

2004 - 2008
Research Theme
Framework



HOME TO CANADIANS
Canada 

2004 - 2008 Research Theme Framework

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Introduction

CMHC's research plays an important role in maintaining and enhancing the high standard of Canada's housing. For 2004-2008, CMHC has established a framework to guide its research that reflects CMHC's overall commitment to improving the affordability, quality and choice of housing for Canadians. Research will be done in five broad theme areas: improving the efficiency of housing markets, housing needs of communities, distinct housing needs of individuals, building performance and technology, and improved data on housing issues. This framework will guide the selection of individual research projects, which are determined on an annual basis. The new framework is the result of wide-ranging consultations with current and potential partners, stakeholders and the housing research community.

A. Overarching Themes: Affordability, Quality and Choice

Affordability, Quality and Choice considerations are so integral to research overall that they have become overarching themes for the entire framework. For example, the ultimate affordability of housing can be addressed while exploring builders' risks and liability, examining issues in urban communities, addressing the needs of low-income people, or investigating repair and maintenance costs as part of envelope performance. Quality can encompass research into the soundness of housing systems and the reasons for their failure, the demonstration of sustainable community planning and design practices that are worth imitating, the identification of preferable options for seniors as they relate to housing and support services, or the development of best practices for maintaining an optimal moisture balance within the home. Choice can result when alternate technical approaches to the supply and treatment of residential water are developed, different types of renovations that can be undertaken to offset the effects of disability are examined, inter-relationships between housing and social well-being are better understood so that social inclusion is effected, or information to the consumer is provided which allows them to exercise discretion when making housing decisions. Against this backdrop of Affordability, Quality and Choice, there are five defined Research Themes in the Framework.

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B. Theme One: Improving Market Effectiveness

A well-functioning housing sector enables the marketplace to be the primary vehicle to meet the shelter needs of society. Market participants include builders, developers, realtors, lenders, insurers, investors and others. Market ineffectiveness exacts a high cost from society. Consumers will have fewer shelter choices. And they will pay higher housing prices. The consequence is a larger affordability problem for governments to solve, therefore more pressure on governments to help the disadvantaged. From a macroeconomic perspective, a dysfunctional housing sector reduces growth and jobs. However, not all members of society have the financial means to compete effectively in the housing market. Nor is the marketplace willing or able to meet distinct housing needs. Consequently, governments help those who cannot reasonably afford adequate or suitable shelter on their own in the private market.

1.1 Housing Costs

Housing prices are determined by land, labour and material costs, as well as other direct input costs. Housing prices are further determined by indirect input costs, including financing, insurance and other soft costs, municipal development charges, taxes, and R&D investments. Profitability is also a pricing determinant. However, the social costs of housing, such as those engendered in urban sprawl, are generally not captured in pricing mechanisms.

Protection is acquired by home builders via builders risk insurance, wrap-up general liability insurance and contractors commercial general liability insurance. The cost and availability of this protection are ultimately determinants of the supply and affordability of housing.

Municipal policies are supported by a multiplicity of instruments, including development approval, lot levies and property taxes. Development approval affects housing choice, while lot levies impact on the front-end cost of housing and property taxes affect long-term housing affordability. At the provincial level, governments have the power to levy sales tax and land transfer tax and to enact formal or informal rent controls or regulated tenant-landlord relations. Building codes are provincial purview and so are consumer protection and liability. Federally, housing is part of the GST, but residential rents are GST-exempt. Rental housing is subject to both federal and provincial income tax. The federal government also have indirect regulatory influence on housing through, for example, the Bank Act and other legislation governing financial institutions, OSFI supervision, and the model National Building Code.

1.2 Long-term Supply of Factors of Production

Production of housing requires a variety of inputs, including land, labour and materials. In the short-run, the supply of residential lots is fixed. However, in the long-run, the supply of residential lots is determined by municipal policy on urban sprawl and the economics of land assembly. The short-run supply of construction workers is variable, with allocation of the total labour force determined by, for example, relative wages,

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while the long-run supply is driven by demographics and the relative competitiveness of the house-building profession. Construction materials are variable in both short- and long-run, particularly those where product substitution is available. Some construction materials are subject to international trade and exchange-rate considerations.

1.3 Innovation and Productivity

Innovation and productivity are linked, as some innovation is a driver of productivity. In a similar vein, productivity and skills are linked, because an adequate supply of skilled labour is a driver of productivity and because productivity is a driver of wages, which, in turn, is a driver of labour supply. Innovation and skills are linked, as some innovation creates requirement for new skills. Some innovation increases productivity. Such productivity increases will result in higher wages. And higher wages are critical to ensuring an adequate supply of workers. Society wants a productive housing sector, because, other things being equal, housing produced by a housing sector that is more productive is more affordable than housing produced by a housing sector that is not. Society also wants housing built by skilled labour, because this is a driver of housing quality.

Society wants housing built and serviced by competent professionals, because this is a driver of quality and performance, health and safety, and life-cycle costs. While some construction professions are regulated or licensed, some are not. Housing is allowed to be produced through self-build and consumers are allowed to engage providers of housing services who may not be technically competent. Technical competence is also a prerequisite for industry innovation and productivity.

1.4 Housing Finance

Investment in housing typically involves debt financing. This relationship means that a shortage in mortgage funds will reduce the level of housing production, which may result in a shortage of housing. It also means that an increase in mortgage rates will reduce the affordability of housing. The system of housing finance is designed to intermediate between the supply of and demand for home loans under a wide variety of economic conditions. It is integrated into the capital market and based almost entirely upon private-sector funds. Hence, housing must compete with other demands for capital. The federal government maintains a national facilitative presence in the marketplace through CMHC's commercial mortgage loan insurance and securitization activities.

1.5 Information for the Consumer

Market effectiveness is determined partly by the extent to which the consumer is able to make informed consumption decision. Informed consumer purchase decisions provide validation signals to producers on product design, choice, pricing and other variables. This, in turn, ensures proper allocation of resources amongst the various sectors of the economy. Housing consumption is complex, because it involves knowing the physical attributes and performance of the dwelling, the financing of it, legal obligations and other subject areas.

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1.6 Housing System Failures

The housing system in Canada is highly developed, but it is not fail-safe. Although infrequent, the housing system has failed the consumer from time to time. These failures were unforeseen without the benefit of hindsight. They were multi-faceted, requiring extensive research to determine the causes and solutions. More importantly, they were latent problems, hitting many unsuspecting in a costly way and creating considerable distress, urgency and health and safety concerns. The repair cost was far above the amount the average household could reasonably afford. Caveat emptor generally does not apply in housing system failures.

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C. Theme Two: Strengthening Community Well-Being

There are many factors which contribute to the development of community, including the physical form of the urban and rural environment, the social interaction of citizens within their community, and the economic activity centred in the community. Housing, as a fundamental component of community, individually provides shelter in the dwelling unit and collectively defines the neighbourhood and contributes to social structure. It provides a focal point for daily activity, a connection to work and play, access to community services such as health, education and social services, and the collective sense of place. Community is determined by the physical form of the neighbourhood, the inter-relationship between adjacent neighbourhoods and districts and exists at different scales--from large metropolitan areas, to medium-sized cities, small towns and isolated rural communities. Research on this theme will investigate the role of housing as a contributor to community well-being, identify innovative approaches and solutions which lead to more sustainable and healthy communities and assist in the demonstration of these approaches in communities across Canada. The results will benefit land use and community planners, municipal officials, social/support service providers and community groups.

2.1 Sustainable Community Planning and Design

Sustainable communities recognize that social, environmental and economic concerns must be considered to ensure that long-term viability, competitiveness and quality of life are maintained while accommodating continuing growth and development. The goal of this program of work is to lower barriers to sustainable community planning and design and to investigate ways to ensure that they reduce environmental impacts and costs while maintaining community livability. Research will focus on: raising awareness amongst decision makers as to why these approaches should be considered, developing tools and innovative solutions to implement alternative planning and development approaches, and assisting in the demonstration of these approaches in communities across Canada. A major element of these activities will be the development of partnerships with governments at all levels, with the development and home building industry, and with non-governmental organizations active in municipal affairs, environmental sustainability and community development.

2.2 Rural / Northern / Remote

Rural, remote and northern communities experience particular problems with respect to community development by virtue of their small size or isolated location. This program of work will collect base data, develop community indicators, and examine rural economics, including the role of housing in local community development. Tools and approaches for community planning and development will be assessed for their applicability and adaptability to the needs of rural and remote communities, and partnerships for the dissemination of information, examples and best practices to communities will be investigated. Partnerships will continue to be used to build on the work of other organizations addressing issues affecting communities.

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2.3 Urban Communities

Canada is one of the most urbanized countries in the world with over 80% of the population living in urban areas and almost half living in the four largest metropolitan areas. Canadian cities, however, also face complex, interrelated challenges that are having adverse effects on quality of life and long-term sustainability. These include: urban sprawl, which in turn leads to rising energy consumption, greenhouse gas emissions and the loss of prime agricultural land; pollution to air, water and land; and the related health issues that affect vulnerable populations such as the young, the elderly, and the sick. Canadian urban communities also face the following challenges: access to affordable housing, homelessness, inadequate infrastructure, financial constraints, immigration, the downturn of traditional industries and the shift in the skills required for a knowledge-based economy. Research in this area will examine issues such as urban infrastructure, residential intensification and brownfield redevelopment.

2.4 Social Inclusion

Social inclusion, the involvement of all segments of the Canadian population in society, is a fundamental challenge that must be addressed to ensure the continued health and well-being of Canadian cities. Research will investigate the linkages between housing policies and programs and societal outcomes and the inter-relationships between housing and social well-being. This program of work will explore questions such as: What is the role of housing as one of the policy instruments available to government? Why are some places able to achieve better social, economic and community well-being and what part does differing community or neighbourhood characteristics play? How can community planning and development principles and practices contribute to increased belonging and strengthen community bonds amongst all groups?

2.5 Housing and Population Health

The objective of this research is to determine the aspects of housing that affect health and explore those aspects that contribute to population health and well-being. Much of the research will be exploratory in nature, including the development of indicators of housing and population health and examining the linkage and relationship to community well-being. It will be informed by the discussions of the National Housing Research Committee's Working Group on Housing and Population Health and will be conducted in partnership with provinces, territories, municipalities and participants in the health and housing communities.

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D. Theme Three: Addressing Distinct Housing Needs

CMHC has a long history of conducting research related to specific populations with distinct housing needs, including Aboriginal people, homeless people, low-income people, newcomers (refugees and immigrants), people with disabilities, people living alone, and seniors. While good progress has been made over the years, a number of challenges remain. For example, housing and living conditions experienced by First Nation households on-reserve and Aboriginal households off-reserve still fall short of those experienced by other households -- overcrowded and inadequate housing is prevalent, and the need for additional housing is compounded by a young and fast-growing population. Homelessness continues to be a significant issue which defies easy solutions and conventional responses. Low-income people continue to face substantial housing challenges, particularly in large urban centers where poverty tends to be exacerbated. The number of newcomers to Canada is growing more rapidly than ever before; and as a group they are becoming increasingly diverse in terms of their education, social, ethnic, lifestyles, family, religion and economic backgrounds. Persons with disabilities continue to need a more barrier-free environment and an improved range of housing choices. The number of seniors -- people over 65- is currently growing at about twice the rate of the general population; and the growth of the senior population will accelerate more and more as we approach the year 2031, when all baby boomers will be over 65, and almost 1 in 4 Canadians will be seniors. As well, an increasing number of people are living alone. No doubt these developments will have implications for Canadians, the housing industry and communities.

Work under this research theme will focus on further investigating issues regarding specific populations with distinct housing needs, and exploring options, solutions and strategies to improve living conditions, access to housing quality, affordability and choice. It will also address issues and solutions associated with the current social housing stock and housing alternatives for all Canadians.

3.1 Aboriginal People

This program of work will seek to contribute innovative solutions that address the unique housing challenges of First Nations/Aboriginal people, support capacity development in Aboriginal communities, and seek understanding of Aboriginal trends, and look for opportunities to improve housing conditions in urban, rural and remote settlements on and off-reserve. "Capacity" can be regarded as a combination of knowledge and skills, and the "development of capacity" as the passing on of knowledge and skills in formats suitable for the various Aboriginal audiences -- First Nations, Métis, Inuit, Non-Status and Treaty.

3.2 Homeless People

This program of work will investigate causes of and pathways into homelessness, and examine and test promising housing solutions, such as supportive housing. It will focus on particular subgroups within the homeless and at-risk population, such as people with mental illnesses or addictions. Research on effective interventions addressing homelessness will build on past research involving best practices, and will also look at

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particular groups, such as families with children. An integral part of this program of work is to facilitate information exchange and networking amongst agencies and relevant government and non-government institutions responding to the needs of homeless people.

3.3 Low-income Canadians

A combination of suitable and affordable housing options, stable or growing household incomes, and strategies designed to help build or improve households assets, is necessary to address the needs of low-income Canadians. This program of work will investigate the housing conditions of low-income Canadians, both owners and renters, and identify promising solutions to improve such conditions. It will examine and compare the conditions in urban centres, small towns, and rural and remote communities while focusing on several subgroups of the population, such as single-parent households, married or common-law couples with children, persons with disabilities, Aboriginal households, and seniors. An integral part of this work will be to examine a wide range of housing solutions, financing and tenure types; investigate and document strategies to help build or improve low-income households' assets; and determine practical and innovative ways to facilitate the construction and maintenance of low cost housing.

3.4 Newcomers

The acquisition of a suitable and affordable place to live and a receptive environment are vital components of the immediate and long-term integration process for newcomers. This program of work will investigate the role of housing and communities as an integrative tool in the successful reception and social inclusion of newcomers in Canadian society. Research will focus on housing needs and preferences, housing conditions, living arrangements, lifestyles, and housing experiences and histories of newcomers as they evolve towards achieving the goal of integration. Barriers, obstacles and success in different jurisdictions across Canada will be examined. Research will also address a number of other issues, including impacts on housing markets (e.g., real estate market, housing costs, rental vacancy rates, subsidized housing); housing suitability, adaptability and change over time; variations within and between geographic areas, particularly related to metropolitan areas where most newcomers tend to concentrate; risk of homelessness; housing accessibility, stability and discrimination; experiences and trends in housing tenure; financing and provision of housing; and housing information needs.

3.5 Persons with Disabilities

People with disabilities want to live independently in their homes, without barriers and with appropriate choices that enable them to carry out their activities of daily living. This can result in numerous benefits to them and society at large. Research in this program of work will focus on examining the types of home renovations that can be undertaken to offset the effects of disability. It will also look at the implications of the renovations for health, quality of life, and cost savings in the provision of health care and home support. The work will also focus on updating existing housing information on

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both new and existing housing, and disseminating it through appropriate channels. Emphasis will be placed on promoting flexible housing solutions.

3.6 Seniors

This program of work will focus on examining housing conditions, trends and issues affecting the senior population; identifying the implications of the aging of the Canadian population for housing and communities; exploring “smart growth for seniors” in urban centres; finding out about the impact of aging-in-place in Canada’s suburbs, small towns and rural areas; and identifying, developing and disseminating information on housing options, innovative financing and types of tenure. Research will also focus on identifying seniors consumer issues as they relate to housing and support services, and on identifying appropriate initiatives to address them.

3.7 Management and Preservation of the Existing Social Housing Stock

The amount and nature of research to be undertaken in this program of work will depend on the needs and interests of provincial, territorial and municipal social housing authorities. The work is expected to include jointly-planned and funded research activities with provinces, territories, municipalities or other housing providers, in such areas as surveys of housing conditions, characteristics of tenants, and issues related to the continued functioning and performance of the housing stock and the well-being of its occupants. The work will result in information and advice for those responsible for the management and operation of the social housing stock, including social housing property managers and tenants. Research and information transfer on technical audits and reserve fund planning to meet the long-term renewal needs of social housing will also be conducted.

E. Theme Four: Improving Building Performance

Quality in the housing stock is reflected in its durability, in the provision of safe and healthy shelter, and in the satisfaction of the occupant. Improved performance in residential buildings also has beneficial outcomes for society - for the environment, for the health of the population and for the economy. Research on this theme is aimed at the performance of residential buildings and systems and will continue to reinforce improvements to the technical performance of housing. Results of this research will benefit consumers, builders, designers and renovators who are seeking to provide and maintain value from their housing investment, and will inform the development process for codes and standards. The cost implications of achieving a level of performance and reasons for unacceptable technical performance of housing will be examined. Research will also identify problems that affect the long-term durability of the residential building envelope (components that enclose the living space) and develop potential improvements. Opportunities for innovation, for housing to better function in Canada's range of climatic and environmental conditions will be examined and practical solutions developed. The promotion of building quality within domestic markets will also serve to enhance our ability to support the export of Canadian housing technologies.

4.1 Energy and Environmental Solutions for Residential Buildings

Research in this program of work will contribute to improving the energy and environmental performance of residential buildings -- by better understanding of the environmental performance of existing housing, assessing and demonstrating residential energy-efficiency technologies and practices, and examining opportunities to link community and building energy-efficiency and supply measures. Attention will be given to reducing residential energy consumption in new and existing low-rise and multiple-unit housing to reduce greenhouse gas production and climate change. The program of work will be co-ordinated with other agencies and the Program for Energy Research and Development (PERD). Included are issues such as insulation levels, air tightness, performance of mechanical systems, resource management and embodied energy. Research will also look to the future of integrating renewables, community energy systems and of next-generation energy technologies into housing.

4.2 Moisture and the Indoor Environment

This program of work will investigate the sources, causes and potential health effects of poor indoor air quality and how these problems can be mitigated or eliminated. Targeted to the consumer and professional audience, an important aspect of the work will address low-rise and multiple-unit moisture problems, and concentrate on best practices for maintaining a proper moisture balance within the home, and on preventing both interior and exterior moisture sources from damaging the building structure. Key to this work will be the investigation of efficient and effective ventilation strategies that can improve the indoor environment without significant, adverse impacts on building energy use.

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4.3 Durability Performance of Residential Buildings

This program of work will examine problems and potential improvements that can increase the long-term performance of residential buildings. Consideration will be given to issues of envelope performance, including durability, health and fire safety aspects, as well as repair and maintenance costs. The implications of design, innovative products, systems and construction and operating practices will be examined. Performance data will be acquired through surveys, direct inspection and monitoring. The transfer of technical information to practitioners, including use of demonstrations, presentations and educational activities, will continue as a priority.

4.4 Residential Water Use and Quality

This program of work will investigate: ways to ensure housing can be provided with an adequate supply of potable water, safe methods of sewage disposal, and more effective storm water management strategies on the building sites and in communities. The water management needs of various residential building forms situated within different community infrastructure and water supply contexts will be examined. The performance of alternate technical approaches to supply and treatment of residential water will be studied and barriers to their adoption and use investigated.

4.5 Disasters

This program of work will investigate practical solutions for making existing and new housing better able to withstand extreme effects of climate, and of the natural and man-made environment. It will address consumers' concerns with the safety and durability of their housing during disasters, and designers', builders' and renovators' needs for information on approaches to better prepare housing to withstand emergent and chronic events. The work will promote design, construction and renovation technologies that will ensure that Canadian housing can offer adequate shelter in the event of natural or man-made disasters.

4.6 Unique Technical Problems of Remote and Northern Housing

Due to the extremes of climate and inaccessibility of remote and northern housing, solutions which provide acceptable technical performance for the more populated regions of Canada may be unacceptable, cost ineffective or inadequate for remote or northern regions. This program of work will focus research attention on the issue of why conventional practices, products, and systems, proven in southern Canada, do not necessarily perform well in remote locations.

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F. Theme Five: Developing Housing Data and Exploring Trends

Research on this theme is aimed at providing industry, government and social housing stakeholders with timely and relevant trend and issue analysis related to households, housing and market conditions as well as related monitoring indicators. This information is needed for informed and proactive decision-making in a time of evolving household and housing market circumstances. The work will entail the exploration of the impact of socio-economic and demographic trends on consumers and housing markets; assessment of their impact on affordability, housing quality and choice; identification and acquisition of data from a range of Statistics Canada surveys and other sources, and the development of carefully selected indicators and measures to interpret the data obtained.

5.1 Data and Indicators

Research in this program of work will focus on improving the timeliness and relevancy of existing indicators while exploring opportunities to develop new ones and/or refine them. The three recognized indicators of housing standards (adequacy, suitability, and affordability) along with the indicator of housing need will play a central role in much of this work. The program of work includes: the analysis and dissemination of the results of the 2001 Census; preparation for the upcoming 2006 Census; exploration and development of new ways to monitor intercensal household and housing conditions; examination of opportunities to enhance the household and housing content of existing Statistics Canada and other survey sources for use in developing new and/or refining existing indicators; and exploration of the development of new indicators related to existing and emerging housing issues and trends.

5.2 Trends and Issues

Research on this theme will examine the evolution of existing and identify and assess the impact of emerging demographic, market and socio-economic trends and issues on consumers and housing markets. Trends and issues to be examined include the impact of: demographic trends (e.g., Canada's aging population, changing household composition, slowing population growth, changing aboriginal household formation); sustained immigration; growing urbanization; and household income disparities. Research models will also be developed to project future housing demand requirements based on the analysis of these trends and issues.