has also determined ways households could reduce the potential impact of earthquakes.

ACTIVITY

- Consolidate the findings from recent research on fire sprinklers and smoke detectors and make them more accessible to fire and crime prevention officials, builders, consumers and industry.
- Develop practical solutions based on lessons learned from the San Francisco earthquake. Describe the characteristics of high risk structures and develop appropriate retrofit strategies to minimize the risk of damage in the event of an earthquake.

7. Toxic Lands

RATIONALE

Communities are being planned on or near hazardous lands (eg. the Ataratiri project in Toronto), and there is a considerable amount of public and regulatory review of these sites. Houses already built on or near toxic soils may need measures to ensure occupant health and safety. Investigation of this issue now, may reduce the need for costly clean-ups in the future, as well as result in better occupant health.

ACTIVITY

- Complete a survey of housing and toxic lands initiated in 1990 and initiate an investigation of the more promising remedial measures identified in this survey.
- Initiate the preparation of a municipal guide on dealing with toxic lands.
- Initiate research on the impact of soil gas venting.

ISSUE

8. High Rise Design and Construction

RATIONALE

Several types of cladding systems used in high rise residential buildings have shown severe enough failures, during their design life, to cause economic hardship for the owners, and in some cases safety problems. Brick veneer on steel stud (BV/SS) or concrete block (BV/CB) backup walls are still of great concern. A new source of cladding concern is stucco and coating systems.

The increased construction of condominium multi-unit buildings and the conversion of apartment buildings into condominiums has increased the number of complaints from owners with regard to noise control. This issue has been recognized and addressed in part by the Associate Committee in the 1990 National Building Code (the Sound Transmission Class Rating for air borne sounds will be increased from 45 to 50 Decibels). Builders will require information on economical methods of achieving the new noise separation requirements and of addressing other issues which are not addressed by the National Building Code (NBC).

The NBC requires that an air barrier be integrated into the building envelope to prevent the infiltration and the exfiltration of air to prevent moisture problems. Air leakage is probably also the most important source of energy loss in high-rise buildings.

High rise mechanical HVAC (Heating Ventilation and Air Conditioning) and electrical systems have a major effect on the amount of energy consumed, the carbon dioxide generated and the indoor air quality levels achieved in a building.

ACTIVITY

- Examine the technical feasibility and cost effectiveness of strategies for servicing or repairing existing BV/SS buildings.
- Develop advisory documents and workshops aimed at builders and designers of high rise buildings.
- Develop a document for property managers to advise them of the potential for post construction failures, how to determine the state of the cladding system, and what to do if work is required to service or maintain the wall.
- Determine the extent of stucco and coating failures and if possible the most probable causes of failure.
- Develop a workshop for architects and consultants on highrise envelope design.
- Examine ways to reduce noise transmission between units from household appliances such as washing machines and dishwashers.

- Determine and demonstrate methods of air sealing high-rise apartment buildings to avoid energy loss and moisture problems in the building envelope.
- Develop diagnostic tools to determine how moisture is entering the wall cavity (rain or air leakage). Survey the tests and methods that are currently being used by the industry to determine their efficacy and their costs and benefits.
- Further develop computer programs for analyzing wall assemblies and validate them against field and lab data.

ISSUE

9. Restoration of Structural Concrete

RATIONALE

Canada has experienced its share of problems with concrete and CMHC has played a lead role in determining some of the causes of the problems. The Corporation, since 1981, has funded a series of studies directed at the investigation of failing structural concrete, the search for durable remedial measures for these failing structures, and provided assistance to organizations writing restoration documents and standards.

ACTIVITY

- Summarize concrete research findings emphasizing why concrete problems have occurred including work by IRC/NRC, academics, utilities, provinces and CMHC.
- Document international research on diagnostic approaches to evaluating post-tensioned systems and highlight the possible range of remedial measures that might be employed on these systems.
- Conclude, with IRC/NRC, an analysis of data on parking garage repairs. These data were collected through a multi-agency study of parking garage deterioration.
- Complete a national survey on the carbonation problem. This work, based on a Corporation funded pilot study which confirmed the presence of carbonation in Toronto, will include trials of remedial measures.

ISSUE

10. Moisture

RATIONALE

Moisture is a prime cause of building structural degradation and indoor air quality problems.

Studies in this area are important because of the impact of moisture on occupant health, structural degradation and Canada's wood product export markets. Humidity levels which are too

high or too low can reduce occupant health. Moulds are thought to contribute to respiratory disease.

Exfiltration of moist air into wall cavities and attics can cause serious structural deterioration, as well as cosmetic problems. Poorly designed wall sections can inhibit proper drying of walls due to wetting from internal or external sources promoting rapid deterioration of the wall components. Moist air can also promote degradation of housing components e.g. flooring and partition walls.

ACTIVITY

- Continue testing of attic and crawl space moisture control strategies.
- Use WALLDRY, a moisture simulation program, to assess moisture problems in walls and adapt it for use on high-rise walls.
- Determine the frequency of occurrence of indoor mould colonization and the process by which it occurs.
- Conduct field moisture work including investigations of moisture problems identified by the HBA's and other industry partners, e.g. wall bowing and moisture in particleboard underlay.
- Develop and deliver seminars on moisture and house construction.

ISSUE

11. Ventilation and Indoor Environment

RATIONALE

Ventilation and indoor air quality (IAQ) have been a major focus of technical research at CMHC. This research represents an area where CMHC can assist the housing industry in adapting to new technologies. New housing in Canada has changed significantly over the past few decades, becoming tighter and more energy efficient. Despite significant reductions in energy consumption and improved comfort, new concerns have evolved over the last decade including ventilation, combustion safety, mould and mildew, building materials and furnishings which may emit chemicals of unknown effect on human health and comfort. The existing housing stock is also becoming tighter and more energy efficient. Renovation activity now equals new housing activity. It is speculated that the concerns currently observed in new housing are manifesting themselves in the renovated stock as well. Sustainable development in housing has become a priority and as a result efforts will be renewed to make housing more energy efficient while maintaining or improving the indoor environment.

ACTIVITY

- Convert theoretical solutions into practical advice for consumers, home builders, the residential ventilation industry and codes and standards bodies.

- Complete a compendium of ventilation research, further develop "how to" guides, and evaluate existing ventilation courses.
- Undertake research to address implementation issues raised by builders and trades related to the CSA F326 Ventilation Standard.
- Initiate additional work on fireplace air intakes, and provide support to uses of CMHC's combustion spillage training module.
- Provide information to the public on indoor air quality and the operation of their homes.
- Conduct research on demand control of mechanical ventilation, durable fans, indoor pollutant, and model the effects of ventilation on air quality.
- Complete work on suitable building materials and investigate cost-effective measures which address the needs of the chemically sensitive.

ISSUE

12. Technical Innovation

RATIONALE

Canadian housing, construction techniques and systems are changing rapidly. The impetus for these changes comes from an acute awareness of environmental issues, special needs, housing quality, competitive free market conditions and the development of new products and construction techniques that can be applied to site servicing and residential construction.

Practical information regarding the technical performance, economics, and environmental impact of innovations will empower the industry to become more proactive in domestic and international markets.

ACTIVITY

- Support the development and demonstration of Canadian housing innovations in cooperation with the private sector.
- Single out some systems which may have attributes which lend themselves to specific applications, and work with industry to develop the systems to meet CMHC's objectives in housing quality and affordability.
- Investigate approaches to building basements which will solve potential moisture and soil gas problems.
- Follow up work on earthquake resistant structures.
- Complete the investigation of better ways of managing storm runoff to prevent flooding and damage to basements and reexamine traditional drainage policies and basement designs.

- Develop a paper on how CMHC's previous research could be helpful to the issue of infrastructure renewal. This could include the dissemination of information on innovative and cost effective renewal technologies.

ISSUE

13. Renovation

RATIONALE

The following activities are listed under other issues but have been consolidated here to underscore the importance of renovation to the housing sector.

ACTIVITY

Industry Initiatives

- Continue the CMHC/CHBA Renovators Seminars.
- Investigate the needs of the private renovation inspection industry.
- Promote the site waste reduction program for renovation.
- Examine strategies for repairing brick veneer/steel stud buildings.
- Develop information on labour and materials used in renovation activity.

Consumer Initiatives

- Consolidate and disseminate research on smoke detectors and fire safety.
- Disseminate information on home repair, maintenance and renovation.
- Disseminate information on retrofitting for earthquake preparedness.
- Explore ways of providing seniors with home renovation and conversion services.

ISSUE

14. Northern and Remote Housing

RATIONALE

Conventional building products, systems and construction techniques used and proven in the southern and urbanized 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 high in northern and remote areas as a consequence of having to import construction materials, fuel and labour from the south.

The environmental impact of community planning and housing design in the fragile arctic ecosystem is a new international concern, being discussed in the context of sustainable development. In Canada and other circumpolar countries, communities are thinly populated and wide spread across remote areas. Good design practices and housing information needs to flow to and from the design community.

ACTIVITY

- **Demonstrate the monocoque house technology in cooperation with Canadian arctic and circumpolar housing agencies.**
- **Continue investigating energy efficient heating technologies such as co-generation and the domestic hot water tank system that offer reduced capital cost and reasonable economic payback.**
- **Review the community design and planning process in the context of environmental factors such as wind, snow, solar, water supply, and waste disposal and prepare some guidelines which would increase environmental awareness and provide technical support to communities that want to improve their social and physical environment.**
- **Document affordable rural house and system designs.**

SUPPORTING HOUSING MARKETS

In facilitating the efficient operation of housing markets, the government faces three key challenges:

- encouraging an adequate supply of affordable housing across the country;
- promoting greater stability and security within the context of economic change; and
- supporting the effective adjustment of housing markets to shifts in demand arising from demographic, economic and social changes.

ISSUE

1. Housing Affordability

RATIONALE

Many Canadians cannot afford to pay the market price of appropriate housing, forcing them to settle for inadequate accommodation, pay a disproportionate amount of their income for housing, or become dependent on subsidies.

In times of fiscal restraint, it is unlikely that available public funds will be sufficient to meet the needs of all households faced with a housing affordability problem. It is, therefore, important to enable as many households as possible to meet their needs with their own resources and ensure that available public funds are used most effectively for those in greatest need.

ACTIVITY

- Continue support to the A.C.T. Program to encourage municipalities and the housing industry to cooperate in identifying how changes to the regulatory environment can enable the production of a greater choice of affordable housing.
- Identify innovative types of housing, project development and servicing that have the potential to improve the choice of affordable housing but are dependent upon regulatory change to facilitate their adoption in Canada. These ideas will be evaluated, packaged and conveyed to the private and non-profit sectors of the housing industry through a series of publications to illustrate potential opportunities for demonstration projects, under the A.C.T. program.
- Examine ways of combining different approaches to producing more affordable housing. Such approaches include studying impediments, providing opportunities through financing and site servicing innovations; maintaining existing stock; and/or requiring the provision of affordable housing. By combining these approaches, their potential for improving housing affordability can be maximized. This work would draw from, and provide input to, the Canadian contribution to the development of a "Global Strategy for Shelter."

ISSUE

2. Homeownership Accessibility

RATIONALE

In light of rapid changes occurring in society, it is important to assess the ability of Canada's housing finance system to serve the needs of consumers, investors, mortgage lenders and mortgage intermediaries, as well as the housing and real estate industries.

Homeownership accessibility and housing affordability must be addressed simultaneously. Improving housing affordability will not increase homeownership unless the appropriate financial instruments are available. Similarly, the availability of innovative mortgage instruments would do little if the underlying housing is not affordable.

ACTIVITY

- Conduct an integrated and comprehensive assessment of opportunities for making the system more complete. This will include an in-depth analysis of index-linked mortgages, Registered Retirement Savings Plans as down payments, Mortgage Backed Securities enhancements, and creative use of NHA insurance.

ISSUE

3. Market Intelligence

RATIONALE

CMHC's projections of long term potential housing demand, short term national economic and housing forecasts as well as local market forecasts must all be accurate and credible to the Corporation's external clients. A regular flow of housing market information and analysis helps the industry and government understand current developments and plan for the future. A lack of information can lengthen the adjustment process to changes in the market and prove costly to producers and consumers.

ACTIVITY

- Continue work begun in 1990 to explore methods to project net replacement demand. Where feasible, program the results of this work into the Potential Housing Demand model. Continue the work on improved projections of tenure choice and household headship rates.
- Initiate revisions to the Potential Housing Demand model in preparation for the distribution of the model to users outside of CMHC.
- Initiate the examination of available information on the household formation and tenure choice characteristics of immigrants. This includes an assessment of the potential impact on future housing requirements.

- Develop and test a macroeconomic model(s) of the housing sector (focussed on the National level).
- Examine different methods for forecasting the local housing market.
- Conduct a survey in order to obtain a profile of potential and actual first time buyers. Spending patterns will also be examined.
- In cooperation with other agencies (e.g. E.I.C. and Statistics Canada) develop information on labour and materials used in renovation activity.
- Study the problem of measuring the level of investment and speculation in demand driven markets and identify their role in contributing to housing price increases.
- A study of the impact of migration will be completed in 1991. Should the study indicate that international and domestic migration have important impacts on the housing sector and should the simulation model prove to be useful as a tool for market analysts, work will be undertaken in 1991 to extend the model to cover all metropolitan areas.
- Undertake a builders' sales survey.

ISSUE

4. Rental Markets

RATIONALE

There are three fundamental issues in rental markets. Firstly, regionally-specific demand-driven rental markets have emerged in an environment of a general decline in the demand for rental housing at the national level. Secondly, the financial parameters governing the viability of rental investment, particularly interest rates, taxation and investment alternatives, are changing. Thirdly, an increasingly-regulated rental sector is now the characteristic feature in some provinces.

ACTIVITY

- A comprehensive policy review will be undertaken and will address three questions: (i) why is the rental situation the way it is today? (ii) what is the desirable market configuration? (iii) what can governments do to achieve and sustain that desirable market configuration?

ISSUE

5. Housing the Elderly

RATIONALE

The elderly population (over 65) will increase from approximately 11% to 25% of the total population by the year 2031. The over 75 age group will almost double before the end of the century.

In a recent series of studies on the impacts of socio-demographic change, conducted by twelve member countries of OECD (including Canada), all twelve identified the aging of the population as the trend which will have the most significant economic and social implications. The growth in the elderly population, particularly in the over 75 group, could result in heavy demands on public funding for housing and related support services if past patterns of need are maintained and ways of enabling seniors to use their own resources most effectively are not developed. CMHC can facilitate appropriate housing options for seniors by encouraging private sector participation in providing accommodation and support services to seniors.

ACTIVITY

- **Convene a thirteenth seniors housing conference devoted to the particular problems encountered by seniors living in remote and northern communities.**
- **Work with health and social service agencies to evaluate alternative combinations of accommodation and services, and ways of co-ordinating the financing and delivery of the most cost-effective combinations.**
- **Examine the practicality and financial implications of adopting the concept of universal and adaptable design.**
- **Examine the magnitude and variety of situations resulting in the displacement of seniors from affordable private rental projects, and evaluate alternative ways of enabling displaced seniors to remain in their neighbourhoods and communities, through intensification projects and regulatory concessions.**
- **Examine the potential policy implications arising from issues and opportunities, related to enabling tenants in social housing projects to age-in-place; to provide more flexible programs to reflect the diverse nature of the elderly population; to improving access to financing for non-profit groups to build resident funded projects; and to improving access to financing for seniors to adapt/convert their homes.**
- **Develop instruments, including those based on NHA insurance, to promote financial flexibility and tenure security amongst elderly homeowners.**
- **Participate in an interdepartmental survey of seniors.**

HELPING NEEDY HOUSEHOLDS

In striving to help Canadians in need of housing assistance, the Corporation faces the following challenges:

- Ensuring that financial resources are well targetted to housing needs and that social housing plays its proper role in Canada's social safety net.
- Achieving greater cost-effectiveness so that more can be done within the budgets available.
- Protecting the existing stock so that it can continue to be used as a major resource in serving and improving the quality of life of needy households.
- Making sure that federal housing objectives and accountability requirements are met under federal-provincial arrangements in social housing and that Canadians are aware of the federal contribution in social housing.

ISSUE

1. Policy Improvements for Social Housing

RATIONALE

The policy development process at CMHC is two-staged. Changes or enhancements are considered on the basis of program evaluations, which are followed by public policy consultations. In 1991, a total of three new evaluations are planned, and three evaluations launched in previous years are slated for completion.

Evaluations of the federal/provincial Urban Native Housing Program, the Research, Information and Communications Programs and Project Haven will commence in 1991.

The completion of the evaluation of several market housing assistance programs is also slated for 1991. These include: the Limited Dividend, Assisted Rental, Canadian Homeownership Stimulation and Canada Home Renovation programs.

In order to assess the need for policy and/or program improvements, public policy consultations for the Public Housing and the Rural and Native Housing Programs are ongoing in 1991.

ACTIVITY

- New program evaluation, an Urban Native, Research, Information and Communications and Project Haven.
- Public release of program evaluations on Rural and Native Housing Programs and the Federal Co-operative Housing Program.
- Completion of progress evaluation of Rental Programs.

- Consultations, follow-up implementation strategies and negotiations with the provinces for the Cooperative Housing Program, the Rural and Native Housing Program, and Public Housing Programs will be undertaken in 1991.
- Continue to participate with Indian and Northern Affairs Canada in the development of On-Reserve housing options.
- Carry out research to support the development of policy for dealing with the future of the social housing portfolio.

ISSUE

2. Life Cycle Costing

RATIONALE

There is increasing concern that the emphasis placed upon controlling the initial capital costs of subsidized housing is having a detrimental effect on ongoing costs. Over the life of a project, the ongoing costs for energy and major repairs and replacements can be substantial, particularly in areas with severe climatic conditions. In designing a project, it is possible to upgrade materials and components to improve its energy performance and durability.

ACTIVITY

- Complete the life-cycle costing analysis of CMHC Rural and Native Program house designs.
- Begin development of an interface with Computer Aided Design (CAD) systems and determine optimum operating systems for the life-cycle costing model.
- Begin development of a life-cycle costing system for high-rise structures.

ISSUE

3. Self-Help

RATIONALE

In the ongoing search for effective and innovative approaches for meeting the nation's shelter needs, self-help has emerged as a feasible and cost-effective option. With our growing appreciation of the approach, questions have arisen concerning the role government should play in this sector, with respect to both social and market housing.

There is growing concern that existing social support programs may be contributing to weaker economic performance and the increased marginalization and exclusion of certain groups from mainstream society. A new focus appears to be emerging which would see social programs in the future emphasizing independence and transition.

There is a need for further work to be carried out to assist people involved in self-help efforts and to demonstrate the positive outcomes of self-help initiatives.

In order to ensure that housing units are constructed affordably in remote locations it may be more cost effective to utilize the local labour force. This would ensure that sufficient skilled and unskilled manpower was available when needed and would also reduce, or eliminate entirely, the cost of transporting labour from outside the community and the resulting loss to the local economy.

ACTIVITY

- Carry out demonstrations of tenant participation in the administration of their public housing projects. The demonstrations would be tenant-led initiatives that implement innovative ideas across the country.
- Demonstrate the feasibility of people in remote areas with building skills forming construction companies to bid on future housing projects through management training and skills enhancement.
- Prepare an advisory document for self-builders, based on the knowledge gained through the RNH Demonstration program.

ISSUE

4. Housing Needs

RATIONALE

Comprehensive and timely information on housing needs is essential if government resources are to be effectively deployed. Housing needs data are required for research policy development, strategic planning, program evaluation and program planning purposes. Up-to-date, estimates of core housing need are particularly necessary to ensure that federal social housing dollars are allocated fairly, in accordance with need. As a result, improved indicators of housing need must be developed not only for the purposes of the current social housing programs but also to enhance assessments of housing need in more general terms.

ACTIVITY

- Continue work on the examination of a variable shelter cost-to-income ratio for use in the measurement of housing need.
- Analyse data from the 1990 HIFE survey (which will become available in mid-1991) to detect changes in the housing needs of renters.
- Undertake work on the development of improved indicators of housing adequacy. (This will be done in conjunction with other initiatives on the measurement of house condition.)
- Provide support to a Post-Censal survey of natives and the 1991 HIFE survey.

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. In 1991, these will include the following activities:

External Research Program

Provide grants for innovative and high quality housing research investigation submitted in an annual national competition.

Housing Technology Incentives Programs

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

Scholarships Program

Develop Canadian housing expertise by assisting graduate students who specialize in studies related to housing and community planning.

Housing Awards Program

Planning for the 1992 Housing Awards Program will begin in 1991.

Job-Site Innovator Awards Program

Provide 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 coordinates the exchange of information in the fields of housing and urban affairs, community/regional planning and development across all levels of the Canadian government and acts as a catalyst promoting consideration of human settlement issues of national importance.

Canadian Housing and Renewal Association (CHRA)

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

Housing Research Institutes (Mount Allison and University of Winnipeg)

The housing research institutes carry out programs of research, academic courses and exchanges, and outreach within their respective regions. Mount Allison specializes in rural housing and community development issues in the Atlantic region, while the University of Winnipeg focuses on urban and northern issues in the Prairies. Both programs complement CMHC's research.

United Nation Centre for Human Settlements (UNCHS)

Provide 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 Nation' system.

Housing Affordability Program

CMHC along with the Société d'Habitation du Québec and private sector sources are contributing to the start up of the Affordable Homes Program at the School of Architecture - McGill University. This undertaking, which focusses upon first time homebuyers, will include research, education and promotion of approaches which will reduce housing prices thereby increasing access to homeownership.

THE HISTORY OF THE UNITED STATES

The history of the United States is a story of growth and expansion. From a small collection of colonies on the eastern coast, it grew into a vast nation that spanned the continent. The process of westward expansion was driven by the desire for land, resources, and new markets.

The American Revolution was a pivotal moment in the nation's history. It was a struggle for independence from British rule, fought between 1775 and 1781. The revolution resulted in the signing of the Declaration of Independence in 1776 and the adoption of the Constitution in 1787.

The early years of the United States were marked by a period of relative stability and growth. The nation's economy expanded, and its population increased. However, the issue of slavery remained a contentious one, leading to the Civil War in 1861.

The Civil War was a conflict that reshaped the United States. It was fought between the Union and the Confederacy from 1861 to 1865. The war resulted in the abolition of slavery and the preservation of the Union.

Following the Civil War, the United States entered a period of reconstruction and industrialization. The nation's economy grew rapidly, and its influence expanded globally. The Gilded Age was a time of great wealth and power, but also of corruption and social inequality.

INFORMATION AND TECHNOLOGY TRANSFER

CMHC will continue to transfer information through existing and new forums. In 1991 Information and Technology transfer initiatives will include the following:

Housing Research Committee

Continue to increase cooperation on research initiatives. Continue to increase awareness of research underway and completed and the results of this research.

Builders' Workshops

Refine and continue delivery of workshops in cooperation with the provincial homebuilders' associations.

Renovation Seminars

Refine and continue delivery of seminars for renovation contractors in cooperation with the provincial homebuilders' associations.

Highrise Construction Seminars

Deliver the results of CMHC research and development to designers and builders through seminars and workshops in collaboration with industry.

Advisory Documents

Produce new and revised publications with practical advice for builders, renovators, designers and consumers and disseminate information through conferences, homeshow, mailout and other special events.

Canadian Housing Information Centre (CHIC)

Continue to make housing and community planning related research and information available through CHIC.