

**A MEETING OF FEDERAL/PROVINCIAL/
TERRITORIAL/INDUSTRY STRAKEHOLDERS
ON BUILDING CODE ISSUES RELATED TO
HOUSING**

**FINAL REPORT
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**PREPARED BY
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Rencontre des intervenants des administrations fédérales, provinciales et territoriales et de l'industrie sur les dossiers d'actualité liés au code du bâtiment touchant l'habitation

PREFACE

Under the Constitution Act, responsibility for building regulations in Canada rests with the provinces and territories. Historically, this resulted in a multiplicity of building regulations which were not consistently updated. In 1937, the Department of Finance asked the National Research Council (NRC) to develop a model building code suitable for adoption by all authorities having jurisdiction across Canada. The first National Building Code (NBC) was published in 1941 with new versions published approximately every five years. The current 1990 document is the tenth edition. The NBC is a code of minimum requirements for public health, life safety and structural sufficiency with respect to new construction.

In response to concerns expressed by housing stakeholders about building code issues related to housing, the federal Housing Minister, at the January 1994 federal/provincial/territorial housing ministers meeting, asked that the subject of nationally consistent building codes be examined. At the June 8, 1994 meeting of ministers an "Issues Paper on the National Building Code of Canada", prepared by Canada Mortgage Housing Corporation (CMHC), was discussed. On the basis of a survey of key housing stakeholders, this paper identified five broad issue areas of concern to the housing sector. The issues were harmonization, scope, the revision process, enforcement of building codes and the impact of codes on affordability.

Housing ministers agreed that achieving stronger consensus on building code issues was desirable. As a result, CMHC was asked to organize a meeting on these issues to facilitate direct discussions at a senior level amongst key stakeholders.

An advisory committee representing five major stakeholders was formed in September 1994 to guide preparations for this meeting. Provincial/territorial ministries of housing and ministries responsible for building regulations, industry and other government stakeholders identified by the advisory committee as active in the building code process were invited to attend the meeting.

The meeting occurred in Ottawa on December 7 & 8, 1994. On the first day, representatives of eight ministries of housing, eight ministries responsible for building regulations, sixteen industry stakeholder groups, Natural Resources Canada, the Institute for Research in Construction and CMHC met (a list of participants is included in the Appendix). There were three main objectives for the stakeholder meeting:

1. To begin building a stronger consensus on building code issues related to housing through discussions between key stakeholders.
2. To provide a national forum for stakeholders to discuss future directions that will assure consistent, viable and cost effective building regulations as they relate to housing.

3. To develop a report to housing ministers that outlines housing issues related to the production, adoption and enforcement of the NBC and, where possible, to suggest future directions and strategies for resolving these issues.

To begin the meeting, an overview of building code issues related to housing (paper included in the Appendix) was delivered, followed by a roundtable discussion amongst stakeholders. The following day, housing ministry representatives met to discuss the scope and content of this report to housing ministers.

The meeting was co-chaired by the Newfoundland and Labrador Housing Corporation and CMHC. Acting as the secretariat for the meeting, CMHC prepared this report for housing ministers. The draft report was reviewed by all meeting participants and this final report reflects the comments received.

The introductory section of the report, Part 1, explains the code revision process and provides background information on the roles of the various agencies and participants. Part 2 highlights the discussions during the meeting of housing stakeholder representatives. An outline of recommendations for action discussed on December 8 by housing ministry representatives is provided for housing ministers in Part 3 of this report.

TABLE OF CONTENTS

PREFACE	i
TABLE OF CONTENTS	iii
EXECUTIVE SUMMARY	1
PART 1 INTRODUCTION	4
a) Purpose of the Report	4
b) Building Regulatory Process	5
c) Current Environment	11
PART 2 DISCUSSION OF BUILDING CODE ISSUES RELATED TO HOUSING	14
a) ISSUE: Harmonization and Scope of Building Codes	14
b) ISSUE: Revision of Building Codes	16
c) ISSUE: Enforcement of Building Regulations	18
d) ISSUE: Affordability	19
PART 3 RECOMMENDATIONS FOR ACTION	21
a) Placing Building Code Issues on the National Housing Agenda	21
b) Strengthening the Housing Sector Voice in the Code Revision Process	22
PART 4 APPENDIX	25
a) List of ministries, associations and federal agencies represented at the meeting	
b) Meeting Paper - "Background on the Issues and Suggestions for Discussion"	

EXECUTIVE SUMMARY

of the Final Report of the Meeting of Federal/Provincial/Territorial and Industry Stakeholders on Building Code Issues Related to Housing

At the June 1994 housing ministers meeting, the Minister Responsible for CMHC suggested that a meeting of key stakeholders be held to further the consensus building on building code issues related to housing. On December 7, 1994, a federal/provincial/territorial/industry stakeholder meeting was held to discuss building code issues as they relate to housing. On December 8, 1994 housing ministry representatives met to discuss recommendations for action for consideration by housing ministers. The Canada Mortgage Housing Corporation (CMHC) and the Newfoundland and Labrador Housing Corporation co-chaired these meetings.

A draft report summarizing the discussions was prepared by CMHC as secretariat for the meeting and was reviewed by all participants. The comments received were incorporated into this final report. It is anticipated that the report's recommendations will be discussed by housing ministers at their July 1995 meeting.

The discussions indicated that:

There was strong support for a harmonized building code across Canada, although provinces/territories indicated that they need flexibility to respond to unique circumstances in their jurisdictions.

The development of a "core" code document of minimum requirements supplemented by separate modules to address additional issues, such as environmental concerns, was supported in principle. In general, it was felt that this "core + modules" structure would provide provinces/territories with sufficient flexibility to enable them to respond to local requirements while at the same time achieving harmonization on a core document.

Most participants believed that this "core" document should be limited to addressing essential issues of health, safety and structural sufficiency (the traditional scope of the National Building Code (NBC)). However, there were dissenting views. Natural Resources Canada felt energy efficiency should be part of the "core", as did the Consumers' Association who preferred an expanded scope. The Régie du bâtiment believed accessibility should be a "core" feature.

The development of performance-based codes, rather than the current prescriptive-based codes, was generally viewed as a means to allow flexibility in the NBC and therefore promote greater harmonization.

Participants agreed that there is a need to balance technical and policy concerns within the code development process. The need to develop stronger rationale for code changes through the use of review criteria which reflect broad technical and public policy objectives was raised. It was also suggested that a broader consensus at a policy level should be sought for those code revisions which would have broad impact or significant cost implications.

It was agreed that there is a fundamental need to undertake cost-benefit analyses of proposed code changes having broad implications. The importance of including social costs and benefits as part of these analyses was stressed as was the need to undertake cost-benefit analysis early in the code revision process.

The enforcement of building codes was generally recognized as being as important as their development. It was agreed that enforcement involves many players - provinces/territories, municipalities, private sector professionals and consumers - and that it is therefore important that the roles and responsibilities of all housing stakeholders be clarified and communication between all parties involved. Training and certification were also discussed as critical in the enforcement of building codes.

Although the code revision process provides for extensive technical review, a number of federal/provincial/territorial housing ministry representatives expressed concern that they do not currently have opportunities to put forward strategic input early enough in the process. In all but three provinces, there is no direct participation of housing ministries in the code revision process through the Provincial/Territorial Committee on Building Standards (PTCBS). This committee reports to provincial deputy ministers responsible for building regulations and is mandated to give policy guidance on the National Building Code to the Canadian Commission on Building and Fire Codes (CCBFC). Further, although individuals from industry groups such as the Canadian Home Builders' Association sit on the CCBFC, there currently is no national level representative drawn from housing ministries on this commission.

At their December 8 meeting, federal/provincial/territorial housing ministry representatives expressed the view that the current Canadian code framework does not adequately address housing considerations. To address their concerns, a set of recommended actions aimed at placing building code issues on the national housing agenda and strengthening the housing sector voice in the code revision process were developed. These recommendations include:

- establishing a federal/provincial/territorial subcommittee to provide an ongoing forum for discussion of building code and housing issues;
- undertaking consultations and developing a national issues paper early in each building code revision cycle to identify the needs, priorities and concerns of the housing sector;

- establishing stronger ongoing links between provincial housing and building regulation ministries and PTCBS members, where these ministries are separate, as well as with other ministries affected by building codes;
- establishing stronger ongoing links with the CCBFC by requesting that one of the co-chairs of the federal/provincial/territorial subcommittee on housing and building codes become a member of the CCBFC;
- submitting a copy of the Final Report of the Meeting of Federal/Provincial/Territorial and Industry Stakeholders on Building Code Issues Related to Housing to the CCBFC as input to the Draft Strategic Plan;
- directing the federal/provincial/territorial subcommittee on housing and building codes to develop a position in consultation with housing stakeholders on the proposal in the Draft Strategic Plan to create a separate housing code.

PART 1

INTRODUCTION

Under the British North America Act and its successor the Constitution Act, responsibility for building regulation in Canada rests with the provinces and territories. This responsibility was generally delegated to municipalities. As a result, there was extensive variation in building regulations. There was often inadequate or even non-existent municipal building regulations, leading to dangers to health and safety. In addition, building regulations were not being consistently updated thereby impeding progress. In 1937, the Department of Finance asked the National Research Council (NRC) to develop a model building code suitable for adoption by all municipalities across Canada to provide all Canadians with a minimum building standard.

The National Building Code (NBC) is a comprehensive document of largely technical requirements for building construction. It is revised every five years to maintain the code as an up-to-date minimum standard for health, safety and structural sufficiency. Since its inception in 1941, this model code has provided Canadians with a high standard of housing.

The NBC has a number of direct and indirect implications for the development of housing in Canada. Building codes affect the cost of housing, the operation of the dwelling unit and its suitability for the occupant. Therefore, housing objectives are directly affected by the content, adoption and enforcement of the NBC. Recently housing stakeholders have become increasingly concerned about issues related to the development, revision and enforcement of the NBC. As a result, a meeting of these stakeholders was held in Ottawa on December 7 & 8, 1994 to discuss building code issues as they relate to housing.

a) PURPOSE OF THE REPORT

The purpose of this report is:

1. To review for housing ministers the current environment and process for revision of the National Building Code of Canada.
2. Summarize the discussions at the meeting of federal/provincial/territorial housing stakeholders on building code issues related to housing.
3. Outline recommendations for action for consideration on the part of housing ministers.

b) **BUILDING REGULATORY PROCESS**

The development, ongoing revision and implementation of the NBC is a process affecting most housing industry stakeholders and all levels of government within a framework of defined responsibilities. A diverse group of code users operate with varying degrees of understanding within the framework of the code process. The following synopsis of the building regulation process provides an overview of the responsibilities of the participants in the process and outlines how the NBC is updated and revised.

i) **Federal/Provincial/Territorial and Municipal Government Roles**

The Canadian system of building regulations involves a partnership of federal, provincial/territorial and municipal governments working in consultation with industry. In general terms, the government responsibilities are:

FEDERAL manage the development of the NBC including
code related technical research

PROVINCIAL/TERRITORIAL adopt the NBC or amend provincial versions
as necessary

MUNICIPAL enforce provincial codes

The Canadian Commission on Building and Fire Codes (CCBFC) was established by the National Research Council to encourage uniformity of building regulations throughout Canada and oversee the code development process. The CCBFC's mandate is to develop and maintain the NBC as an up-to-date and progressive document of minimum requirements for public health, fire safety and structural sufficiency with respect to new buildings. The NRC publishes the model code and acts as the secretariat for the CCBFC. The Commission is responsible to the NRC for the contents of the code and the revisions which are issued. The Commission reports to the NRC through the Institute for Research in Construction (IRC) Advisory Board.

New editions of the national model code do not come into effect unless adopted by an authority having jurisdiction for building regulations. Authorities having jurisdiction are normally the provincial or territorial governments, although a few charter cities continue to exercise a separate responsibility. Prior to adopting the revised NBC, some authorities having jurisdiction may undertake their own review of the new code, although the extent of the review varies in each jurisdiction. Most authorities having jurisdiction currently adopt the NBC 1990 as their provincial building code. However, Ontario, Manitoba, Alberta and British Columbia develop their own building code, which is based substantially on the national model with varying degrees of change in each jurisdiction. Newfoundland has not enacted a provincial building code, although most municipalities in

Newfoundland adopt the NBC. Prince Edward Island has not enacted a provincial building code with the exception of Part 3 Section 3.7 Barrier-Free Design of the NBC 1990 (this occurred in April 1995). However, Charlottetown and Summerside adopt the NBC. The province of Québec has adopted and enforces the NBC 1990 with few modifications for public buildings (i.e. for residential buildings this applies to rooming houses with 10 or more bedrooms and apartment buildings with more than two floors and eight units) and the Québec municipalities have generally adopted the NBC for small residential buildings.

Municipal governments are responsible for the enforcement of building codes. Issuance of building permits, plan review, site inspections, and building official training and certification are aspects of this responsibility.

ii) Institutional Framework for Developing the NBC

While the NRC publishes the NBC, the development and revision of the model code is the mandate of the CCBFC. The CCBFC accomplishes their mandate with the guidance of the Provincial/Territorial Committee on Building Standards (PTCBS) and the assistance of the CCBFC's Standing Committees and the IRC.

NATIONAL RESEARCH COUNCIL

responsible to the Minister of Industry
publishes the NBC

CANADIAN COMMISSION ON BUILDING AND FIRE CODES

responsible to the NRC
develops and maintains the NBC

PROVINCIAL/TERRITORIAL COMMITTEE ON BUILDING STANDARDS

responsible to ministries responsible for building regulations*
provides policy guidance on the NBC to the CCBFC

STANDING COMMITTEES

responsible to the CCBFC
advises the CCBFC on necessary amendments to the NBC
each Committee responsible for a specific portion of the NBC

INSTITUTE FOR RESEARCH IN CONSTRUCTION

responsible to the NRC
provides technical and secretarial support to the CCBFC
communication coordinated within the IRC by its Canadian Codes Centre (CCC)
conducts research in support of codes and standards

* In New Brunswick, Ontario and Saskatchewan housing and building regulation responsibilities fall within the same ministry.

Canadian Commission on Building and Fire Codes (CCBFC)

As an independent body supported by the NRC, the CCBFC provides for broad input from regulatory authorities and stakeholder groups for the development of the national model codes. The CCBFC uses a volunteer, consensus process to develop standards for building construction. The process is described as technically-driven since the document produced provides a clear set of minimum requirements to meet the need for public health, safety and structural sufficiency in buildings. The CCBFC is responsible for the content of the NBC. The Commission gives final approval of revisions to the NBC and authorizes its publication.

The CCBFC consists of not less than 27 voting members, including the chairs of its Standing Committees. Membership of the CCBFC and its Standing Committees is chosen to represent broad interest categories (industry, regulatory authorities and general interest), supplemented by specific interests (e.g. building officials, fire officials, building owners, building contractors, architects, engineers, standards development organizations, consumer protection interests). The membership structure or "matrix" is designed to ensure appropriate representation on the CCBFC and its Standing Committees of the principal interest groups in the private and public sectors and to provide for regional representation. Members are appointed for their expertise within the building construction field and not as delegates of an individual agency or organization.

The chairs of the PTCBS and of the Canadian Commission on Construction Materials Evaluation (which provides the construction industry with a national evaluation service for innovative materials, products and systems), the head of the Canadian Codes Centre (the CCC, which coordinates the secretarial and technical supporting services for the CCBFC from within the IRC), and the Secretary and Technical Advisors to the CCBFC are ex-officio members without voting privileges.

Provincial/Territorial Committee on Building Standards (PTCBS)

The Provincial/Territorial Committee on Building Standards is responsible to the deputy ministers of the ministries responsible for building regulations. The PTCBS serves as a forum for the discussion of issues affecting the building industry. The PTCBS usually meets twice a year. The mandate of this Committee is to provide policy guidance on behalf of the provincial/territorial regulatory agencies on the scope, content, format and process of the NBC and associated documents to the CCBFC, the Canadian Construction Materials Centre, and the Standards Council of Canada.

The committee membership includes one senior official appointed by each provincial/territorial deputy minister responsible for building standards. The Deputy Chair of the CCBFC, the Deputy Chair of the Canadian Commission on Construction Materials Evaluation and the Secretary for the PTCBS, all of whom are staff members of the Institute for Research in Construction, are ex-officio non-voting members of the PTCBS. Secretariat services are provided by the CCC.

The Chair and two Vice-Chairs of the PTCBS, who constitute the Executive Committee, are elected by its membership. Their appointments are reviewed once every five years, to coincide with the NBC cycle. The Executive Committee of the PTCBS meets periodically with its CCBFC counterpart as the need arises. To ensure close liaison between the PTCBS and the CCBFC the Chair of the PTCBS serves as an ex-officio non-voting member of the CCBFC.

The PTCBS process is one of consensus. A province/territory may table an item for consideration by the Committee. After discussion, should the PTCBS view the item as a valid concern, they will forward it as a recommendation to the CCBFC. Standing Committees and the CCBFC will, in turn, forward items to the PTCBS for their comment. Although the PTCBS provides advice to the CCBFC, there is not a formal requirement, as a committee, for the PTCBS to comment upon proposed technical revisions to the code. Such comments, however, are solicited and received from individual provinces and territories.

Standing Committees

The NBC consists of a number of sections, called Parts. For example, Part 9 is entitled Housing and Small Buildings. The CCBFC is aided in its work by its Standing Committees, each responsible to the CCBFC for the technical content of a specific portion (such as a Part) of the code. Standing Committees continually review their portion to ensure that it is in accord with safe and efficient building and fire safety practices. Standing Committees may, in turn, create task groups with specific short term objectives. This is particularly useful where expertise on specialized subjects is required from outside the Committee. After a detailed technical assessment, including public consultation, final recommendations on the technical content of the code are made by the Standing Committees to the CCBFC.

Members of the Standing Committees are drawn from all segments of the construction industry, regulators (provincial/territorial/municipal), fire services, architects and engineers, manufacturers and product suppliers, building owners and developers, and building users. They are appointed as individuals and not as delegates from a specific association or company. In all, some 300 members work on about 40 Committees. The NRC pays all travel expenses for the Committee members. This allows input to the process by all those with the appropriate expertise, not only those who can afford to attend. Non-members of Standing Committees are welcome to observe the meetings or to address the Committees on specific agenda items.

The membership of Standing Committees is reviewed twice during each five-year code cycle by the Nominating Committee of the CCBFC (the Nominating Committee consists of at least seven members of the CCBFC and at least four of these are Standing Committee chairs). The Nominating Committee reviews the qualifications of applicants as individuals and selects new members based on the established membership matrix of interests, expertise needed and geographic location.

Institute for Research in Construction (IRC)

The NRC established the Division of Building Research, now called the Institute for Research in Construction, during the post-war construction boom to respond to the needs of the rapidly expanding construction industry. One of its original mandates was to provide research support for the NBC. Communication between the Standing Committees and the research staff of the IRC is provided through the IRC's Canadian Codes Centre (CCC). The CCC provides the secretariat, technical, editorial, translation and office support services to the Committees.

The Standing Committees receive a continuous stream of suggestions for changes to the NBC. The IRC technical advisors evaluate these proposals, from both technical and enforcement points of view, and advise the Committees on a recommended course of action. The final recommendation on the technical content of the code is made by the Standing Committees.

Studies may be undertaken to provide additional information to Standing Committees. These studies are not only performed by the IRC but also by provinces, manufacturing groups and various organizations and consortia having an interest in the code.

iii) Memorandum of Understanding Between the NRC and the Provinces and Territories of Canada on the National Building Code

In 1987 the provincial/territorial deputy ministers responsible for building regulations recommended that the federal/provincial/territorial governments develop a Memorandum of Understanding (MOU) which would lead to provinces and territories adopting the NBC as a core document with as few amendments as possible. This MOU was suggested by an advisory board of the NRC in an effort to encourage more uniform regulations in Canada and to improve efficiency in construction and interprovincial trade. It was felt that the adoption of one harmonized building code would minimize internal barriers to trade.

The MOU was signed in 1990 by representatives of seven provincial governments and two territorial governments. The three provinces which did not sign were Québec, Newfoundland and Prince Edward Island. Québec adopts and enforces the NBC 1990 with few modifications as the minimum set of building regulations for public buildings (i.e. for residential buildings this applies to rooming houses and apartment buildings over a specific number of units and floors) and, in general, the Québec municipalities adopt the NBC 1990 for small residential buildings. Newfoundland does not have a provincial building code but its major cities have adopted the NBC. Prince Edward Island has adopted only Part 3 Section 3.7 Barrier-Free Design of the NBC 1990. Charlottetown and Summerside have adopted the NBC 1990.

To ensure that the provinces and territories have a voice within the code change process, the MOU provides for the input of the PTCBS. The MOU describes the role of the PTCBS as being to "provide policy guidance ... on scope, content, format and process of the National Building Code" on behalf of the provincial and territorial departments responsible for building standards.

iv) Revision Process for the NBC

Standing Committees may initiate code changes or outside contributors (e.g. industry, coroner's inquests, members of the public, PTCBS) may submit suggested changes to the code. The code-writing and revision process includes an extensive public review. Twice during every five-year code cycle all proposed changes to be recommended by Standing Committees, along with supporting rationale, are assembled into a code change package. The availability of code change packages is announced in NBC/NFC News (the CCC newsletter with circulation in excess of 60,000) and in several trade publications. These packages are available to anyone upon request. Code change packages are circulated for a three-month public comment period. This allows for feedback from those most affected by a proposed change, increases the range of expertise available on any subject and provides for widespread distribution of code change packages. (Over 17,000 code change packages were circulated in the development of the NBC 1995.)

In addition to circulating the code change packages, the IRC conducts public Code Change Forums across Canada. IRC staff and Standing Committee members explain the changes and the background behind them. These Forums are organized jointly by IRC and provincial ministries responsible for building regulations. They are advertised in the NBC/NFC News and in provincial newsletters.

With the technical assistance of the IRC, the Standing Committees review each comment resulting from the public review and agree on the disposition of the proposed changes. Standing Committees then submit final sets of changes to the CCBFC for approval. A period of about 15 to 20 months is required for editing, translating and printing from the time the Standing Committees recommend their final changes until the code documents are published.

Proposals for changes to the current codes must be received by the Standing Committees at least two years before the end of the five year code cycle to be included in the next edition of the NBC. However, the CCBFC issues special changes from time to time during the code cycle. For example, a special change can be issued when a potentially dangerous situation arises or when new products, systems or designs are unduly restricted by code requirements. Changes approved early in the code cycle can also be issued as amendments prior to the next publication date.

v) Housing Ministry Participation in Code Revision Process

The membership matrices for the CCBFC and its Standing Committees provide for representation from three main categories of interest, namely regulatory, industry or general interest. Provincial or territorial representatives are chosen to represent regulatory interests, and therefore usually are from the ministries responsible for building regulations. Only in New Brunswick, Ontario and Saskatchewan do the responsibilities for housing and the enforcement of building codes fall within the same ministry.

It is possible for housing ministry representatives to participate on the CCBFC and its Standing Committees based on an individual's area of expertise under the general interest category (e.g. an architect or engineer). However, in practice, there is limited participation on the part of housing ministries.

The PTCBS is charged with providing policy guidance on behalf of the provinces and territories to the CCBFC. Since the representatives on the PTCBS are from within the building regulation ministries and only New Brunswick, Ontario and Saskatchewan have combined housing and building regulation ministries, the majority of housing ministries have limited knowledge of the activities of the PTCBS. Housing ministries do not actively provide the PTCBS with policy input.

c) CURRENT ENVIRONMENT

i) CCBFC "Draft Strategic Plan"

The CCBFC in recent years identified a number of issues affecting the future of the national model codes. These issues included increasing demand to expand the scope of the codes, the increasing complexity of codes, the impact on costs to the building industry and the public, and the importance of building regulations to Canada's economy and competitive position. In response to these concerns a representative Task Group was struck to develop long-term strategies to deal with Canadian needs. The Task Group was to consult with the PTCBS and major code-user groups in developing the strategic plan.

In September 1994 the Task Group produced a "Draft Strategic Plan" to identify the CCBFC's principal goals and strategies to achieve them. The goals in the Plan focus on providing national model codes that meet the needs of all code-users and that are adoptable by all authorities having jurisdiction. The codes should also be capable of being uniformly enforced throughout Canada and they should be developed within a responsive, objective, efficient and effective code development system. As with code changes, the "Draft Strategic Plan" has been widely distributed for review and comment by code users, particularly the provinces/territories and key groups and associations.

At the CCBFC March 19-20, 1995 meeting, based on input received to that date, there was agreement in principle of a variety of recommendations in the Plan including:

- freezing the scope of the NBC in its present form;
- creating more rigorous criteria for submission and assessment of code changes (screening criteria should specify problem, appropriateness of proposed solution and impact);
- the requirement that all proposals for a code change be accompanied by information on cost implications (significant changes should have a more formal cost benefit study, including societal costs and benefits); and

- ° removing the requirements for "housing" from Part 9 with reliance on a separate housing code.

Additional key strategies being considered in the "Draft Strategic Plan" include the development of objective-based codes which set out the intent to be achieved by code requirements, more direct involvement of regulatory authorities in the code technical decision-making process, the strengthening of partnerships with code-user groups, the private sector representation forming the majority in the membership of all CCBFC Standing Committees and the provision of improved access opportunities for all code-users to the code development system.

After a year long review of the "Draft Strategic Plan", the CCBFC will meet in October 1995 to formally adopt the strategies supported by code users. This public review of the Plan represents an opportunity for the housing sector to contribute to a revitalized building code system. The NBC 1995 will not be affected if and when the many proposals in the Plan are implemented.

ii) Status of the NBC 1995

Under the direction of the CCBFC, the NBC 1995 has been developed and the process of public review and comment is complete. As was the case for previous NBC revisions, the process of change to the code involved broad consultation with a wide range of interest groups. The CCBFC has approved the NBC 1995 and the document is expected to be available in August 1995.

Significant progeny documents to the NBC 1995 are the National Energy Code for Buildings and the National Energy Code for Houses (NEC). These model codes were developed in response to requests from agencies concerned with energy efficiency. These include provincial energy ministries, Natural Resources Canada and the Canadian Electrical Association. The purpose of the NEC is to specify minimum requirements for energy efficiency in houses considering climate, location, type and cost of energy source, and construction costs. The format of the NEC is suitable for administration by a municipal building department. These codes are currently out for public review and the publishing date is expected to be in the spring of 1996.

The CCBFC had been considering a mandatory cross-reference between the NBC and the NEC, allowing a province or territory to adopt the NEC simply by adopting the NBC 1995. At the CCBFC meeting in March, agreement in principle was reached for establishing the NEC as a separate document which would not have a mandatory reference in the NBC. The final decision will be made at the October 1995 CCBFC meeting.

iii) Housing Stakeholder Views on Building Code Issues

There has been participation by housing stakeholders in the current public debate on building code issues. Housing sector groups have commissioned papers to publicly state their concern about the development and revision process of building codes, and the impact of code changes on the provision of housing. The Canadian Home Builders' Association (CHBA) has been a very

active force in the building code debate. The CHBA prepared a position paper on the role, scope and purpose of the NBC which identified a variety of issues and made recommendations. The CHBA also ensured that material was prepared on the proposals to extend the use of sprinklers to provide background information on the process of change to this specific area of the code. Other groups, such as the Masonry Council of Canada, have also prepared position papers related to various aspects of the code.

As a result of surveying a range of stakeholders, CMHC's "Issues Paper on the National Building Code of Canada" (provided to housing ministers prior to the June 8, 1994 meeting) summarizes the building code issues as they relate to housing into the five categories of harmonization, scope, the revision process, enforcement of building codes and the impact on affordability.

Some of the concerns of housing stakeholders related to building code issues are being addressed in other contexts.

- Some provinces are also reviewing various aspects of the building code process, including the role and scope of their provincial codes, the processes for code development and enforcement. For example, British Columbia in March 1994 issued "Options for Renewal: The Building Regulatory System in British Columbia". This examination of the building code system seeks public input on topics of: roles and responsibilities; liability of government; use of the B.C. Building Code; training, education and certification of building officials; approval of building and plumbing products; and review of building legislation and regulations.
- Alberta Labour, the department responsible for the Alberta Building Code (ABC), recently developed a comprehensive training program for building officials to support uniform enforcement of building codes in their jurisdiction. This program has been made available to other code users as well. The Safety Codes Council (SCC), which is responsible for recommending adoption of the ABC, has established mandatory certification requirements for building inspectors based on this training program.
- The National Energy Code for Buildings and the National Energy Code for Housing have been developed by the CCBFC and they are currently out for the second round of public review. Housing stakeholders, including CMHC, Ontario Hydro, Ontario Ministry of Housing, Ontario Ministry of Environment and Energy, Natural Resources Canada, B.C. Ministry of Energy, Mines and Petroleum Resources and B.C. Hydro, are involved in research to determine the impact of the code, particularly the impact on housing costs. NRC and Natural Resources Canada have completed a study on various options for implementing the NEC which will reduce its impact on the enforcement community.

PART 2

DISCUSSION OF BUILDING CODE ISSUES RELATED TO HOUSING DECEMBER 7, 1994

Federal/provincial/territorial and housing industry stakeholders met on December 7, 1994 to discuss building code issues related to housing. The mix of public and private sector housing interests provided a diversity of views and generated considerable discussion on building code issues of importance to the housing sector. This portion of the report provides the highlights of these discussions. No formal votes were taken during the day to determine the extent of agreement on issues and therefore this summary reports on the measure of support in general terms rather than reporting on consensus or numerical majorities.

The meeting agenda was organized around the five broad issue areas of harmonization, scope, the revision process, enforcement and impact on affordability. There was a great deal of overlap in the points raised relating to the first two issues, the harmonization of building codes and the scope of building codes. As a result, the summary of these two issues has been combined for purposes of this report.

At the end of the summary on each issue area a brief section on "Relevance for Housing" has been added to assist in placing the discussions within a housing context. This was done to respond to suggestions made by housing ministry representatives during their December 8 meeting. It should be noted that the Housing Relevance sections do not summarize stakeholder discussions on the first day of the meeting although the points raised relate to the topic under discussion.

a) ISSUE: HARMONIZATION AND SCOPE OF BUILDING CODES

Participants indicated that harmonization, meaning the application of a consistent building code across the country, is desirable in principle for a variety of reasons. A harmonized building code enables manufactured housing and other building product manufacturers to benefit from economies of scale and enhances the competitiveness of Canadian industry. The home building industry and the Consumers' Association pointed out that there are costs associated with variations from the national model code and any differences need to be rationalized. For governments, harmonization increases opportunities for sharing the costs of code development and building official training and education.

There is currently considerable harmonization of building codes across Canada, in that much of the NBC is adopted unchanged by the authorities having jurisdiction, namely the provinces, territories and, in some cases, municipalities. However, some provinces/territories made the point that they make changes to the national model code to respond to unique circumstances and local pressures. The flexibility to do so enables them to respond on a timely basis to changing circumstances. For authorities having jurisdiction to make changes to the NBC, they have to maintain an

infrastructure for the code revision process and support the costs of undertaking code changes.

Discussions highlighted the fact that, to address an increasing range of societal issues, there is increasing pressure from provinces/territories and interest groups to expand the NBC beyond its traditional scope of providing for minimum standards for health, safety and structural sufficiency in new buildings. This possibility has become an area of concern for some housing stakeholders. Meeting participants expressed the concern that expanding the scope of the model code could lead to an increase in the number of provincial variations.

Changing the structure of the code document was discussed as one means to help achieve greater harmonization. There was strong support in principle for developing a "core" code document of minimum requirements related to a set of essential or "core" issues supplemented by separate modules to address additional issues, such as environmental concerns. In general, it was felt that this "core + modules" structure would provide provinces/territories with sufficient flexibility to enable them to respond to local requirements while at the same time achieving harmonization on a "core" document.

Most participants believed that this "core" document should be limited to addressing issues of health, safety and structural sufficiency (the original purpose of building codes). In their view other "societal" issues should be dealt with in separate modules. Authorities having jurisdiction could choose to adopt the modules or not. There were, however, dissenting views expressed. For example, Natural Resources Canada felt energy efficiency should be part of the "core" code. The Consumers' Association of Canada thought that the scope of the "core" code should be expanded, including requirements for energy efficiency, environmental responsibility, durability. The Régie du bâtiment du Québec believed accessibility should be a "core" feature of a national model code and that, as such, all provinces should agree to the same requirements. (It should be pointed out that if accessibility is considered to be a health or safety issue, including such standards does not expand the scope of the code.)

While the concept of a "core" document was supported in principle, the discussions revealed a number of operational concerns related to difficulties in implementation. Participants noted that it would be necessary to reach agreement on the scope of a "core" document, as well as the process for determining the "core" content and developing the modules. As needs change over time, agreement to revisions to the "core" would have to be sought and this could be an ongoing area of concern for housing stakeholders.

A movement towards performance- or objective-based codes was suggested and had general support as another way to help achieve greater harmonization. Performance-based codes would address both the need for flexibility and responsiveness to changing circumstances. Objective-based codes set out the intent to be achieved by code requirements, in contrast with the current, largely prescriptive, codes which define how construction is to be undertaken.

Relevance for Housing

From a housing policy perspective, harmonization of building codes can have many benefits. The affordability of housing has increased in part through economies of scale in its manufacture and through the productivity of an industry working to national codes and standards. As well, broadly based housing policy objectives, such as the provision of safe shelter, are shared amongst provinces and territories. These objectives can be efficiently achieved through a consistently enforced model code across the country.

b) ISSUE: REVISION OF BUILDING CODES

Building codes are currently revised on a five year cycle. Standing Committees of the CCBFC initiate code changes and review changes proposed from a variety of sources. After a public review, changes are incorporated into the NBC and the revised codes are issued. Housing ministries recognized that building codes can have important technical and policy implications for housing. Although the revision process provides for open and accessible review of the technical requirements, a number of housing ministries expressed concern that they do not currently have opportunities to put forward their strategic input early enough in the code revision process. Housing ministries need to explicitly identify code change implications for housing and participate to a greater degree when code revisions are being contemplated.

The PTCBS was suggested as a means by which housing ministries can communicate their concerns. It was pointed out that although the PTCBS provides provincial/territorial policy guidance to the CCBFC, this Committee has been unable to develop consensus positions on the issues at their meetings and current members of the PTCBS do not have decision making authority. Since the members of the PTCBS are from within building regulation ministries and housing ministries have not been active in the code revision process (only in New Brunswick, Ontario and Saskatchewan are the ministries combined), housing ministries have limited knowledge concerning the role of the PTCBS and therefore have not provided the appropriate PTCBS member with policy input.

It was recognized by participants that, with every revision cycle of the NBC, the number of proposed changes has increased. Some participants expressed the view that all proposals seem to be considered more or less with equal priority. However, it was generally agreed that not all proposed revisions are equally important and require the same level of review. Therefore, potential revisions need to be better rationalized. Participants indicated that the code process must prioritize proposals and review criteria need to be established. These criteria should in some way reflect broad public policy objectives. Overall, the current process for code revisions was considered by a number of participants to require a better balance between technical and housing policy concerns.

The CCBFC and the Standing Committees membership structure incorporate criteria for members to represent a mix of building industry expertise and

geographic location. The intent is that these members participate as individuals, and not as representatives of an agency or industry. The Consumers' Association, speaking for homeowners, and RAIC, speaking on behalf of building owners, pointed out that, in their view, the interests of the stakeholders most affected by change and paying the cost of revised building standards must have greater influence in the decision to make revisions. Participants generally stated the view that there is a need for a more appropriate balance of interests influencing the process of code change and setting the national agenda for code review and development. The suggestion was made that the membership structure of committees and voting privileges should be reviewed to develop an appropriate representation mix.

One suggestion made was that a broader consensus at a policy level should be sought for those code revisions which would have a broad impact or significant cost implications. The view was expressed that this consensus should precede technical reviews undertaken at the Standing Committee level and that technical reviews in these cases should be undertaken in the context of this broader policy framework. The point was made that in considering the impact of a code change, societal costs, as well as implementation costs, should be addressed.

The view was expressed that the apparent increasing complexity of the code may be partly attributed to its language. There is a need for the code to be written in user friendly, simple language to assist in making its interpretation easier and more consistent.

Various participants at the meeting mentioned that the CCBFC "Draft Strategic Plan" also identified many of these issues and proposes extensive changes to the code process to address them. The Plan was developed based on consultations with the PTCBS and major code-user groups. The CCBFC issued the Plan for public review in September 1994 and will formally adopt the provisions supported by code-users after their meeting in October 1995.

Relevance for Housing

Code revisions can have very broad impacts and significant implications for the housing sector. As a result, housing issues need to be understood and considered by code developers.

A prominent example of the broad impact of codes is the change in Part 3 of the NBC 1995 which will require the mandatory installation of sprinklers in new residential buildings over three stories in height. This code change is indicative of the complexity of the issues which code developers face in bridging the technical and policy aspects of the NBC. It emphasizes that clear policy direction early in the process involving the housing sector is necessary to ensure broad acceptance and adoption across the country of significant changes.

c) ISSUE: ENFORCEMENT OF BUILDING REGULATIONS

Participants indicated that although provinces/territories are responsible for adopting the building code, generally municipalities are charged with building code enforcement. Municipal building officials review building plans and carry out inspections. The view was expressed that the degree of thoroughness in the inspection process varies greatly between jurisdictions. The point was made that with the increasing complexity of buildings and the trend towards objective-based codes, the knowledge requirements of building inspectors are expected to increase substantially. However, there is a lack of training and educational programs to consistently improve the knowledge level of these officials. One suggestion at the meeting was that the CCBFC needs to produce training material for the education of building officials charged with enforcement of building codes. A national standard for competency of building officials was also suggested as desirable.

It was suggested that the needs of the enforcement community should be better incorporated into the code development process. Building officials are required to administer codes and therefore know how codes should be written to be enforceable. It was stated that building officials generally view the enforcement of performance-based codes to be more difficult. With prescriptive codes, the product and construction process is well defined. With performance-based codes, more discretion and on-site decision making will have to occur. As a result, building officials believe the move towards performance-based codes necessitates the development of appropriate training material to adequately prepare building officials to enforce them.

There was general agreement that enforcement of the code is as important as its development. It was acknowledged that there is a need to recognize enforcement as a shared responsibility amongst provinces/territories, municipalities, private sector professionals (e.g. designers, builders, manufactured housing industry) and consumers. In this respect, the view was expressed that the roles and responsibilities of all housing stakeholders need to be clarified and the communication between all parties improved.

It was agreed that delivery costs of code enforcement, including the cost of training and certification programs, can be significant. The point was made that these costs should be considered when codes are developed. It was proposed that alternate means to enforce building codes, including the use of building officials, third party inspectors, designers, builders and even consumers, may have to be explored. Government budgets are limited and new ways to accomplish cost-effective delivery of the building code will become increasingly important.

The Consumers' Association expressed the view that the public believe that the NBC guarantees them a minimum standard for house construction and that local governments uniformly enforce this standard. The potential liability resulting from the ineffective enforcement of building regulations was raised as an issue of increasing concern to municipalities. Examples were cited to justify this concern. Courts have assessed municipalities with

all damages in cases, for instance, where liability for code infractions are assessed to builders who are no longer in business.

Relevance for Housing

The adoption of a national building code can be an effective vehicle in producing a high standard of safe, structurally-sound housing -- an important housing policy objective. However, a uniformly adopted national code is only effective if it is also uniformly enforced. Enforcement of the NBC involves a commitment of funds and human resources, and has liability implications.

The lack of enforcement of building regulations could lead to a decrease in housing standards in Canada in relation to health, safety and structural sufficiency. Enforcement now generally occurs at the municipal government level with varying degrees of effectiveness. However, the concept of a shared responsibility for achieving a consistent and effective enforcement system is gaining support. Partners in the process are likely to involve governments including housing ministries, builders and other private sector professionals, and consumers.

d) ISSUE: AFFORDABILITY

Meeting building code requirements, that is achieving minimum standards required for health, safety and structural sufficiency, establishes a minimum construction cost of new housing. This was recognized by participants and there was general agreement that the requirements of the NBC can affect the affordability of housing. The complexity of the house as a system, as dictated by the code, also influences the cost and ability of the homeowner to maintain the house. From these perspectives it was agreed that there is a fundamental need to undertake cost/benefit analysis of proposed code changes with broad implications to determine their impact on housing affordability.

It was noted that cost/benefit analysis must go beyond examining up-front construction costs and immediate benefits to the owner. It was recognized that there are "societal costs and benefits" that must be considered as well. Looking to the NBC 1995 and related codes, examples of such "societal benefits" requiring analysis might include environmental protection through the National Energy Code for Houses and accessibility for the disabled. Further, it was stated that cost/benefit analysis should be available early in the review process to justify proceeding with the proposed code change. A number of participants expressed the view that not all issues have sufficient impact to warrant a complete cost/benefit review.

A number of questions of an operational nature were raised related to the implementation of cost/benefit analysis. Currently, the full range of data to undertake this type of analysis is lacking. As well, responsibility for undertaking and paying for cost/benefit analysis has to be determined. The proponent of a change may not have the resources to do the analysis and

code developers would likely have a similar difficulty. Combining the resources of interested parties may be necessary for cost/benefit analysis to be affordable. It was also noted that specific circumstances must be taken into account to ensure cost/benefit analysis is relevant. For example, a favourable cost/benefit result for a code requirement in the majority of the country may be unfavorable in the North due to higher construction costs. Notwithstanding these concerns, the assessment of significant code changes within a cost/benefit framework was viewed as necessary by participants.

The point was raised that building codes should facilitate the development of innovative and affordable housing forms, and the use of new and innovative products. Examples cited of such innovation included alternative uses of existing buildings, changes in work patterns (e.g. home-based work) and new concepts such as "grow homes". The current code system was criticized by some participants for restricting the timely introduction of innovative products and the associated improvement in affordability. NRC recognized that there are pressures to respond quickly to changing circumstances, but code developers have a responsibility to provide a national model code suitable for all code-users and to ensure that the code is not open to liability claims. Objective-based codes were discussed as one way that innovation might be better accommodated in the future.

Relevance for Housing

Building regulations can directly affect the initial capital cost of housing, as well as ongoing maintenance costs. The development of the National Energy Code for Housing (NECH) demonstrates the potential for building codes to affect affordability. The NECH has been developed to improve energy efficiency in new housing by requiring thermal standards be met. There will be capital costs associated with meeting these standards. Lower annual operating costs are expected to offset the increased capital costs, although the payback period could vary depending upon the geographic location and type of fuel source. Currently studies are underway to determine the financial impact of the NECH on the cost of housing. Since the implementation of the NEC may increase the cost of housing production, affordability could be affected. In reviewing the adoption of requirements such as these, the benefits should be assessed in relation to overall costs to society.

PART 3

RECOMMENDATIONS FOR ACTION

Federal/provincial/territorial housing ministry representatives attending the building code issues meeting met on the morning of December 8, 1994. The purpose of this meeting was to review the issues and future directions discussed by stakeholders on the previous day and to identify recommendations for action for consideration by housing ministers which would help lead to the future development of consistent, viable and cost effective building regulations as they relate to housing.

The building codes issues identified by stakeholders related to harmonization, the scope of the code, the code review process and enforcement, have widespread implications for housing. For example, the application of consistent minimum requirements and standards can lead to economies of scale which in turn can help to improve housing affordability. Code requirements can affect the costs of building and operating homes. Code provisions and their enforcement also have significant implications for the overall quality and condition of housing in Canada.

Despite the far reaching implications of the building code system for housing, housing ministry representatives expressed the view that the current Canadian codes framework does not adequately address housing considerations. Housing issues and implications of the building code system for the housing sector are not currently identified or discussed in a formal manner within the housing sector. In addition, housing sector positions or concerns are not conveyed effectively to those responsible for building codes. To address these concerns, a set of recommended actions aimed at placing building code issues on the national housing agenda and strengthening the housing sector voice in the code revision process were developed.

a) PLACING BUILDING CODE ISSUES ON THE NATIONAL HOUSING AGENDA

Housing stakeholders and federal/provincial/territorial housing representatives identified the need for more effective consensus building at a policy level within the code development process. Housing ministry representatives also agreed that there is a need to more clearly define issues of importance for the housing sector at an early stage in the code development process to convey these views to decision makers within the building code system.

Prior to the recent discussions at the ministerial and senior officials levels, building code issues had not been formally discussed by federal/provincial/territorial housing partners as part of the national housing agenda. The December 7 federal/provincial/territorial/stakeholder meeting on building codes issues as they relate to housing was the first of its kind. These meetings and the consultations which proceeded them, have helped to identify and crystalize issues related to the building code system from a housing sector perspective.

To ensure that building code issues continue to be given priority on the national housing agenda, it is recommended that housing ministers:

- establish a federal/provincial/territorial subcommittee on housing and building codes to provide an ongoing forum for discussion within the housing sector, to identify housing related issues, and to formulate positions on housing issues related to building codes.

To ensure that the needs and priorities of the housing sector are identified and formally submitted as part of the code development process, it is recommended that housing ministers:

- charge this subcommittee with responsibility for undertaking consultations and developing a national issues paper early in each building code revision cycle which would identify the needs, priorities and concerns of the housing sector regarding the Canadian building code system.

b) STRENGTHENING THE HOUSING SECTOR VOICE IN THE CODE REVISION PROCESS

At both the meetings of housing stakeholders and federal/provincial/territorial housing representatives it was agreed that building code changes need to be assessed in terms of their technical and policy implications for the housing sector. The view was expressed that decisions within the code development process must be made on the basis of informed and objective consideration of impacts for the housing sector within a broad cost/benefit framework. The view was also expressed that it is important that there be an appropriate balance of interests represented on committees charged with responsibility for developing codes and setting policy directions. In order to ensure that housing issues are explicitly considered within this process, it is important that the housing sector is effectively represented.

Within the current code framework, through their membership on the Provincial/Territorial Committee on Building Standards (PTCBS) provincial ministries responsible for building regulations are responsible for providing policy input to the Canadian Commission on Building and Fire Codes (CCBFC). Only in New Brunswick, Ontario and Saskatchewan are housing and regulatory ministries combined. Generally, housing ministries do not consult with their provincial PTCBS member on code issues related to housing nor are they approached or updated on codes issues by the PTCBS member. As a result, at a provincial level, in most cases, PTCBS members are not in a position to convey and discuss housing policy related issues.

At a national level, within the existing framework, if the housing sector wishes to put forward policy related concerns it is necessary to request and make a special representation to the CCBFC. Although individuals from industry groups such as the Canadian Home Builders' Association sit on the

CCBFC, there currently is no national level representative drawn from the housing ministries on this committee.

To ensure that housing sector priorities and concerns are brought forward consistently and in a timely manner in the code revision process at both the provincial/territorial and national levels, it is recommended that housing ministers:

- establish stronger ongoing links between provincial housing and building regulation ministries and PTCBS members, where these ministries are separate, as well as with other ministries affected by building codes; and
- that the federal Housing Minister and his co-chair write to the CCBFC on behalf of housing ministers to request that one of the co-chairs of the federal/provincial/territorial subcommittee on housing and building codes become a member of the CCBFC.

In September of 1994, the CCBFC released a Draft Strategic Plan which proposes a number of improvements to the code development process and initiated a broad consultation process. Individual housing stakeholders have submitted input as part of this consultation. In addition, input is currently being consolidated within provinces by ministries responsible for building regulations. However, there is also an opportunity for the housing sector to put forward a consolidated view on the proposals in this strategic plan as a part of this consultation.

Many of the issues and future directions discussed at the December 7 multi-stakeholder meeting on building codes issues as they relate to housing are relevant to the proposals outlined in the Draft Strategic Plan. These are discussed in this report on the stakeholder meeting but have not been formally communicated to the CCBFC.

As a result, to ensure that the most current and comprehensive housing sector views on issues arising in the Draft Strategic Plan is available to the CCBFC, it is recommended that housing ministers:

- submit a copy of this Final Report on the Meeting of Federal/Provincial/Territorial and Industry Stakeholders on Building Code Issues Related to Housing to the CCBFC as input to the Draft Strategic Plan on behalf of the housing sector.

It should be noted that some strategies identified in the Draft Strategic Plan although of interest to the housing sector were not discussed in any detail at the December meetings. One such example is the proposal to create a Canadian Housing Code as a separate document from the National Building Code. Federal/provincial/territorial housing representatives suggested that the housing sector should develop a position on this proposal.

It is therefore recommended that housing ministers:

- direct the federal/provincial/territorial subcommittee on housing and building codes to develop a position on the proposal to create a separate housing code in consultation with housing stakeholders and that this position be conveyed to the CCBFC.

PART 4

APPENDIX

- a) List of Ministries, Associations and
Federal Agencies Represented December 7, 1994**

**List of Housing Ministries Represented
December 8, 1994**

- b) Discussion Paper - "Background on the Issues and
Suggestions for Discussion"**

APPENDIX a

**List of Ministries, Associations and
Federal Agencies Represented
December 7, 1994**

**List of Housing Ministries Represented
December 8, 1994**

List of Attendees
Federal/Provincial/Territorial and Industry Stakeholder Meeting on
Building Code Issues Related to Housing 7 December 1994

		<u>Telephone</u>	<u>Fax</u>
Peter Honeygold	Nfld. and Labrador Housing Corp.	709-745-0384	709-745-2388
Charles Boulay	N.B. Dept. of Municipalities, Culture and Housing	506-453-2677	506-457-4991
Paul Angers	Société d'habitation du Québec	418-644-4841	418-646-5560
Jacques Desbiens	Société d'habitation du Québec	418-646-7906	418-646-5762
Anne Beaumont	Ontario Ministry of Housing	416-585-7482	416-585-7233
Rick Hiebert	Manitoba Housing	204-945-4674	204-948-2394
Ron Styles	Saskatchewan Municipal Government	306-787-4200	306-787-8571
Dan Boyd	Yukon Housing Corporation	403-667-5868	403-667-3664
Peter Tremblay	N.W.T. Housing Corporation	403-873-7875	403-873-9426
Eugène Arrelle	Régie du bâtiment du Québec	418-644-0598	418-646-9280
Jean Paul Gagnon	Régie du bâtiment du Québec	418-644-0598	418-646-9280
Ann Borooah	Ontario Ministry of Housing	416-585-4238	416-585-4029
Harry Wiebe	Manitoba Labour	204-945-3397	204-948-2089
Margaret Miller	Saskatchewan Municipal Government	306-787-4517	306-787-9273
Chris Tye	Alberta Labour	403-427-8265	403-422-3562
Gary Harkness	B.C. Ministry of Municipal Affairs	604-387-4095	604-387-7973
Eric Kieken	Government of the N.W.T.	403-873-7469	403-873-0260
Easton Lexier	Canadian Commission on Building and Fire Codes	204-786-7561	204-783-8268
René Lafontaine	Assoc. de la construction du Québec	514-739-8565	514-31-1216
Doug Crawford	Assoc. of Canadian Fire Marshals and Fire Commissioners	416-325-3100	416-325-3119
Bruno Nantel	Assoc. provinciale des constructeurs d'habitation du Québec	514-353-9960	514-238-1787
Keith Wilson	Canadian Assoc. of Man Made Vitreous Fibre Manufacturers	416-730-7939	416-733-8613
Bruce Clemmensen	Canadian Home Builders' Assoc.	613-230-3060	613-232-8214
Bob Sloat	Canadian Home Builders' Assoc.	613-230-3060	613-232-8214
Jamie Cooke	Canadian Manufactured Housing Assoc.	613-563-3520	613-232-8600
Richard McGrath	Canadian Portland Cement Assoc.	613-236-9471	613-563-4498
Steven Fox	Canadian Sheet Steel Building Inst.	519-650-1285	519-650-8081
Brian Gibson	Canadian Sheet Steel Building Inst.	519-650-1285	519-650-8081
Kelly McCloskey	Canadian Wood Council	613-731-7800	613-731-7899
Margaret Soper	Consumers' Association of Canada	204-269-7050	204-275-3785
Dennis Petry	Council of Canadian Building Officials Assoc.	613-932-6252	613-933-8567
Neil Dillon	Federation of Canadian Municipalities	613-241-5221	613-241-7440
Alan Larden	Royal Architectural Institute of Canada	613-241-3600	613-241-5750
Basil Darrah	Society of the Plastics Industries of Canada	416-449-3444	416-449-5685
Chris Fillingham	Urban Development Institute	416-596-6666	416-596-7892
Bill Cuff	Urban Development Institute	613-823-1264	
Robert Bowen	Institute for Research in Construction	613-993-2480	613-941-0822
Richard Desserud	Institute for Research in Construction	613-993-9960	613-952-4040
Nick Marty	Natural Resources Canada	613-996-6629	613-943-1590
John Cockburn	Natural Resources Canada	613-996-4359	613-943-1590
Douglas Stewart	Canada Mortgage and Housing Corp.	613-748-2553	613-748-2402
Jim Robar	Canada Mortgage and Housing Corp.	613-748-2316	613-748-2402

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Ann Borooah	Ontario Ministry of Housing	416-585-4238	416-585-4029
Rick Hiebert	Manitoba Housing	204-945-4674	204-948-2394
Ron Styles	Saskatchewan Municipal Government	306-787-4200	306-787-8571
Dan Boyd	Yukon Housing Corporation	403-667-5868	403-667-3664
Peter Tremblay	N.W.T. Housing Corporation	403-873-7875	403-873-9426
Douglas Stewart	Canada Mortgage and Housing Corp.	613-748-2553	613-748-2402
Jim Robar	Canada Mortgage and Housing Corp.	613-748-2316	613-748-2402

APPENDIX b

**Discussion Paper
for**

**A MEETING
OF
FEDERAL/PROVINCIAL/TERRITORIAL AND INDUSTRY STAKEHOLDERS
ON
BUILDING CODE ISSUES RELATED TO HOUSING**

Ottawa, December 7, 1994

**Background on the Issues and
Suggestions for Discussion**

A MEETING
OF
FEDERAL/PROVINCIAL/TERRITORIAL AND INDUSTRY STAKEHOLDERS
ON
BUILDING CODE ISSUES RELATED TO HOUSING

Ottawa, December 7, 1994

Background on the Issues and
Suggestions for Discussion

During this meeting, discussion is planned to focus individually on these key building code issues that relate to housing:

- Harmonization of Building Codes
- Scope of Building Codes
- Enforcement of Building Regulations
- Revision Process for Building Codes
- Affordability of Housing

The following are brief statements on the background for each issue. Suggestions for the purpose of stimulating discussion at the meeting are also provided.

BUILDING CODE ISSUES RELATED TO HOUSING
OTTAWA, DECEMBER 7, 1994

ISSUE #1 -- HARMONIZATION OF BUILDING CODES

Background

- o There is a very high level of harmonization of building regulations across Canada. The 1990 model National Building Code has been adopted, wholly or in very substantial part, by all principal Authorities Having Jurisdiction. This harmonization was formalized in 1990 in a Memorandum of Understanding committing the signatory provinces and territories to adopt the National Building Code as a core document with as few amendments as possible.
- o The goal of uniform building regulations throughout the country is strongly advocated by the principal associations representing builders, building officials, building material manufacturers, and consumers.
- o There has been a trend in some jurisdictions to expand, rather than to reduce, the number of variations to the National Building Code and to lessen participation in the National Building Code revision process.
- o In some cases delays in adopting the latest edition of the National Building Code have resulted in a lack of uniformity between jurisdictions with respect to their building regulations.
- o Whereas all Authorities Having Jurisdiction benefit from the high technological calibre of the national model codes and the economies in their cooperative development, not all contribute to their funding.
- o The benefits of building code harmonization would be maximized by increased participation in the code revision and review processes and by an early, and therefore more synchronized, adoption procedure by the authorities having jurisdiction.

Suggestions for Discussion

1. That steps be taken to facilitate the timely review and adoption of the 1995 National Building Code as the core document for building regulations in all jurisdictions.
2. That any variations from the National Building Code now contained in provincial, territorial or municipal building regulations, except those that can be geographically justified, be reviewed provincially to determine if their maintenance is warranted and whether the National Building Code should be amended.

ISSUE #1 -- HARMONIZATION OF BUILDING CODES

3. That all jurisdictions use national model codes and amendment packages rather than provincial codes.
4. That municipal governments with authority over building regulations be encouraged to assist in achieving harmonization benefits by refraining from adopting higher minimum standards without first submitting them for consideration in the national model codes consensus process.
5. That all jurisdictions support the cost of the national model codes system by having the National Research Council act as the publisher of all building, plumbing, fire and energy codes used or adopted by the regulatory authorities.
6. That all jurisdictions reconfirm their support of the national model codes system by signing a 1995 Memorandum of Understanding.

BUILDING CODE ISSUES RELATED TO HOUSING
OTTAWA, DECEMBER 7, 1994

ISSUE # 2 -- SCOPE OF BUILDING CODES

Background

- o Historically, the National Building Code has dealt with minimum standards related to health, safety and structural sufficiency. In recent years provisions for increased insulation, barrier-free access and building security have been introduced in response to social and economic pressures. There has not been universal support for their application and related costs.
- o Some jurisdictions have issued building code regulations designed to achieve other objectives and/or extra Parts or Sections for building activities not covered by the National Building Code -- e.g. swimming pools, renovations, heritage buildings, construction camps, etc.
- o In 1990, the Provincial/Territorial Committee on Building Standards supported the request to the Associate Committees on the National Building and Fire Codes, the predecessors of the Canadian Commission on Building and Fire Codes, to develop model National Energy Codes for Houses and for other Buildings. These are scheduled to be published in the latter part of 1995.
- o There have been strong advocates that the building code of minimum standards should also include provisions for environmental protection, commissioning and periodic code compliance inspections throughout a building's life. This has caused others to express concern that such measures in the building code would impose undue extra costs, an inspection problem, and possible complaints for GATT and NAFTA contraventions. Moreover, the inclusion of potentially contentious provisions might delay or inhibit the adoption of the National Building Code.
- o The CCBFC Strategic Planning Task Group recommended in September 1994 that the scope of the National Building Code should not be expanded beyond its present form. Additional scope issues should be included in related documents.

Suggestions for Discussion

1. That regulatory authorities wishing to regulate additional building activities, or to achieve other goals through building regulations, consider using the national model codes system whereby a code or module is developed by a representative, technically-driven consensus process.
2. That the adoption of any such additional codes or modules of building regulations continue to be the subject of separate and optional decisions on the part of the authorities having jurisdiction.

BUILDING CODE ISSUES RELATED TO HOUSING
OTTAWA, DECEMBER 7, 1994

ISSUE #3 -- ENFORCEMENT OF BUILDING CODES

Background

- o Building regulations are only words on paper unless there is an effective delivery system for their enforcement. The responsibility for enforcing building regulations has generally been delegated to the municipal governments.
- o Buildings are becoming increasingly complex and the scope of building regulations has expanded in accordance with provincial policy. This has placed a greater and more technically demanding responsibility upon the municipalities for building plans examinations and site inspections.
- o Many municipalities have, in the face of budget problems, reduced the size of their building department staff and of any training budget for code compliance inspectors. This has exacerbated the difficulty of enforcing building regulations.
- o The administration of building codes varies greatly across Canada. Even in major cities where professional and technical inspection staffs are maintained, inspections in practice are often only monitoring or spot checks. Outside of the main centres there is often little or no code compliance inspection.
- o The dormant Council of Canadian Building Officials Associations is being re-constituted with a membership base expanded to include private sector and First Nations building officials, and industry associations. Heavy emphasis will be placed by the Council on the harmonization of training and certification programs.
- o The Interprovincial Committee on Building Code Education is seeking to develop training courses on a cooperative basis. It will be represented on the CCBOA board of directors and form an integral part of the re-structured organization.
- o Some jurisdictions are seeking to mitigate the present code enforcement problem through the use of private sector inspectors, the requirement that designers and builders certify that their building conforms to the building code, or by qualifying design professionals who demonstrate that their plans need not be examined.
- o Shifting the responsibility for building code compliance from the municipalities to designers and/or builders raises the issue as to whether third party inspections can be eliminated, bearing in mind economic pressures that may encourage corner-cutting to save on construction costs.

ISSUE #3 -- ENFORCEMENT OF BUILDING CODES

- o The CCBFC's Draft Strategic Plan recommends that the Commission and the Canadian Codes Centre provide resources and materials to assist in training programs with a view to facilitating the uniform application of code requirements throughout Canada.

Suggestions for Discussion

1. That the importance of the adequate training of code enforcers be more fully recognized by the authorities having jurisdiction.
2. That the positive momentum and cooperative spirit that has developed of late with respect to the training and certification of building inspectors be reinforced by:
 - a) encouraging the development and delivery of building code courses and the participation in them of building officials; such courses to be open also to other code-users;
 - b) supporting the work of the Interprovincial Committee on Building Code Education, Provincial Building Officials Associations, and their Canadian Council;
 - c) fostering the establishment of certification or licensing programs attesting to the competence of qualified building officials and for the reciprocal recognition of such certificates or licenses across Canada; and
 - d) considering code certification programs for design professionals and builders.
3. That a mechanism be established for the ongoing exchange of code enforcement information including technical information, interpretations and rulings, research findings, and experience in administering building regulations.

BUILDING CODE ISSUES RELATED TO HOUSING
OTTAWA, DECEMBER 7, 1994

ISSUE #4 -- REVISION PROCESS FOR BUILDING CODES

Background

- o The 1990 Memorandum of Understanding on the National Building Code states that the mandate of the Provincial/Territorial Committee on Building Standards is to "provide policy guidance ... on scope, content, format and process of the National Building Code" on behalf of the provincial and territorial departments/ministries/agencies responsible for building standards.
- o The membership matrices of the CCBFC and of each of its standing committees responsible for reviewing and updating the National Building Code provide for representation from provincial or territorial governments.
- o There is an extensive public review process for proposed code revisions. Proposals are circulated for a 3-month public review period; feedback is reviewed by the standing committees at open meetings; and code change forums are held in major centres. The degree of provincial/territorial participation in the review process has varied.
- o Following the publication of a new edition of the National Building Code, extensive reviews are undertaken in some jurisdictions prior to recommendations being made for revisions in their building codes. In some cases there have been separate detailed reviews of proposed changes to provincial building codes.
- o The sheer volume of proposed code revisions studied by the standing committees and then circulated for public review has been criticized for imposing an unduly heavy work-load and for threatening to hinder a thorough review.
- o The CCBFC Strategic Planning Task Group has recommended that the regulatory authorities be more directly involved in the code technical decision-making process. This would include the participation of the Provincial/Territorial Committee on Building Standards in technical matters and a coordinated Provincial/Territorial/CCBFC public review process.
- o The CCBFC Strategic Planning Task Group has also recommended that more rigorous criteria be created for the submission and assessment of proposed code changes.

ISSUE #4 -- REVISION PROCESS FOR BUILDING CODES

Suggestions for Discussion

1. That future National and Provincial Building Code revision cycles be harmonized, thereby maximizing inputs and facilitating a more uniform adoption date across Canada of the revised codes.
2. That consideration be given to having the Provincial/Territorial Committee on Building Standards involved in technical guidance to the CCBFC in addition to current policy guidance.
3. That provincial/territorial government representatives on CCBFC standing committees communicate with their counterparts in other governments concerning proposed revisions and invite their comments during this initial stage in the code revision process.
4. That any regulatory authority considering the introduction of a new building code regulation, or having promulgated one, file with the CCBFC information as to its nature and supporting rationale.
5. That the regulatory authorities individually participate actively in the public reviews prior to the publication of new editions of the National Building Code.

BUILDING CODE ISSUES RELATED TO HOUSING
OTTAWA, DECEMBER 7, 1994

ISSUE #5 -- AFFORDABILITY OF HOUSING

Background

- o The impact of new building code provisions on housing construction costs, and therefore on the "affordability" of new housing, has become an issue.
- o "Affordability" can be interpreted differently depending on one's perspective. For example, regulations which require energy conservation measures may result in decreased operating costs of housing, making accommodation more affordable. However, they may also add to the initial construction costs, making new housing less affordable.
- o The level of construction costs is of basic importance to the potential investors of any building, particularly during a prolonged recession. In the case of houses, the initial selling price and financing terms are more dominant factors for potential buyers than future operating costs or life cycle costs.
- o Some building code changes lead to cost increases and others to cost decreases. Some revisions may do both -- that is, there may be off-sets. The cost impact of a new building code requirement should be viewed as a factor within the total selling price. Influencing this price would be direct building costs, levies, productivity, market conditions, environmental protection requirements, etc.
- o The CCBFC Strategic Planning Task Group has recommended that the proponent of any revision to the National Building Code be required to include a cost/benefit analysis. Further, that a more formal cost/benefit study, including societal costs and benefits, should be conducted in the case of proposed code changes that have significant cost implications.

Suggestions for Discussion

1. That cost/benefit studies be conducted prior to the introduction of new building regulations having significant cost implications.
2. That consideration be given to the sponsorship of a study on the "affordability" aspects of code provision changes.
3. That the concept of "affordability" be adequately defined for use by code developers and users.