

1988
Policy and Research Initiatives
(Summary)

In 1988, there will be a number of **major research activities** which will be given high profile and present a number of challenges for the Corporation.

Renovation of the Housing Stock:

Consultation on housing renovation is being carried out in 1987. This will lead to policy and program development in 1988, which will focus on the best methods for government to promote private renovation and on improvements to RRAP which assist those in core housing need. New initiatives and program improvements will involve considerable discussions with the provinces and the industry.

Housing the Elderly:

Research into financial and physical alternatives for housing elderly Canadians will continue in 1988. The results will be used for policy and program development work in the areas of home equity conversion and the development of a comprehensive CMHC policy on shelter for senior citizens.

A major national conference on housing the elderly early in 1988 will be held. This conference will be a forum for the exchange of ideas on elderly housing issues/options as input into the policy development work.

Market Analysis:

The major thrust of the Market Analysis Centre in 1988 will be to improve the targeting and distribution of housing market information and analysis. This will involve identifying the information requirements of the Corporation's major industry clients and internal business managers. After these needs have been identified, reports will be created or revised to maximize the visibility of the Corporation and to ensure that clients and internal business managers have the best possible information for decision making.

Improvements will be sought in the release of starts, vacancy and rent survey information then the Outlook and Forecast publication. Concurrent with these publications, the Centre will also complete reports on specific market or economic problems in support of field activity.

Housing Research Committee:

It is important that the momentum achieved in 1987 is maintained and that the Committee continues the process of establishing itself as a dynamic and influential force in the housing research field.

In 1988, major objectives will be to bring about: increased cooperation on research projects, thereby ensuring research products in which there is a wide commitment and which are relevant to the needs of housing sector participants, and, increased awareness of members about research underway and completed, its relevance and the key findings of this work, thus ensuring effective dissemination.

This will involve consultation and planning in full committee meetings and in working groups. Joint venturing will be encouraged. Working groups will typically identify research needs in specific research areas, and may jointly develop terms of reference for specific projects and act as advisory teams or steering committees during the course of the project.

Data Gathering and Information Transfer:

Data acquisition during 1988 will be, as in previous years, in support of identified research and analytical studies of demography, markets and housing need.

Statistical surveys will be undertaken to gather information about housing activity in various markets across the country, and the data will be made available to the public via news releases on a monthly cycle. In 1988, the Market Analysis Centre will be issuing a series of bulletins and newsletters targetted at the real estate and lending communities.

The Corporation will undertake housing related research in a broad spectrum of topic areas, and the methodologies used to convey the information to end users will also vary according to the nature of the target audiences.

Also, publications in the Corporation's three new series of Advisory Documents will begin to be available to targeted audiences. There will be three new series of publications that are targeted at builders, at renovators and consumers.

Information transfer activities directed at private industry will be continued, in the form of the CMHC/CHBA/APCHQ Builders' Workshops, and the Seminars for Renovators that are being pilot tested across the country in the 87/88 winter season.

The Canadian Housing Information Centre will continue to operate as Canada's primary housing library. The results of all research undertaken by the Corporation will be available to the general public through inter-library loans, and research outputs are listed on nation-wide data bases available to researchers with other levels of government, the private sector and in universities.

It is planned to prepare a "marketing package" in portfolio format composed of pamphlets, illustrations and booklets which will assist Canadian delegations, the Trade Negotiations Office, and trade representatives in Canadian Embassies abroad in explaining the Canadian wood frame housing system. This package will assist in the marketing of Canadian wood products and systems to other countries.

The following summarizes the **issues** of policy and research activity for 1988.

Market Housing:

Housing activity in Canada will moderate to more sustainable levels in 1988 following cyclical peaks in starts and resales in 1987. Activity in the booming urban markets of Ontario and Quebec will return to normal although significantly fewer renters will be able to afford the payments of a modestly priced home. Activity will be down in all provinces except Newfoundland where no major change is expected, and Alberta where improving economic prospects will enable higher starts and resale activity. Declines in market activity in Saskatchewan, Manitoba and Nova Scotia will continue for the second consecutive year and reflect the very weak agriculture and resource based economies of each province.

Canadian housing markets will change appreciably over the next twenty years. In order for CMHC to fulfill its federal role of providing a supportive framework for private activities the Corporation will seek to enhance its role in providing information and leadership in the key market housing areas. Work in 1988 will focus on expediting the development of the **renovation industry**, updating **housing requirement projections**, analyzing the information provided by the **labour and materials** survey and using this and other information to assess **housing as an employment generator**. In order to keep pace with the institutional environment, work will continue in the area of **regulatory reform**, **taxation** and **free trade** on housing; **cost of instability of the housing sector**; **innovations in the mortgage markets**; and **land supply** issues. In addition, the Corporation will pursue activities on increasing the range of **housing options for the elderly**.

Social Housing:

Social housing policies and programs address the housing problems of Canada's low income population. Currently, over one million are estimated to be in need of housing assistance. These are in addition to the approximately 450,000 households already occupying social housing units. The stock of social housing units has been built-up since 1949, and is composed of public housing, non-profit housing, rent supplement and rural and native ownership units. A significant number of low income families living outside of the social housing stock have also received assistance to improve their units. In 1986, a new policy direction ensured that federal funds would be targetted to those most in need. Further, the provinces were offered an opportunity to play a greater role in the delivery of social housing units.

The work for 1988 concentrates on three areas related to the management of the existing social housing stock, enhancing the effectiveness of the current social housing programs and exploring potential issues and opportunities that may arise in the 1990's.

With respect to management of the existing **social housing stock**, work will focus on examining opportunities for **reducing the cost** of operating it, and on **preserving and maintaining** it. The work related to the administration of the new social housing programs includes developing better measures of **housing need** to enable a fair distribution of social housing units among the provinces, participation in Indian and Northern Affairs' review of **on-reserve housing** programs and policy, a consultation on the need for changes to the design of the Residential Rehabilitation Assistance Program, and a review of **income definitions** for social housing tenants on rent geared to income.

Work scheduled in 1988 will also include evaluations of **self-help** housing in order to determine whether it is a viable way of delivering social housing assistance, an examination of the implications for social housing policy of introducing a **guaranteed annual income**, and an examination of the nature and extent of non-traditional and **special housing needs**.

Housing Quality:

In 1988, it is proposed to focus the Corporation's technical research resources on three major theme areas: **high rise buildings; northern and remote housing; and, ventilation, air quality and moisture.**

In the high rise area, it is planned to continue work on cladding failures and parking structure deterioration, and undertake new work on the overall performance of high rise wall systems, and on air quality in high rise apartment buildings.

Work in the north will continue with the development of foundation systems that can cope with unstable soils. The Northwest Territories Housing Corporation is already implementing foundation designs that have resulted from earlier experiments. In order to deal with current concerns about air quality, work will continue to be undertaken in the development of heating and ventilation systems that will ensure safety from combustion spillage and adequate fresh air supply for occupants. Additional work will be undertaken in the field testing of housing components (window hardware, for example) for their ability to resist the heavy usage common in much of the north.

The Ventilation, Air Quality and Moisture theme area is one of the areas of research in which the Corporation is involved that is of direct concern to the general public. Over the last few years, the Corporation has developed a capability in the areas of combustion safety and moisture problems that has placed it on the "leading edge" of research, and the generation of solutions to these common problems. In 1988, work in these areas of investigation will be continued. The Atlantic Moisture Test Huts approach will be replicated in Ontario, and in the Prairies (as a joint venture with the University of Alberta). Work on air quality and combustion safety will be continued, with funding support from the EMR coordinated Panel on Energy Research and Development. New work will be undertaken in the development and field testing of solutions to prevent the build-up of radon gases in basements.

PROGRAM EVALUATION:

The Program Evaluation Division is responsible for reviewing and evaluating all of CMHC programs on a cyclical basis to determine whether they are meeting their objectives. Evaluations of both individual programs and groups of programs with similar objectives are undertaken. This latter approach permits comparison of the effectiveness of different programs in meeting similar goals. Where the effectiveness of programs in responding to housing needs is inadequate, evaluation studies include recommendations for their improvement or change.

The plan for the Program Evaluation Division is prepared on a five-year basis. 1988 activities are therefore determined, in part, by the need to evaluate all programs within the five-year timeframe. In addition, the Plan responds to other priorities through consideration of strategic planning and policy development requirements, direct requests from Cabinet or central agencies management concerns, major changes in programs or the introduction of new ones. The Plan also meets any external requirements set by the Office of the Comptroller General (OCG).

The evaluation of the public housing portfolio, initiated in 1987, will be completed in 1988. The priority accorded this project reflects the importance given to the proper maintenance, preservation and management of the existing public housing stock.

Concern has been expressed about the condition of Canada's rural housing stock and issues raised regarding the adequacy of current program designs to deal with rural and native housing needs. In response, evaluations of the Rural and Native Housing Program, the RNH Demonstration Program and the Emergency Repair Program, scheduled to occur in 1989, will be brought forward to 1988. The native cadre and residual lending programs will also be evaluated in 1988. The rescheduling of evaluations of rural housing programs will allow evaluation results to feed into a possible consultation process for rural and native housing in late 1988 or 1989. To accommodate this rescheduling, the evaluation of housing research and information programs will be deferred until 1989.

Four rental housing programs (Canada Rental Supply Program, Multiple Unit Residential Building Tax Shelter, Assisted Rental Program, Limited Dividend Program) will be evaluated in 1988. The evaluation will focus on the effectiveness of using the housing sector to support broader economic objectives.

Work will also begin in 1988 on evaluations of the pre-1986 non-profit and cooperative housing programs. In addition, a framework for the future evaluation of the Federal Cooperative Housing Program will be produced. Follow-up consultations will be undertaken with provincial and territorial housing agencies on the potential for joint program evaluations of the new (1986) social housing programs.

MARKET HOUSING

<u>ISSUE</u>	<u>RATIONALE</u>	<u>ACTIVITY</u>
1. The Renovation Industry	<ul style="list-style-type: none">• Housing researchers and industry representatives have underlined the need for better data on the condition of the Canadian housing stock.	<ul style="list-style-type: none">• Hold a seminar to determine the renovation data needs.• Develop measures of house condition.
2. Labour and Materials	<ul style="list-style-type: none">• Basic up-to-date information regarding labour and materials used in new residential construction is important to CMHC as well as to other federal agencies and to members of the housing industry.	<ul style="list-style-type: none">• Obtain comparative costs of different methods of production, including both manufactured and site-built housing.• Analyse trends in housing types and construction systems and materials.• Examine productivity in terms of trends and significant factors that influence productivity.
3. Regulatory Reform	<ul style="list-style-type: none">• Canadian housing markets will change appreciably over the next twenty years. It is not clear that the existing regulatory structure will be able to cost effectively accommodate change: CMHC has funded a study by the FCM/CHBA/CAHRO tripartite association to establish a plan for evaluating and improving the Canadian regulatory environment related to residential construction.	<ul style="list-style-type: none">• Phase I of the FCM/CHBA/CAHRO study is nearing completion. The workplan which will evolve from phase I will be implemented in 1988.

MARKET HOUSING

<u>ISSUE</u>	<u>RATIONALE</u>	<u>ACTIVITY</u>
4. Housing Requirements Projections	<ul style="list-style-type: none">• The long term socio-economic and demographic outlook continues to have important implications for future housing demand and housing supply. The last comprehensive long term projection of housing requirements was produced by CMHC in 1981 based on 1976 Census data. No other agency has produced a comprehensive long term outlook for housing at the metropolitan area level since then. Census data from 1986 will be available early in 1988 and it will therefore be possible to update these projections at both a provincial and a metropolitan area level.	<ul style="list-style-type: none">• Continue participation in the Health and Welfare three year study of Canada's demographic future.• Enhance and update the housing requirements model developed by CMHC in 1981 using 1986 Census data.• Explore the development of a micro-computer application for one housing requirements model.
5. Housing as an Employment Generator	<ul style="list-style-type: none">• Housing has been used in the past as one instrument for employment creation purposes in times of economic recession. Measures to stimulate home purchase, rental construction or renovation have different employment multiplier effects for a given level of expenditures.• To ensure maximum cost-effectiveness, it is important to assess the appropriateness of housing stimulation programs in the context	<ul style="list-style-type: none">• Measure the employment multiplier effects of stimulating home purchase, rental construction and renovation, in the current context.• Conduct a comparative analysis with other non-housing job creation measures.

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<u>ISSUE</u>	<u>RATIONALE</u>	<u>ACTIVITY</u>
5. Housing as an Employment Generator (Cont'd)	of today's and future market conditions, and to develop criteria appropriate to the selection and implementation of various programming alternatives.	
6. Innovations in the Mortgage Market	<ul style="list-style-type: none">One legacy of the high and volatile interest rate environment of the early 1980s is the increased interest in alternative mortgage instruments. There has been increasing pressure on the federal government to assume a role in facilitating new mortgage designs in the marketplace. Recent examples include mortgage-backed securities and the index-linked mortgages.	<ul style="list-style-type: none">Develop a position paper on the role of, as well as the policy opportunity available to, the federal government once the directions on tax reform are set down which will be used to engage the private sector and relevant government departments and agencies in discussion.
7. Housing the Elderly	<ul style="list-style-type: none">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.	<ul style="list-style-type: none">Conduct case studies of innovative housing for the elderly in Canada.Organize a National Conference on Housing the Elderly.
8. Land Supply Issues	<ul style="list-style-type: none">In some cities lot prices are increasing at as high rates as they did in the early 1970s. Municipalities are gradually increasing the cost base of service lots by elevating lot levies.	<ul style="list-style-type: none">Monitor the policy/research exercises already underway.Explore the potential for improving data bases, encouraging wider and more flexible distribution of information concerning the

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8. Land Supply Issues (cont'd)	In eastern and central Canada, there are sporadic claims by smaller builders that they are unable to maintain adequate sources of serviced lots to assure their production. Some larger urban regions will need major sewage treatment facilities and/or sewer trunks within a few years in order to accommodate the demand for serviced land for urban expansion. It is estimated that \$15 billion is needed to repair and replace existing deteriorated municipal infrastructure.	land supply, and augmenting the automation of such information systems. • Monitor the findings of local land studies and integrate these into occasional, timely reports which assess national trends.
9. Taxation and Housing	• Corporate and federal sales tax reform opportunities and their impacts on implications for housing.	• Examine the impacts of a BTT and other proposed federal sales tax regimes on construction costs, prices and rents, housing affordability, and regional market reactions. • Examine the impacts of proposed Corporate tax reform proposals on developers, operators and builders.

MARKET HOUSING

<u>ISSUE</u>	<u>RATIONALE</u>	<u>ACTIVITY</u>
10. Free Trade	<ul style="list-style-type: none">. What would be the potential impacts of a free trade agreement with the United States on the housing sector? To what extent would the Canadian homebuilding industry be vulnerable to imports of manufactured housing from the United States if tariffs and trade barriers were removed?	<ul style="list-style-type: none">. After the specifics of a free trade agreement are announced, further examine, more precisely, the impacts of free trade with the United States on the Housing Sector.
11. Costs of Instability of the Housing Sector	<ul style="list-style-type: none">. What has been over the years the cost of industry instability and what can we learn from other countries? Are there any measures that would be effective in stabilizing the housing sector given the boom-bust nature of the homebuilding industry and the sensitivity of housing demand to the effects of monetary policy? What would be the cost of such measures and how would such costs compare with outlays on programs such as CHOSP, CHRP, etc. and past stimulus programs offered by provinces? Would it be appropriate for the government to put in place measures to stabilize housing sector?	<ul style="list-style-type: none">. Determine whether there are low cost approaches to stabilizing the residential construction industry.. Examine what has been and will likely be the impact of a rapidly growing renovation industry on the stability of the housing sector.. Identify what the social costs of industry instability are and how significant they are.

SOCIAL HOUSING

<u>ISSUE</u>	<u>RATIONALE</u>	<u>ACTIVITY</u>
1. Preservation and Maintenance of the Existing Public Housing Stock	<ul style="list-style-type: none">• There are approximately 200,000 units in the public housing stock. Some of this stock may be in poor physical condition because of initial inadequate construction or maintenance. It may be inferior in space and amenities to housing built under current construction standards. It may also be inappropriate or unsuitable for the current and future social housing population.	<ul style="list-style-type: none">• Following the completion of the public housing evaluation examine alternative strategies to address problems.
2. Reduction in Cost of Public Housing Stock	<ul style="list-style-type: none">• The Federal Government currently spends over 450 million dollars annually to support the public housing stock. Cabinet directed CMHC to examine ways to reduce subsidies on the existing public housing stock through economies in maintenance and operating budgets and through seeking increases in public housing rents paid by social assistance recipients.	<ul style="list-style-type: none">• Review and assess how other governments (i.e. Great Britain, U.S.) have handled or have failed to handle similar problems.• Evaluate the public housing operating and maintenance practices identified as presenting opportunities for savings, such as simplifying management and accounting practices, redevelopment of land, tenant self-management, etc.• Prepare a paper for discussion with the provinces and other Federal agencies with the objective of securing support for implementing those ideas which promise savings in the public housing subsidy budget.

SOCIAL HOUSING

<u>ISSUE</u>	<u>RATIONALE</u>	<u>ACTIVITY</u>
3. Housing Needs and the Joint Planning Process	<ul style="list-style-type: none">. The development and implementation of an inter-provincial social housing allocation model, the joint planning process, and the new social housing programs generally, have emphasized the requirement for up-to-date defensible estimates of core housing need.	<ul style="list-style-type: none">. Continue to undertake work on improving the measurement of need in conjunction with the provinces/territories.. Examine with Statistics Canada, expanding the HIFE survey to include home-owner and other housing costs, as well as enlarging the sample.. Add questions to the 1991 Census.. Examine methods for measuring the housing needs of natives.. Conduct further work on imputation, synthetic matching, etc.
4. Housing the Non-Traditional/Special Needs Population	<ul style="list-style-type: none">. One of the more important results of demographic, social and economic change over the last thirty years has been the increasing number and proportion of single person households, particularly in the non-elderly category. More recently the plight of those single people not living in structurally separate dwellings - roomers, boarders, lodgers and the homeless has increased in visibility as a result of generally poor fiscal and economic conditions, and the loss of rooming house accommodation in the major centres as a result of demolition and gentrification. Many single person households	<ul style="list-style-type: none">. Continue work to establish the data requirements for improving measures of single person housing conditions, and special housing need.. Estimate the number and types of households with special housing needs.. Examine the characteristics of non-elderly singles.. Assess the impact of non-housing programs on the housing situation of singles.. Evaluate the policies and programs of other countries vis-à-vis singles.. Begin exploratory work looking at the housing options available for groups with special needs.

SOCIAL HOUSING

<u>ISSUE</u>	<u>RATIONALE</u>	<u>ACTIVITY</u>
4. Housing the Non-Traditional/Special Needs Population (cont'd)	are in core housing need yet have not received any priority in social housing programming.	. Evaluate alternate way of facilitating self-help in new construction and renovation.
5. Self-Help	<ul style="list-style-type: none">. Self-help in its broadest sense implies the participation of the user in housing, i.e. the responsibility for the construction and/or operation of the unit.. Government's involvement in social housing will be directed toward core need responsibility on the tenant. Thus there is little opportunity for him or her to develop skills which would be useful both in terms of maintaining the unit or perhaps even in improving personal economic prospects.. The alternative of self-help housing offers these opportunities by requiring individuals, groups of people and communities to become more self-reliant when looking for solutions to their housing problems.	<ul style="list-style-type: none">. Monitor and evaluate past experience with the R.N.H. Demonstration Program.. Recommend and proceed with demonstration/pilot projects with a greater degree of participation by the user.
6. On-Reserve Housing	. Following its evaluation of the On-Reserve Housing Program, and CMHC's evaluation of its on-reserve housing programs, the Department of Indian and Northern Affairs (DIAND) is planning to establish a	. Participate on the On-Reserve Housing Task Force.

SOCIAL HOUSING

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6. On-Reserve Housing (cont'd)	task force to develop housing policy and programs for Indian reserves.	
7. Guaranteed Annual Income	<ul style="list-style-type: none">• The MacDonald Commission recommended that Government consider a guaranteed annual income to replace many, if not all, of the existing income support programs, including social housing. All three political parties have publically stated that a guaranteed annual income should be considered.	<ul style="list-style-type: none">• The analysis would be to compile and summarize the known material on this subject.• Identify issues which require further analysis and conduct the necessary research.• Preparation of a position paper.
8. The Definition of Income	<ul style="list-style-type: none">• The definition of income used for determining program eligibility and level of federal assistance has not been reviewed since 1980. It is unknown whether the current deductions or inclusions are consistent with the intent of the social housing program.• In addition to the CMHC definition of income, which varies amongst programs there is the question of consistency with the treatment of income under such federal programs as veteran's pensions, Canada Assistance Plan, Income tax, etc.	<ul style="list-style-type: none">• Undertake a thorough review of the current federal definitions of income to determine the housing rationales for the various exclusions and inclusions and whether these are still valid.• Compare the provincial rent-to-income scales and definition of incomes with the federal equivalent.• Examine how income is defined in the programs of other federal departments and agencies to determine inconsistencies.• Investigate provincial variations in the treatment of assistance payments such as pensions, disability awards, disability pensions, family allowances, mother's allowances, workmen's compensation, etc.

HOUSING QUALITY

<u>ISSUE</u>	<u>RATIONALE</u>	<u>ACTIVITY</u>
1. High Rise Residential	<ul style="list-style-type: none">. Concerns have existed for several years regarding the potentially serious economic implications of parking garage deterioration from salt attack, and similar problems may exist regarding the failure of concrete balconies from a chemical process known as carbonation.. The possibility of failures of high rise walls constructed with the masonry on steel stud cladding system has stimulated lab work, and theoretical analyses to understand the problem, and to provide best advice to designers and contractors on the system. Similar work needs to be undertaken in the installation of air barrier and rain-screen systems.. Air supply and unplanned circulation between units and between floors often results from passageways formed by service chases, which also convey undesirable fumes, odours and vermin.. Concerns have been raised, particularly in Quebec, for problems of noise transmission between units in group housing projects.	<ul style="list-style-type: none">. Undertake a study on the applicability of cathodic protection to residential parking garages and do a pilot survey in Toronto to determine if evidence of problems caused by carbonation exists.. Continue funding for government/industry study on parking garage deterioration.. Continue field testing and evaluation of masonry walls on steel stud backup, as a carry-through of studies already conducted to assess performance from the point of view of rain penetration, air infiltration, and corrosion.. Develop test methods to determine the air tightness of high rise walls.. Undertake field testing to establish typical air change rates, air movement patterns and pollutant levels in both high rise and medium rise apartment buildings of varying ages and types of mechanical systems.. Undertake case studies to document noise levels, develop and test upgrading techniques.

HOUSING QUALITY

<u>ISSUE</u>	<u>RATIONALE</u>	<u>ACTIVITY</u>
2. Northern and Remote Housing	<ul style="list-style-type: none">• Northern and remote housing experiences conditions that are in general, more severe, longer in duration and more difficult to cope with than mainstream urban tract houses. Transposing conventional southern housing into isolated and northern climates has in the past proven to be less than satisfactory to the occupants and the Corporation. Solutions to problems applicable in the south often do not apply directly to the northern or remote situation.	<ul style="list-style-type: none">• Undertake field testing of building components in the north, including door and window hardware.• Continue field testing of approaches to ventilation and air quality that can cope with northern climates and lifestyles.• Continue development and field testing of cost-effective foundation systems that can cope with unstable soils.
3. Ventilation/ Air Quality/ Moisture	<ul style="list-style-type: none">• Over the past decade, the capability of the construction industry to construct tighter housing has improved significantly, but moisture and air quality problems have increased as a consequence. An increasing number of houses in Canada are experiencing damage from wood rot, and concerns for occupant health are on the rise due to higher indoor pollution levels. CMHC has developed expertise which has placed it in the position of being a leader in this field.	<p><u>Ventilation</u></p> <ul style="list-style-type: none">• Monitor the field performance of ventilation systems;• Measure and document the characteristics of duct (and chimney) devices;• Develop better air supply designs; and• Via competitive proposal call, encourage the private sector and the building science community to develop and field test new integrated ventilation and combustion systems.

HOUSING QUALITY

<u>ISSUE</u>	<u>RATIONALE</u>	<u>ACTIVITY</u>
3. Ventilation/ Air Quality/ Moisture (cont'd)		<u>Air Quality</u> <ul style="list-style-type: none">. Develop better fireplace, wood stove, and chimney designs using a computer simulation program (WOODSIM);. Examine indoor air quality hazards caused by renovation activities;. Undertake field testing of the performance of high efficiency heating appliances (effects of wind, and impacts on moisture levels); and prepare a bibliography and analysis of housing for the chemically sensitive.. Undertake the development and field testing of radon avoidance techniques for basements. <u>Moisture</u> <ul style="list-style-type: none">. Conduct in-depth analysis of the data from Atlantic test huts;. Field test wall drying in other climates (including stucco in the prairies and brick veneer in Ontario);. Develop solutions for attic moisture problems.. Carry out field investigations into moisture damage in re-sided houses in Atlantic Canada.