



Photo Credit: City of Québec

Four Centuries of History, 400 Years of Housing

Housing has taken on many looks in the City of Québec's 400-year history. From the time the first wooden structure was built by the city founder at the foot of Cap Diamant in 1608, to the rows of sprawling post-2000 single-family houses in distant suburbs, housing has evolved through major expansion phases into what has become Canada's seventh largest city.

When Samuel de Champlain set up his fur counter at the dawn of the 17th century, Jacques Cartier, the man who discovered Canada, had already spent a winter in the area 75 years before, very close to a village where some 5,000 Iroquois resided in about 50 long bark-covered houses.

In 1608, nary a trace of this village remained, and the same can be said today of Champlain's house and the first wood houses that went up around it. It did take some time for the City of Québec to develop, but Champlain's successor, Charles Huaut

de Montmagny, was nonetheless able to produce the city's first development plan back in 1636. He plotted out the lots to be distributed and drew...two streets!

From the initially confined quarters at the foot of Cap Diamant, the city gradually crept outward and along the shore, also branching off toward the top of the cliff. It would take more than 100 years for the population to reach a few thousand, but circumstances had already conspired to force the less well off to settle outside the City of Québec boundaries, at which time the first suburbs were born.

The small, one-storey, cookie-cutter-style wood houses, which were shoehorned together in the suburbs, stood in stark contrast to the imposing stone homes owned by wealthy city merchants. "They were heated with wood, candles provided light and animals frolicked about in the back yards. The setting was more than ripe for fire," related historian Louise Côté.

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About the National Housing Research Committee

The National Housing Research Committee (NHRC), established in 1986, is made up of federal, provincial and territorial, municipal, industry, social housing, academic community and consumer representatives. Its objectives include:

- identifying priority areas for housing-related research or demonstration,
- fostering greater co-operation, developing partnerships and minimizing overlap in research activities,
- encouraging support for housing research,
- promoting the dissemination, application and adoption of research results.

In addition to the full committee, the NHRC also operates through working groups to exchange information, discuss research gaps and undertake research projects. Currently, working groups meet on housing data, homelessness, sustainable housing and communities and distinct needs. NHRC participants also contribute articles to the *NHRC Newsletter*, which is produced twice a year, and network through their online community: www.nhrc-cnrl.ca.

The NHRC co-chairs are John Black of Canada Mortgage and Housing Corporation (CMHC) and Doug Page of the province of British Columbia. CMHC provides the Secretariat for the Committee and produces this Newsletter.

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Indeed, fires, which could wipe out hundreds of dwellings in less than 24 hours, posed a huge threat at the time. Sure enough, two major fires broke out one month apart in 1845, destroying 3,000 houses in the Saint Roch and Saint Jean boroughs. Notwithstanding the fact that municipal authorities had brought in bylaws prohibiting wood construction in the wake of these disasters, this accomplished nothing. "Most people couldn't afford to use stone and simply rebuilt the same way they had before," pointed out Louise Côté. Only on the heels of another major fire, this time in 1881, did the first red brick houses with mansard roofs appear, which are still standing in certain neighbourhoods.

The highlights of the 19th century were massive immigration and the beehive of activity at the Port of Québec, which became the third busiest in America due to the burgeoning lumber trade. As the British lumber lords brought with them the English architecture, which can be seen in the large terrace-front houses along Grande Allée and still attracts admiring glances, the working class neighbourhoods expanded and became more densely populated. Floors were gradually added to the houses and dormers began adorning the roofs, a sign that occupants began living in the attics.

In the early 1900s, the area was on the cusp of a new spike in the population, which during the ensuing century, grew almost tenfold. Taller brick apartment buildings with flat roofs went up to handle the increased demand for housing, particularly in neighbourhoods of recent vintage such as Limoilou, where, surrounded by trees, three-storey houses with outside staircases sit back from the street.

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However, the older boroughs were falling into disrepair to the point that a significant proportion had clearly become unsafe. Two successive land-use plans, the Gréber Report in 1956 (Projet d'aménagement de Québec et de sa région) and the Martin Report (Le logement à Québec, 1963), discussed this issue at length, suggesting that redevelopment and renovation were needed and proposing that an extensive road network be built to relieve the downtown of increasingly heavier traffic.

This marked the dawn of a new era for the City of Québec. In the space of a few years, old neighbourhoods were turned on their ear, starting with Saint Roch, where 200 housing units were demolished and their occupants relocated to low-rent housing built for them outside the neighbourhood. This would mark the beginning of the city's involvement in social housing programs funded in part by CMHC: social housing, housing co-operatives and non-profit organizations sprung up everywhere...to the point that the provincial capital had one of the largest social housing set-ups in the country in proportion to its population, according to Louis Méthé of the municipality's economic development department.

Residential construction took off as never before during these years (8,000 new housing units in 1971 alone). It was also back at this time that major rebuilding work was done on Place Royale, the hamlet of New France. The road system evolved to the point that many city dwellers fled in droves to suburbs poorly serviced by public transit, where automobiles and bungalows were commonplace. With its 21 km per 100,000 residents, Quebec has proportionately three times more urban highways than Montréal and Toronto.

Quite a difference
in the spread of
the Québec urban
area between
1900 and 2003!

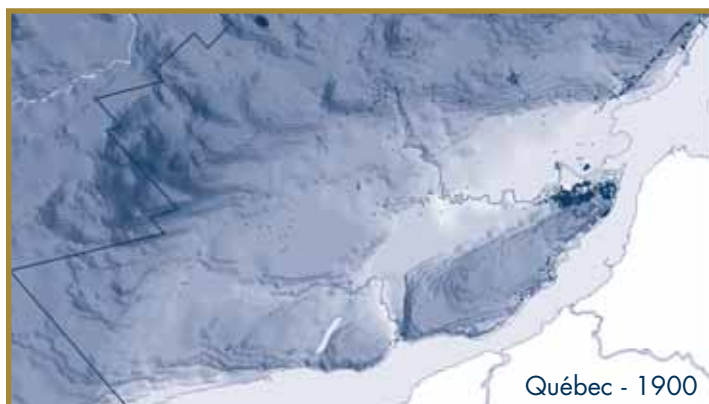
In 1988 and 2005, another two planning programs gave metropolitan development a further boost. The 1988 paper, *Une ville sur mesure*, barely preceded the second redevelopment of Saint Roch as part of the RevitalisAction program. This time, a true renaissance took place, where the population in the neighbourhood and surrounding area skyrocketed. Several dilapidated buildings were very successfully revamped and put to different uses, and were often converted to residences.

Following the amalgamation of 13 municipalities, which created a new city of 500,000 in 2002, the 2005 Master Development Plan set out the trajectories the territory would take until 2020. This plan, which was adopted following public consultations, included a housing policy which, among other things, shed light on the lack of affordably priced rental housing and the need to make the environment a component

of any development initiative, particularly by opting for sustainable construction.

Incidentally, the pace of construction should taper off in the coming years, notes Louis Méthé, if only due to an aging population. "There will always be a strong demand for new housing," he added, "which will be met partially by densification of the built areas, since the available space will be scarcer. The city will continue to take part in government renovation programs for as long as they are offered," emphasizes Méthé, who believes the future bodes well for housing in Québec because the urban area is in good economic shape. ■

Serge Beaucher, writer, in collaboration with Louis Méthé,
City of Québec



Québec - 1900



Québec - 2003

Photo Credit: City of Québec

The National Housing Research Committee Renewal Initiatives

The Fall 2007 meeting of the National Housing Research Committee (NHRC) was a chance to test the new structure of the working groups, of which there are currently four: Housing Data, Sustainable Housing and Communities, Distinct Needs, and Homelessness. Since the new structure has one less group, consideration had to be given to members of the previous groups, and new members had to be recruited for the new groups that would have a broader mandate going forward. Strong participation by members of the existing and disbanded groups certainly made these efforts worthwhile. The NHRC Administrative Committee determined that the success achieved with the testing was such that it was generally agreed the new formula would be retained.

The Spring meeting in 2008 will include all of the new working groups, and the Secretariat would like to take advantage of this new arrangement to expand the NHRC audience. On the heels of the success of the Sustainable Housing and Communities webcast, the Distinct Needs Working Group is being live-video webcast.

In conjunction with these efforts, the NHRC also hopes to boost the effectiveness of the network of housing researchers in Canada to avoid duplication and to establish beneficial links between key partners. The Housing Researcher Mapping Project revealed who is doing what nationally. It was suggested that a subsequent stage be established whereby the NHRC would continue to broaden its influence, improve its research connections and the transfer of knowledge and play a role in facilitating networking.

To do so, four Task Groups were struck:

1. Linking Researchers
2. Exploring Housing Research Repositories
3. Nurturing the Emerging Housing Researcher Community
4. Strengthening the Understanding of the Community-based Research Community.

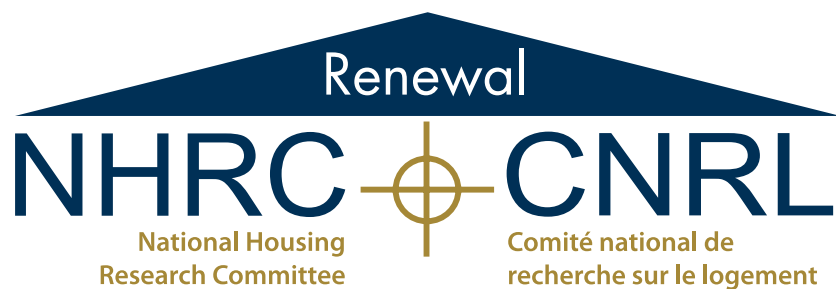
Furthermore, discussions about the Housing Researcher Mapping Project revealed the need to modernize the NHRC website. The site can continue to provide space to stimulate co-operation and serve as a depository for documents, but it must also increase its scope to reach housing researchers collectively and, through various web applications, encourage these experts to identify themselves as an integral part of a network. The work of the Task Groups will be reflected in part in the redefinition of the website.

The meeting next fall in Ottawa (Nov. 4–6) has been planned to coincide with the CMHC 2008 Housing Awards on Nov. 3. CMHC believes that holding these events in tandem is beneficial.

For more information, please contact **Nancy Walker**, Coordinator, National Housing Research Committee and External Liaison.

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Why Young People Live in Marginal Conditions in British Columbia

The McCreary Centre Society in Vancouver claimed the reasons young people leave the family home are often not well understood and are the subject of stereotypical commentary.

The centre had already conducted research involving young street people in six communities in British Columbia in 2000. Six years later, it wanted to learn more about that segment of the marginalized population. To do so, it used a questionnaire to survey 762 young people between the ages of 12 and 18 in nine communities across the province in a modified social and economic setting. The poverty rate among B.C. children increased to 24% in 2003, well beyond the national average; and between 2002 and 2005, the number of homeless doubled in the Vancouver region, where obtaining affordable housing has become a problem for one-third of households.

The responses of these young people, the majority of whom claim Aboriginal heritage, did uncover some surprises with respect to their living conditions in the past 12 months. One-quarter said that they had lived in precarious situations, close to one-half lived with a parent at one time or another, and one-fifth lived in three or four different locations such as on the street, in hotels, shelters or temporarily with friends or other family. This misfortune, however, did not prevent one-third of them from attending school.

Two-thirds of boys and three-quarters of the girls interviewed left the family home before age 14 to join up with their friends who had already done so (32% of boys, 49% of girls), because they no longer got along with their parents (24% of boys, 34% of girls), to gain a feeling of acceptance (25% of boys, 32% of girls), to run away (18% of boys, 28% of girls), because of an alcohol or drug problem (16% of boys, 25% of girls), because they had been thrown out of the home (25% of boys, 19% of girls) or because they did not find any affordable housing (9% of boys, 8% of girls). In addition, 40% of these young people indicated that they had been placed with a family or in a group home.

The study, *Against the Odds: A Profile of Marginalized and Street-Involved Youth in B.C.* also revealed that 35% of the young people worked on a regular basis and that only 13% were receiving public financial assistance.

When asked which community services were priorities as far as they were concerned, the young people responded that professional training was most important (47%) followed by the need for shelter (40%), work experience (39%) and more affordable housing (38%).

The paper recommended that the government provide adequate services to meet the needs of young people and their families. ■

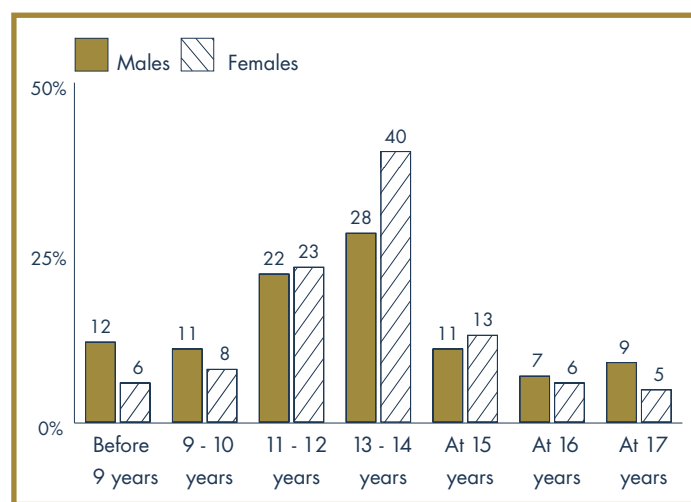
The study, which was published in 2007, can be found at: http://www.mcs.bc.ca:80/rs_new.htm

For additional information, please contact the McCreary Centre Society

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Age At Which Youth Became "Street Involved"

Source : *Against the Odds: A Profile of Marginalized and Street-Involved Youth in B.C.*

Report Card on Homelessness in Ottawa: A Model for Other Communities

For a fourth consecutive year, the Alliance to End Homelessness in Ottawa published a report card this spring on homelessness that is becoming a longitudinal study on the phenomenon.

The report card paints a general picture of homelessness in the nation's capital in 2007 with data taken from several sources: the City of Ottawa, the National Homelessness Initiative, the Canadian Mental Health Association, the Government of Ontario, CMHC and the Homeless Individuals and Families Information System (HIFIS) a Federal electronic filing system, which makes it easier to gather information on the clientele that use shelters.

The Alliance speaks of a step backward for 2007 and designed four indicators to gauge the situation—housing, income, homelessness and the length of stay in a shelter. The latter indicator received the poorest grade. The average stay of those using shelters increased to 38 days, five days more than in 2006. Families, youth, single men and women, on average, stayed longer in shelters.

The other indicators also fared poorly. On the issue of homelessness, the number of people using a shelter increased by nearly 5.7%. The number of individuals using shelters reached 8,915 persons. It should be noted that 3.9 per cent more families, including 1,237 children, stayed in emergency shelters. As for housing, the Alliance noted that the average rent for one-bedroom apartments rose by 3.1 per cent to \$798 per month; in addition, it remains difficult to get an affordable dwelling, as only 73 new units of this type were produced last year. The revenue indicator did not show any progress. The Alliance pointed out that the increase in welfare benefits only reflected the increased cost of living.

The report card then discusses the trends on the use of shelters and the affordable housing waiting lists. It also contains a special report on personal stories and housing solutions to help homeless people. A section on homelessness

deals with the right to housing and services that help people get and keep dwellings. The report concludes with several recommendations.

The Alliance Report Card on Homelessness did not go unnoticed—quite the opposite was true. According to the Alliance Coordinator, Lynne Browne, the 2006 online edition was downloaded more than 10,000 times in the past year. She also noted that the media is now responding better to the phenomenon of homelessness, especially by emphasizing that better housing conditions should be available to the homeless.

Thanks to the third version of the HIFIS software, the Alliance is in the process of finalizing a model to produce similar community report cards across the country. Winnipeg, Edmonton and Halifax have shown interest in this initiative.

The Alliance report card for 2007 was published this spring. ■

For more information, you can view the report card at www.endhomelessnessottawa.ca

Contact Lynne Browne, the Coordinator of the Alliance to End Homelessness in Ottawa

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	2004	2005	2006	2007
Housing	C-			
Affordable Housing				
Pre-1995 social housing units (total stock)	22,400	22,400	22,400	22,400
Post-2000 affordable units (total stock) (i.e., Action Ottawa & NHI units)	509	521	760	833
Rent supplements (City of Ottawa & CMHA)	3,000	3,085	3,198	3,198
Supportive housing units (total stock)	650	863	865	885
Waiting Lists				
Households on social housing waiting list	10,500	9,914	10,055	9,370
Supportive housing waiting list	2,000	2,214	2,630	2,000
Housing Market Indicators				
Rental vacancy rate	3.9%	3.3%	2.3%	2.3%
Average rent for a 1-bedroom apartment	\$771	\$762	\$777	\$798

Indicators of the Alliance to End Homelessness

Getting People Off The Street—Hope for the Homeless in Toronto

Toronto set an ambitious objective to eliminate the homeless phenomenon and in February, 2005, the City Council of Canada's largest city gave the green light to a program to achieve this end, which is known as Streets to Homes. The underlying principle is straightforward as the aim above all it is to give the homeless shelter and help them gain access to assistance programs for which they qualify.

The Streets to Homes program has been a success and has helped more than 1,500 homeless find housing, 90% of whom have not returned to the street. As the Director of the Streets to Homes Program, Iain De Jong, explained, "employment and skills problems are better resolved when the persons affected have stable housing." In short, the idea is to resolve rather than manage the homeless problem.

To find out more about the Streets to Homes program, how effective it is and how their clientele perceives it, Laural Raine and Tricia Marcellin looked into the issue for the City of Toronto and interviewed 88 program recipients, some of whom had been homeless for more than 10 years. *What Housing First Means to People—Results of Streets to Homes 2007 Post-Occupation Research* discovered that the vast majority of recipients are satisfied with their housing in their neighborhoods and that their lives have changed since they moved. More than two-thirds indicated that their health had improved along with their personal safety, sleep and stress levels. Some even stopped drinking and taking drugs. In addition, fewer former homeless people used emergency health care system services, such as ambulances or the emergency rooms at hospitals, and instead made greater use of regular medical services such as family doctors or psychiatrists. Psychologically speaking, 82% indicated that they had a more positive view of their future.

Nonetheless, 68% indicated that they did not have enough money left over to live on once the rent was paid. Two-thirds indicated that each month they did not have enough money to meet basic needs such as food. It must be pointed out that the Streets to Homes recipients are not required to pay the rent, as the money is paid directly to the owner of the housing from the benefits paid by the Ontario Works Program or by support to the handicapped.

When asked what improvements should be made to the Streets to Homes program, numerous respondents indicated that the program itself should be advertised more. Some even said that many homeless had never heard of it.

In any event, Streets to Homes is known internationally and is one of the 12 finalists for the 2007–2008 World Habitat Award of the Building and Social Housing Foundation which will be handed out next Oct. 6 during World Habitat Day. ■

For more information, contact Patricia Anderson, the Director of Partnership Development, Shelter, Support and Housing Administration, City of Toronto.

Please go to: www.toronto.ca/housing/pdf/results07postocc.pdf for the full report.

N=87	#	%
Improved a lot	53	61%
Improved somewhat	26	30%
Not really changed	6	7%
Gotten worse	2	2%

How Has Your Outlook About Your Future Changed?

Source: p. 91

The Contribution of GIS to Housing Research

Geographic Information Systems (GIS) have been used by geographers and planners for several years now to design complex maps that incorporate spatial data. Researchers are also using GIS these days to combine various types of data to compare the distribution of certain variables or to create new ones. Teams in three major metropolitan areas in Canada have used GIS to support their housing research.

Proximity of specialized services for immigrants in Toronto

Some immigrant groups that arrived in Toronto in the 1990s settled in the suburbs to have access to more affordable housing. However, services provided by specialized agencies to immigrants, in particular, language courses, jobs and searches for accommodation, were located in the downtown area. Geographers at York and Ryerson Universities used GIS to study eight groups of immigrants and three services provided by a total of 911 agencies based on geographic proximity. The study showed that overall, though housing-related services were more available than employment-related services, some groups of immigrants such as Sri Lankans, Somalis and Iranians are contending with spatial disparity because the required services are not close to their homes.
<http://ceris.metropolis.net/Virtual%20Library/WKPP%20List/WKPP2007/CWP59.pdf>

The risk of new arrivals to Vancouver ending up homeless

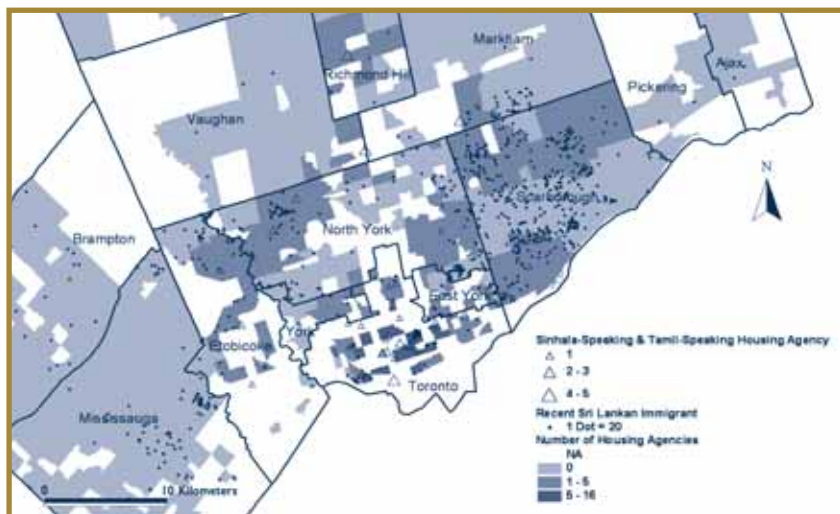
Geographers from Simon Fraser University used GIS to collect data on small "areas of distribution" in the Vancouver region, consisting of 400 to 700 residents. They superimposed census data on the places of residence of immigrants, tenants and those with core housing needs to identify the locations where the newcomers run the risk of becoming homeless. The analysis revealed that the distribution areas at risk are geographically dispersed but that a cluster of these areas is prominent in the Downtown Eastside neighbourhood.

This data and that collected from questionnaires completed by newcomers showed the existence of areas where concentrations of poverty, deprivation and housing requirements coexist with concentrations of low quality and inexpensive housing, some of which is associated with immigrants.
<http://www.riim.metropolis.net/Virtual%20Library/2006/WP06-10.pdf>

Accessibility of services for low income housing residents in Montréal

Researchers from the Urbanization, Culture and Society Centre of the Institut national de la recherche scientifique used GIS to measure accessibility to collective services and commodities such as cultural sites, hospitals, parks, food markets and banks for low income housing residents in Montréal. They developed accessibility indicators for these collective services and commodities for each low-income housing building. The analysis confirmed the premise that not all low-income housing residents, due to their lack of economic security and reduced mobility, have the same access to urban resources, and concluded that one half of these tenants do have good or very good access.
http://www.ucs.inrs.ca/pdf/inedit2005_01.pdf ■

For more information, contact Candace Fedoruk, Senior Researcher, Housing Needs, CMHC
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Housing Services to Recent Sri Lankan Immigrants

Source : Toronto Blue Books 2002; Lim et al. 2005; Statistics Canada 2003

The Dynamics of Housing Affordability in Canada

Housing is the largest expenditure for most households in Canada, and its affordability can have an impact on the well-being of household members. Statistics Canada and Canada Mortgage and Housing Corporation examined this crucial issue. Researchers from both organizations examined the probability of a household spending 30% or more of its income on housing, the generally accepted benchmark of affordability. They also analyzed the recurrence of the situation, determined whether it was occasional or persistent and compared households spending 30% or more of their income on housing with those spending less.

The resulting study, *The Dynamics of Housing Affordability* was published in January, 2008 and is revealing. It indicated that close to 28% of Canadians at some point between 2002 and 2004 spent more than 30% of household income on housing. Of that number, 9% did so on a persistent basis and 19% occasionally. Conversely, the data showed that close to three-quarters of Canadians never exceeded that limit during the years that were studied.

The survey also revealed that one in five Canadians lived in households which spent beyond the affordability benchmark. Furthermore, low-income households spend more of their income on housing and are more likely to spend beyond the affordability benchmark. These households consist of persons living alone, tenants, immigrants or single-parent families headed by women who are more likely to be located in Toronto or in Vancouver.

More than 80% of the members of households exceeding the benchmark ranked among the lowest 40% of the income distribution scale. In contrast, those whose incomes were within the top 40% of this scale only accounted for 7% of those exceeding the affordability benchmark.

Tenants in subsidized housing were less likely than those renting at market prices to persistently spend 30% or more of their income on housing. In addition, those living in households experiencing some kind of transition between 2002 and 2004 had a higher probability of exceeding the benchmark at least once during the period. Such transitions include renters with changing residency status, those who changed from owner to renter or vice-versa, and those who changed family type.

The authors of the study conceded that the period analyzed is relatively short, which means that some households that seemed to be going through a transition could be starting or ending a prolonged period when they exceeded the benchmark figure. They believe that analyzing the data over a longer period will make it possible to learn more about the subject of the dynamics of Canadian households in terms of affordability. ■

For more information, refer to *Research Highlights* at www.cmhc-schl.gc.ca/en contact Roberto Figueroa, Senior Researcher, Housing Needs, CMHC.
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	Never	Ever			Total
		Occasional		Persistent	
Number of years spending 30% or more of income on shelter costs	0	1	2	3	...
People (thousands)	17,987	3,114	1,756	2,154	25,011
People (percent)	71.9	12.4	7.0	8.6	100

Estimates of the number of people who live in households exceeding affordability benchmark, 2002–2004

Report on Core Housing Need in Winnipeg and Long-term Prospects

An analysis of the core housing need situation in Winnipeg shows how important it is to determine precisely who in the community is affected by this phenomenon. This emerged from a working paper prepared for the Manitoba Family Services and Housing Department.

This paper was written during the course of a project initiated by the Manitoba Housing and Renewal Corporation to analyze core housing need against the backdrop of demographic projections in Winnipeg from 2006 to 2026. Mention is made of statistics compiled by CMHC, which revealed that, in 2001, 45,400 Manitoba households, that is, more than one in 10, were living in a core housing need situation and therefore did not have housing that was deemed suitable, large enough or affordable. Most of these households were located in the metropolitan Winnipeg area and were made up of 60,040 persons, more than half of whom were women.

The study noted that the incidence of core housing need was more significant in certain categories of households and individuals in Winnipeg. Heading the list were single-parent families, particularly those headed by a woman. Aboriginal households ranked second. Moreover, Aboriginal people are particularly at risk, as 26% of them have to contend with this situation. These two groups were followed by persons living alone, immigrants (especially those who arrived between 1996 and 2001) and those with disabilities. The latter seem to be particularly at risk as 19.1% were affected by this phenomenon, particularly children.

The figures reveal that core housing need in Winnipeg affects more than 20,655 children and 22,920 adults between the ages of 18 and 44. Conversely, those least at risk of finding themselves in this situation were families headed by an elderly person, couples with children and childless couples.

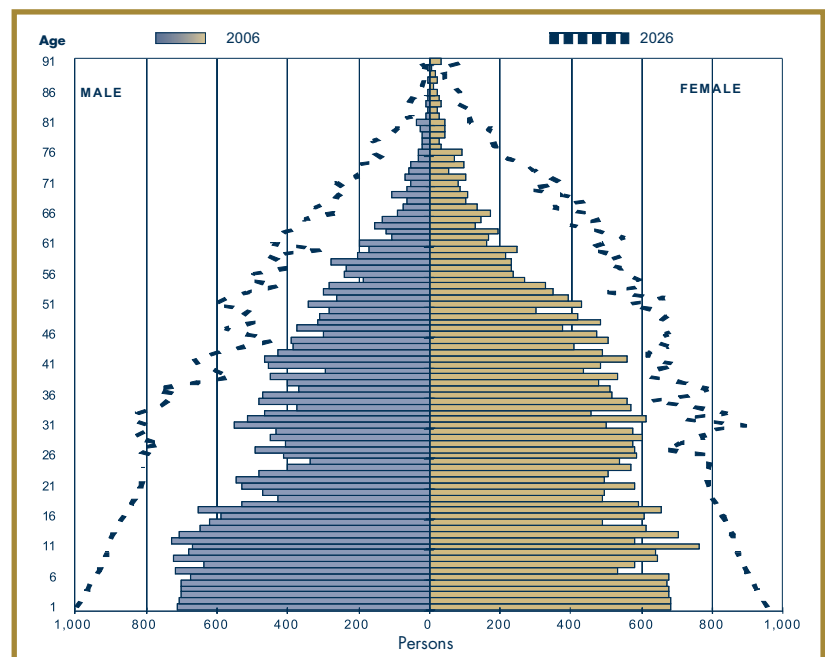
The paper then looked at the impact of demographic projections on core housing need from 2006 to 2026. The Manitoba Bureau of Statistics estimated two years ago that the population in the provincial capital would

increase 29% within 20 years to over 843,000, 142,000 and 101,000 of whom would be senior citizens and Aboriginal people respectively. The study also pointed out that if the socio-economic conditions continue to expose aboriginals to the risk of core housing need from now to 2026, the increasing number of Aboriginal people in Winnipeg will create a need for additional subsidized housing.

The paper recommends that the department take into account the specific needs of families with young children and persons with disabilities by incorporating universal design principles in the construction and renovation of subsidized housing. The study also recommended that the department continue its analysis of diversity and equality of the sexes.

The working paper, *Core Housing Need and Projected Changes in Winnipeg's Population 2006 to 2026* by Lissa Donner, was published in Oct. 2007. ■

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Projected population pyramid—aboriginal people in Winnipeg, 2006 and 2026

The Province of Quebec's Unique Housing Profile

Quebec stands out in the area of housing for reasons that are more economic than demographic, a finding that emerged from a 2007 Société d'habitation du Québec study, *Profil statistique: le Québec comparé aux autres provinces et territoires du Canada*.¹

It indicated that although homeowner households are in the majority as is the case elsewhere in Canada, Quebec has the lowest rate of ownership of any province. In addition, Quebec has the greatest number of persons living alone in their units and proportionately fewer households of five persons and over than the rest of Canada.

Furthermore, housing units are generally smaller in Quebec than elsewhere in the country. Large units of six or more rooms make up just one-half of all private housing units in the province, as compared with 60% in the rest of the country.

Quebec also stands out in other respects. Most rental households live in multiple-unit buildings less than five storeys high. There are proportionately far fewer rental households in Quebec living in single-family homes than in the rest of Canada. It is to be noted that the median value of single-family homes is much lower in Quebec than in Alberta, Ontario and British Columbia.

The housing stock is older overall than elsewhere in the country. For example, for private rental housing, the main construction periods were from 1946 to 1970 in Quebec and from 1961 to 1980 in the rest of Canada.

Demographically speaking, Quebec has a profile similar to that in the rest of Canada, but the differences are the most remarkable in terms of housing. According to the 2001 Census, the cost of housing in Quebec is still low in comparison with Ontario, Alberta or British Columbia and, in general, with the rest of the country. In addition, owner-occupied housing worth \$200,000 and over is commonplace in British Columbia and Ontario but relatively infrequent in Quebec. All things being equal, Quebec has a profile comparable with several Maritime provinces in terms of housing value.

Even if the proportion of rental households in Quebec devoting 30% or more of their income to shelter is only slightly lower than elsewhere, the housing market has adjusted to the economic reality of the province, where the proportion of the population living beneath the poverty line is the highest in Canada.

Moreover, Quebec has posted the largest number of rental housing starts in Canada. In 2005 alone, it accounted for one half of these housing starts in the country. Conversely, Quebec has one-half as many owner-occupant housing starts as Ontario. The average price of housing in Quebec between 2005 was far beneath the figures of Ontario and British Columbia. ■

For more information, please refer to the study at www.habitation.gouv.qc.ca/publications/fiches_fr/M1957801.html

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Area	Homeowners (\$)	Renters (\$)	Variance (\$)
Canada	691	596	94
Quebec	619	502	118
Rest of Canada	726	672	53
Newfoundland and Labrador	380	501	-120
Prince Edward Island	497	524	-27
Nova Scotia	509	565	-56
New Brunswick	452	499	-47
Ontario	839	727	112
Manitoba	579	501	78
Saskatchewan	517	501	16
Alberta	823	650	173
British Columbia	744	705	39
Yukon	805	694	111
North West Territories	979	789	190
Nunavut	>1000	219	>781

Median private housing prices by tenure – Canada, provinces and territories, 2001

Source: Statistics Canada.

Note: These data exclude band housing and are for non-farm households with revenues higher than zero.

¹ Statistical Profile: Quebec Compared with Other Provinces and Territories in Canada (unofficial translation)

The First EQuilibrium Initiative Green House Opens its Doors in Eastman, Que

Canada Mortgage and Housing Corporation (CMHC)'s EQuilibrium sustainable housing demonstration initiative now has its very own address! The first ecological and eco-energy demonstration house officially opened its doors last November, five months after the groundbreaking, in a new rural neighbourhood in the community of Eastman, Que.

Alouette Homes of Ste-Anne-de-la-Rochelle received assistance from a Concordia University team to design the EcoTerra™ house based on the five essentials of healthy housing (occupant health, energy efficiency, resource efficiency, environmental responsibility and affordability), which places it at the forefront of the green revolution in sustainable housing.

The goals are convincing. This single-family, two-storey house with an area of 141 m² (1,517 sq.ft.) is expected to produce as much energy as it consumes. It does so in a number of ways. Its photovoltaic panels capture sunlight and transform it into electricity. Its geothermic pump takes heat from the ground to heat the water and the house. Its three-ply windows ensure alternative passive solar heating for the coldest months. It also incorporates the latest air-sealing methods. A central computer coordinates all heat recovery and renewable energy production systems in addition to air conditioning, if required. As a result, the energy requirements of this home are only 17% of those of a conventional Canadian house.

This EcoTerra™ house, which should be sold later this year, has already received more than 700 visitors. The following three characteristics were the most often cited by a group of 30 visitors:

- The construction process, which uses factory-manufactured prefab modules making for quick installation under construction conditions. The EcoTerra™ house has seven modules—four for the house, one for the roof, one for the mechanical equipment in the basement and another for the garage.
- The geothermal heating system.
- The passive solar energy system, which releases energy from the sun in the form of heat, while providing abundant natural lighting.



Perspective view of Ecoterra™

Source : www.cmhc.ca

The visitors also liked the heat recovery system that recovers up to 76% of the heat and provides better quality ambient air.

CMHC is monitoring the eco-energy performance of the house for one year. The findings from the monitoring exercise will be posted on the CMHC web site and can be used by building contractors wishing to obtain information on EQuilibrium's performance.

EcoTerra™ is one of 12 projects that won the national EQuilibrium competition in 2007. CMHC will pay \$60,000 for each project to cover the costs involved in the design, marketing and the public showing of the houses.

Another two projects are underway in Quebec, four in Alberta, three in Ontario and one in Saskatchewan. Another one may begin in Winnipeg. A second RFP was issued to solicit housing construction or renovation projects in regions that do not have any EQuilibrium demo houses, that is, British Columbia, the Atlantic Region (New Brunswick, Nova Scotia, Newfoundland and Prince Edward Island) and the North (Yukon, the Northwest Territories, Nunavut, Nunavik and Labrador). The RFP has been posted at www.MERX.com. ■

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Moving Toward a New Canadian Residential Waste Water Treatment Standard

Canada should soon have its own national standard for on-site residential waste water treatment systems.

Several provinces are using the American NSF 40 standard, and even though it is being increasingly recognized on both sides of the border, certain jurisdictions are demanding further testing. The problem is that the standard only deals with two classes of treatment and that the testing only lasts six months. Moreover, the NSF 40 standard does not take the peculiarities of Canada's climate into account. For example, it does not have any requirements pertaining to the atmosphere of the premises or to the temperature of the waste water entering the treatment system.

Furthermore, there is no national standard to ensure that systems are compliant with existing legislation with respect to reductions in fecal coliform, total nitrogen and total phosphorus. It is also feared that conventional systems are not treating residential waste water in accordance with current environmental standards.

In April, 2005, CMHC sponsored a meeting of public and private stakeholders in the waste water field across the country, and a decision was made to form a standardization committee for on-site residential waste water treatment systems. One of the 14 participants, the Bureau de normalisation du Québec (BNQ), had already designed a provincial performance standard for houses not connected to an authorized sewer system. It includes several treatment classes and a six-month testing period based on the NSF 40 standard followed by another six-month period with more infrequent sampling to ensure the reliability of the systems in Quebec's climate.

The Committee gave the BNQ a mandate to develop a national draft standard. This project ranks on-site waste water treatment systems based on four types of treatment—basic treatment, disinfection, phosphorus reduction and nitrogen reduction.

Each type is subdivided into classes according to the level of treatment corresponding to the specific type of treatment. The project includes design and construction requirements, particularly based on environmental conditions. It also calls for performance testing for a six-month period based on the NSF 40 standard and seasonal reliability testing over a continuous 12-month period, which includes the collection of samples.

A national standard would give regulatory authorities the tool they need to ensure that the systems available on the market are reliable

The manufacturers would see that their systems are no longer subject to more than one certification process in Canada.

Public consultation on the Standard Project ended April 14, 2008. The committee is scheduled to meet once again in May and it is anticipated that the new Canadian standard will be published before year end. ■

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Waste Water Treatment Without Sewers: Possible Solution for Hydraulic Development in Yellowknife

Land and housing development represents a serious challenge in Yellowknife both financially and logistically. In 2000, municipal authorities estimated that it could cost more than \$75,000 per lot to install adapted pipes in the permafrost and the rock. The other option, which is also very costly, would involve using a transportation system to provide drinking water and to evacuate waste water.

An easier solution would be to do without municipal services and instead opt for on-site waste water recycling, a technology that rural communities in both the U.S. and the southern part of Canada have been using for decades. In general, these systems make it possible to reuse 55% of waste water for toilets and washing.

The City of Yellowknife looked into the issue. It received a subsidy from the Affordability and Choice Today* program to study the possibility of using this technology in a Northern climate and to assess the cost-benefit relationship from a land use and housing perspective. A team made up of representatives of the City of Yellowknife, the Northwest Territories Construction Association and the Vista and UMA engineering companies was formed to study the issue.

The team observed that, with innovations, it would be possible to use this technology on a large scale in an urban setting. Tests conducted during the course of this study revealed that, among the available and potential systems, the Healthy Housing™ system held the most promise for Yellowknife.

This was the system CMHC used to build an ecological house in Toronto. It recovers waste water for reuse not only for toilets and washing but also for bathing, showers and irrigation. The Healthy House system uses a biological treatment process which uses very little energy to treat waste water. Another advantage beyond question is the fact that it provides adequate protection from freezing. This system has also been used to build a house in Nidlo, Northwest Territories to demonstrate the waste water recycling application up North.

From a financial standpoint, the Yellowknife Project Team estimated that installing these systems on a typical residential lot could produce savings of 25% in municipal infrastructure costs and 40% if the on-site waste water recycling systems were installed on a large scale.



The City of Yellowknife has not yet had a chance to launch a project of this type on a large scale. In addition, the study revealed that public health authorities have neither the experience nor the regulatory framework required to approve these systems. It therefore recommends that the *Canadian Public Health Act* contain regulations governing on-site waste water recycling.

**The ACT Program is a housing regulatory reform initiative with four national partners: CMHC (funder), the Federation of Canadian Municipalities (administrator), the Canadian Home Builders' Association and the Canadian Housing and Renewal Association. ■*

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To find out more about the ACT Program,
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The city of Yellowknife report: *On-Site Recycling
in Cold Regions* is available on the ACT program
website at www.programmeact.com.

CUExpo 2008 in Victoria: Housing Problems Surface in Research Presented



From May 4 to 7, the B.C. capital hosted the CUExpo 08 Community-University Exposition, the third of its kind following the ones held in Saskatoon in 2003 and Winnipeg in 2005. CUExpo 08 provided more than 400 researchers from Canada and abroad with an opportunity to present their research that emerged from partnerships between members of community organizations and university researchers in several fields, including housing.

Professor Isobel Findlay of the University of Saskatchewan's Management and Marketing Department made reference to a 2007 survey by the Community University Institute for Social Research, which concluded that the socio-economic chasm between residents in low-income neighborhoods and high-income neighborhoods in town continues to widen, in spite of the economic boom.

Cheryl Forchuk of the University of Western Ontario's Faculty of Health Sciences spoke about research involving 300 people aimed at exploring the various facets of homelessness from an ethnographic perspective. The findings suggested that their problems relate back to their learning difficulties which then affect their employability and their ability to obtain housing.

Lisa Helps discussed the activities of the Fernwood Neighbourhood Resource Group in Victoria. This non-profit company she heads purchased a building in 2005, which was renovated to house a cafe, a restaurant and four affordable housing units for families.

Lance Jakubec of CMHC's Vancouver office spoke about the need for translating the principles of sustainability into concrete action.

In his view, concepts such as livability or the three levels of objectives (ecological, economic and egalitarian) do not indicate to communities how they must be reflected in policy or strategy development. He reminded his audience that CMHC offers a series of tools and initiatives to help communities put practical and economical measures in place.

The Coordinator of the National Housing Research Committee (NHRC), Nancy Walker, indicated that the NHRC is willing to work with community-based researchers involved in housing and added that the NHRC is providing a web portal to make it easier for housing researchers to network. She was followed by Jim Zamprelli of CMHC's National Office who cited examples of research projects that demonstrate that CMHC is supportive of community research.

Christine Walsh of the University of Calgary's Faculty of Social Work presented the findings of a study done jointly with a shelter in Calgary involving the city's homeless women and what the notion of home means to them.

Guido Weisz of Human Resources and Social Development Canada delivered the preliminary findings of research done in 53 communities in the country involved in the Community Action Partnership Initiative, the cornerstone of the National Homelessness Initiative. Research has shown the partnership has been successful in taking into account the needs of the homeless, even though some communities deal with the problem more effectively than others. ■

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New Series of *About Your House* Fact Sheets on Accessible Housing by Design

Canadian homes today house persons of all sizes and all ages. As a result, housing requirements are evolving, especially keeping in mind that the 2001 Census revealed that seniors are the fastest-growing segment of Canada's population.

CMHC believes that housing that is designed and built based on the principles of universal design* will be more suited to the needs of occupants and visitors. It has therefore decided to take this trend into account by producing a new series of fact sheets as part of the *About Your House* general series, the objective of which is to help owner-occupants make the right decisions when resolving existing problems or making informed decisions regarding planned changes or improvements.

This new series is entitled *Accessible Housing by Design*. It is intended for persons with disabilities and for architects, therapists, renovators, building contractors and the general public. The fact sheets in the series include in-depth articles on each topic discussed. They include the most recent information on how to design accessibility in housing and incorporate universal design and FlexHousing** principles. The fact sheets are illustrated with drawings and photos. They suggest standards and may contain price estimates for equipment.

The fact sheets, currently available in a series, deal with the following topics:

- Lifts and Residential Elevators: what are the various types available in Canada and some criteria to consider when selecting and installing one in a home.
- Ramps: the design of ramps, which can be particularly useful for changes in slope up to 760 mm, and other aspects to be considered before building a ramp onto a house.
- Appliances: information about appliances that can be used by persons of different ages and skill levels without having to make specialized adaptations or designs.

- Kitchens: how to design a universal kitchen to accommodate motorized wheelchairs or three-wheel scooters so that minimal effort is required. In short, this describes a kitchen that combines comfort and safety for people who demand flexibility, adaptability and efficiency of effort.
- Bathrooms: how to design a universally accessible and safe bathroom which incorporates the latest trends while at the same time being flexible, adaptable and easy to clean.
- Residential hoists and ceiling lifts: information about this equipment that is commonly used in Canada and enables persons with reduced mobility to get into and out of their beds and bathtubs safely.

Other fact sheets will be added to the series on home automation systems, fire safety and floor plans based on the principles of universal design.

** Universal design can be defined as the design of products and environments to be usable by all people, to the greatest extent possible without the need for adaptation or specialized design. Seven major principles define this constantly evolving philosophy: equitable use, flexibility in use, simple and intuitive use, perceptible information, tolerance for error, low physical effort; and size and space for approach and use.*

*** FlexHousing™ is a concept in housing that incorporates, at the design and construction stage, the ability to make future changes easily and with minimum expense, to meet the evolving needs of its occupants. ■*

The series is available online at the CMHC site at www.cmhc-schl.gc.ca.

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Core Housing Need in Canada—Observations and Trends

Close to 1.5 million Canadian households (13.7% of the total) were in core housing need* in 2001. This CMHC estimate, which is based on the 2001 Census, is reported in a study done by Will Dunning Inc., a firm specializing in economic research, for the Co-operative Housing Federation of Canada (CHFC). The study measured the scope of core housing need, which varies depending on population categories:

- Housing need is much more common for renters than for homeowners.
- Across the provinces and territories, core housing need is most prevalent in the three territories.
- Core need is least prevalent in the middle of the age distribution. The incidence of need is higher for young adults and the elderly.
- Lone-parent families and childless households are more likely to experience a high incidence than all households overall.
- Immigrants are more likely to be in core housing need than are non-immigrants.
- Aboriginal households are substantially more likely to be in core need versus non-Aboriginal households.
- Households whose "primary household maintainer" is employed have a core need much lower than for households with an unemployed maintainer and households whose maintainer is not in the labour force.
- Similarly, households whose major source of income is government transfers are four times more likely to have core need than those whose major source of income is employment or "other income."

The study also indicated that the total monetary shortfall for affordable housing for households with core housing need (that is, the difference between the housing costs they can afford compared with the cost of acceptable housing in their community) was \$6.99 billion per year (based on the value of the dollar in 2001). The authors believe that the federal and provincial governments should intervene and that this financial challenge "in the context of a \$1.5 trillion dollar Canadian economy, (...) is not an insurmountable cost."

The study noted that the frequency of core housing need grew from 1991 to 1996 and then tailed off until 2001. Data on core need from the 2006 Census was not available when the study was conducted, but the latter did mention that "it is possible that the incidence of need will fall once again, because incomes have increased more rapidly than housing costs."

Tenure	Homeownership	Rental	Total
Total number of households	7,229,665	3,575,950	10,805,615
Number in core need	473,845	1,011,490	1,485,335
% in core need	6.6%	28.3%	13.7%
Total monetary shortfall (in billions of dollars)	-\$2.45	-\$4.54	-\$6.99
Average monetary shortfall by household in core need (per year)	-\$5,165	-\$4,492	-\$4,706

Core housing need in Canada by tenure – 2001

Source: Will Dunning Inc., with data from customized tables produced by CMHC

Looking into the future

According to the study, core need will rise due to an aging population (based on projections) and high immigration levels, in the short term at least. The study did mention that it will often be desirable to anticipate and accommodate the increase in market demand by developing new housing.

**Canada Mortgage and Housing Corporation defines households in "core housing need" as, first, those whose housing did not meet at least one of the three standards—adequate, suitable and affordable—and, secondly, those who could not pay the median rent for alternative housing in the urban centre without spending 30% or more of its total before-tax income. ■*

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The Dimensions of Core Housing Need in Canada was published in July 2007 and is on the CHFC website at: www.fhcc.coop.

New Research Reveals that Adapting Homes Can Extend the Autonomy of Seniors and Improve their Quality of Life

Suburbia is aging. Not only are the houses, streets and equipment aging but so too are the residents. Some neighborhoods built back in the 1950s are already a half-century old. An analysis of census data for the City of Québec metropolitan area painted a rather surprising picture of this territory and dispelled the image of young families traditionally associated with suburbs. Of course, their findings did confirm the general aging of the first generation of suburbanites, but they also revealed that more seniors are living out in suburbia than in the central areas of town. Many of the first generation of owners are still living there.

Most seniors in the Québec metropolitan area live in the suburbs and wish to grow old there. Specific requirements must be addressed for suburbanites approaching old age. Adapting the homes of seniors receiving support services and health care services in their homes to extend their autonomy is an extremely relevant issue.

Geneviève Vachon and Carole Després, professors with the Université Laval School of Architecture, undertook qualitative research which received financial support from Canada Mortgage and Housing Corporation under its External Research Program. They interviewed 13 Québec residents with disabilities or a chronic or degenerative illness affecting their ability to move about, who have adapted their suburban homes.

All of the persons interviewed said that the adaptations improve comfort and quality of life for them and their families. They feel safer and the risks of falls and injuries are considerably reduced. They are also less housebound and can access more rooms. They particularly liked the changes made to their bathrooms.



The adaptations improve comfort and quality of life for them and their families

This research report discusses the process and the findings in detail. It compiles the literature on adapting homes and provides the findings from a study of completed home adaptation projects. The report describes personal accounts of adaptation experiences arising from situations where persons lost their mobility, and presents the views of some design and health professionals involved in adapting homes in Québec. It also contains some recommendations on how to make for a smoother adaptation. ■

For additional information, refer to Research Highlight *Adapting Homes to Extend Independence* on the CMHC website at <http://www.cmhc-schl.gc.ca/fr/> or order a copy of the research report by calling 1-800-668-2642.