



REVIEW OF ISSUES, IMPACTS & OPTIONS IN RESIDENTIAL INSPECTION SYSTEMS

*A Situational Analysis of the Building Inspection Systems
in Nova Scotia and Other Jurisdictions*

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Preface

The project documented in this report received a grant under the Affordability and Choice Today (ACT) Program, a regulatory reform initiative sponsored by Canada Mortgage and Housing Corporation (CMHC) and jointly managed with the Canadian Home Builders' Association (CHBA), the Canadian Housing and Renewal Association (CHRA) and the Federation of Canadian Municipalities (FCM). ACT was designed to stimulate changes to planning and building regulations and residential development approval procedures to improve housing affordability, choice, and quality. The United Nations Centre for Human Settlements recognized the ACT Program in 1998 as one of the top global best practices for improving the living environment.

Through ACT, grants have been awarded to municipalities, private and non-profit builders and developers, industry associations, educational institutions, planners and architects across Canada to undertake regulatory reform initiatives. ACT grants have been awarded under three categories: Demonstration Projects, Approval Process Projects, and Promotion Projects. A wide range of projects across Canada have received assistance.

All projects awarded an ACT grant are documented in project completion sheets or case studies, to share the benefits of regulatory reform with others. These documents serve as learning tools to help builders, local building and planning officials, and others recognize and seize opportunities to improve housing affordability, choice and quality through regulatory reform in their communities.

For more information on ACT and ACT projects (both completed and in progress), visit the ACT Web site at www.actprogram.com, or contact:

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DISCLAIMER

This project was partially funded by Canada Mortgage and Housing Corporation, but the views expressed are the personal views of the author(s) and the Corporation accepts no responsibility for them.

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Introduction

1.0 Introduction

1.1 Background

Under the leadership of the Atlantic Home Building and Renovation Sector Council, the home building and renovation industry in Nova Scotia is in the process of planning and implementing a comprehensive professionalization program. Elements of this ambitious project include the development of a licensing system for home builder-renovators and new competency-based certification standards for skilled workers in the industry.

This initiative raises questions about potential changes in the interface between the building inspection process and other processes for licensing building firms:

- ▲ What changes may need to be made in the current system of municipally administered inspection services to accommodate new developments in the wider home building and renovations industry?
- ▲ Are there reasonable and appropriate alternatives to the current system in Nova Scotia that might be considered in future?
- ▲ Is there industry, government, and consumer support for such alternatives?

In light of these questions, the Atlantic Home Building and Renovation Sector Council applied for and received an Affordability and Choice Today (ACT) grant to undertake a situational analysis of the building inspection system in Nova Scotia.

1.2 Objective and Scope

The objective of this study is to describe the current building permit approval and inspection system for the residential construction and renovation sector in Nova Scotia and to identify areas of possible change or development. The study will also examine alternative systems in Alberta and Victoria State, Australia and provide comparative information on issues of cost efficiency, effectiveness, consumer protection, accountability, liability, training, standards and certification criteria.

This project has not had the resources to undertake a systematic evaluation of current building



inspection services in Nova Scotia or to generate comprehensive survey analyses of the views of stakeholder groups. The scope of this situational analysis is therefore limited to the description of the current system in Nova Scotia and of the salient aspects of alternative systems, and the identification of issues for further research and consultations in follow-up initiatives.

1.3 Methodology and Information Sources

To provide the study team with a clear understanding of the existing building inspection system in Nova Scotia and other jurisdictions, this project involved the following elements:

- ▲ a review of literature documenting the existing municipal building inspection system in Nova Scotia and other jurisdictions, notably Alberta and Victoria State, Australia;
- ▲ key informant interviews (refer to Appendix A); and
- ▲ report preparation and production.

The Building Permit Approval and Inspection System in Nova Scotia

2.0 The Building Permit Approval and Inspection System in Nova Scotia

2.1 The National Building Code

In Canada the federal government funds the development of the model National Building Code through the National Research Council. Produced by the Canadian Commission on Building and Fire Codes (CCBFC), the main purpose of the National Building Code is to establish a uniform set of construction standards to ensure buildings are safe for structural sufficiency, fire protection, and general building safety.

The provinces have the responsibility of adopting the building code through legislation. Fifteen years ago, Nova Scotia amended the Nova Scotia Building Code Act and Regulations to adopt the National Building Code. Prior to the provincial adoption of the National Building Code, municipalities adopted the provincial building code through a by-law. As a result, the building code varied from municipality to municipality. For instance, some municipalities did not adopt the code whereas others adopted variations of the code. In response to this situation, industry lobbied the provincial government to amend the act in 1987 and thereby ensure the existence of a consistent code in Nova Scotia.

The Act and Regulations set out the systems of building regulation, scope of application, enforcement powers, permits, inspections, penalties, and appeals. Provincial responsibility for the Nova Scotia Building Code Act and Regulations was recently¹ transferred from Service Nova Scotia and Municipal Relations (SNSMR) to the Public Safety Division of the Department of Labour and Environment.

2.2 The Building Permit and Inspection System

The Nova Scotia Building Code Act and Regulations designate municipalities as being responsible for administering the permit approval and inspection process. Municipalities have the option of using their own staff of building inspectors or third party inspectors. At present, the Building Code Act does not require inspectors to be certified.

In Nova Scotia, building permits and inspections are mandatory for the “design, erection, placement,

¹ September 13, 2002



and occupancy of new buildings, and the alteration, reconstruction, demolition, removal, relocation, occupancy, and change of occupancy of existing buildings.”² Permits are not required for minor repair projects such as painting, tiling, roofing, and the like.

In general, the permit process involves the following steps:

- ▲ the owner of the building or property applies to the local municipal building department for the permit and pays the requisite permit fees;
- ▲ a Municipal Building Inspector reviews the plans to ensure compliance with all applicable National Building Code requirements;
- ▲ a Municipal Building Inspector advises whether approvals are required from other departments such as the Department of Environment and Labour, the Office of the Fire Marshall, and/or the Department of Transportation; and
- ▲ the permit application is approved or denied by the Municipal Building Inspector.

The Municipal Building Inspector is then required to conduct on-site inspections at various stages of the construction to ensure compliance with building codes and to follow-up on deficiencies or unsafe conditions. The permit applicant must make the request for the inspection.

The Provincial Building Code Act and Regulations (Part 9) require a total of five mandatory inspections³ at the following stages of residential construction and renovation⁴:

1. footings are in place;
2. the site before commencing backfilling of the laterally supported foundation, before a superstructure is placed on the foundation;
3. the framing, roof, plumbing, and mechanical;
4. insulation and vapour barrier before wall framing is covered; and
5. before occupancy.

² Nova Scotia Building Code Regulations, Service Nova Scotia and Municipal Relations, 2001. Page 2.

³ Note that inspections differ for mobile homes and modular homes.

⁴ Note that these inspections are for single dwellings. The construction process of larger buildings is subject to a field review by design engineers and architects.

2.3 The Delivery of Building Permit Approval and Inspection Services in Nova Scotia

In Nova Scotia, administration and delivery of the system is distributed among 37 municipal groups, including:

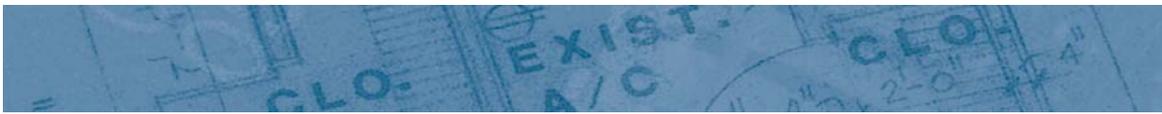
- ▲ 20 municipalities representing regions and rural areas;
- ▲ 13 municipalities representing towns; and
- ▲ 4 district-planning commissions representing more than one municipality.



The 37 municipal groups employ an estimated 120 municipal building inspectors in Nova Scotia. The geographical distribution of municipal building inspectors is:

- ▲ 29 (24%) in Halifax Regional Municipality;
- ▲ 7 (6%) in Cape Breton Regional Municipality; and
- ▲ an average of 2 inspectors in each of the remaining 35 areas (in total 70%).

Many of the municipal building inspectors do not focus solely on the inspection of single dwellings but

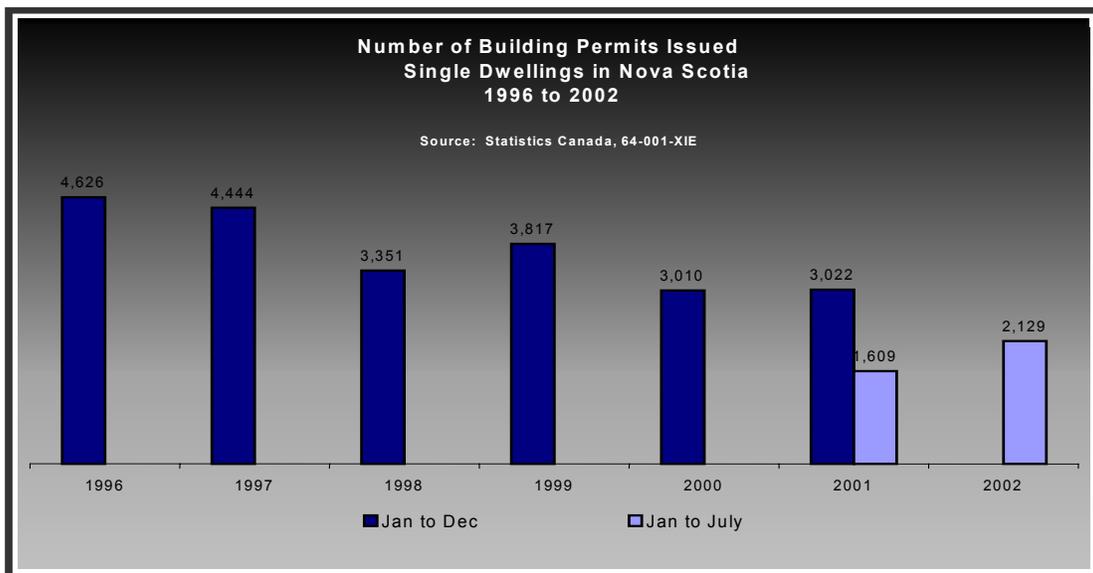


also inspect commercial, institutional, and government properties and/or are responsible for enforcing compliance with by-laws (such as the unsightly premises by-law). However:

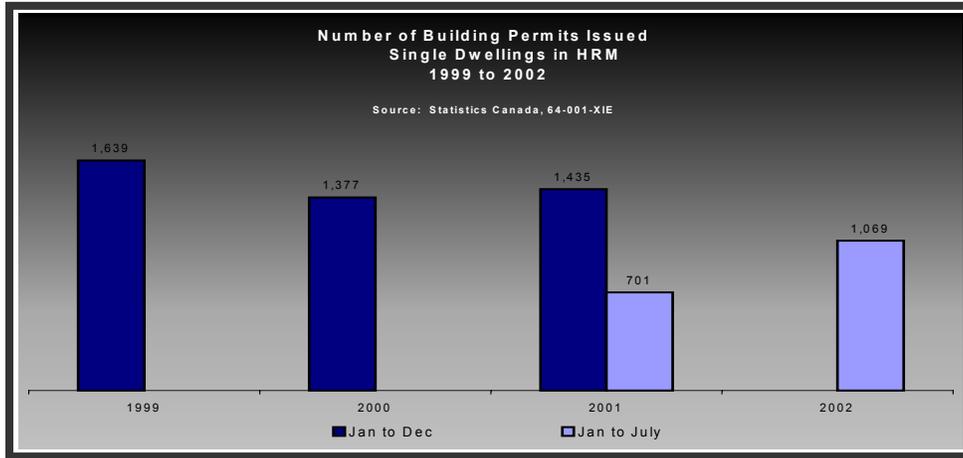
- ▲ in the municipalities representing rural areas, inspectors are primarily involved in the residential sector; and
- ▲ in the municipalities representing towns, inspectors are involved in all sectors.

2.4 Volume of Municipal Building Permit Approvals and Inspections

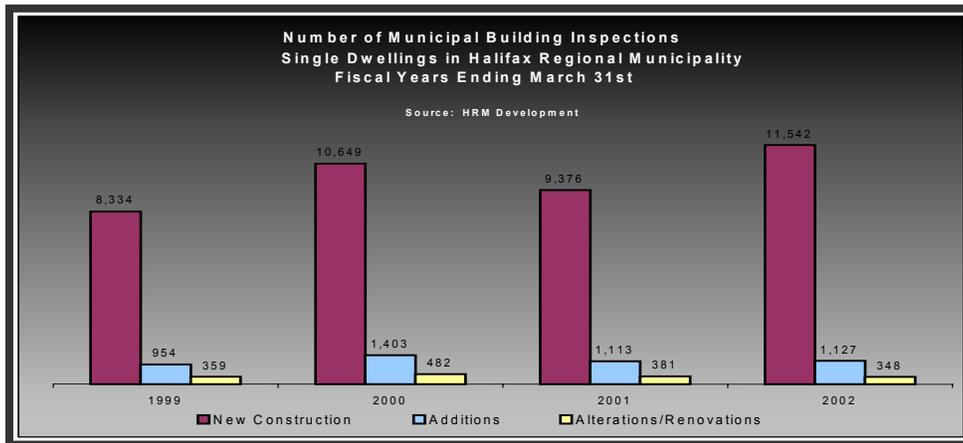
In Nova Scotia, 3,000 building permits were issued for single dwellings in 2001. As depicted in the following graph, the number of building permits issued has been declining since 1996, although there were permits issued for 2,129 single dwellings in the first seven months of 2002, up 32% from the same period of 2001.



Nearly one-half of single dwelling building permits are issued in Halifax Regional Municipality. The following graph shows the volume of building permits issued in HRM for the last four years.



HRM issued building permits for 1,069 single dwellings in the first seven months of 2002, up 52% from the same period in 2001. As illustrated in the following table, the number of building inspections in HRM5 has been increasing. The inspection of new construction accounts for, by far, the majority of inspections.



The preceding graphs illustrate that growth in demand for building permit approvals and inspections has increased in Halifax Regional Municipality. Information is not readily available on the number of building inspections in areas other than HRM.

5 Note that the number of inspections for Nova Scotia is not readily available.



2.5 Timeliness of Building Permit Approvals and Inspections

Each municipality establishes guidelines for the timeliness of permit approvals and inspections. In Halifax Regional Municipality, permit applicants are requested to allow one to two weeks for approvals. According to literature published by HRM, it generally takes five business days to process applications and issue permits. Inspections are to be conducted within 48 hours of being notified (excluding non-working days). HRM key informants report that the actual turnaround time is within one day.

In Cape Breton Regional Municipality, the municipality conducted a trial run of a streamlined residential building permit approval process in 1996. The program focused on offering a training course for home builders and their designers focused on the completion and submission of plans that are consistently code compliant. Graduates of the course are “code-qualified” and plans submitted by graduates are subject to a low-level review. In practical terms, their permit applications are fast tracked. As a result, the average processing time for applications from “code-qualified” applicants declined to six days compared to an average of 14 days for the non-certified.

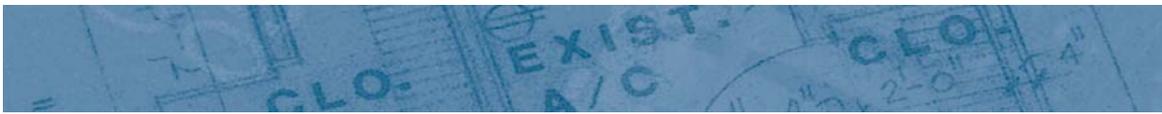
Since 1996, the municipality has not offered any new training on the Code Qualified Program but still receive and process permit applications from individuals who were “code-qualified”.

The timeliness of permit approvals and inspections for other municipalities varies and is further explored in section 3 of the report.

2.6 Municipal Revenues Related to the Building Permit Approval and Inspection System

In the existing system, the permit applicant pays the municipality permit fees for the building permit approval and inspection service. These fees are the only revenue stream for the municipalities under the building permit process.

In general, building permit fees are based on the size of the structure for new construction and value of construction for renovations. In other words, municipalities charge a fee that varies based on the size



and value of the project rather than the amount of service provided to individual building permit applicants. For instance, if a construction project is not compliant, then additional inspections may be required. However the cost to the applicant is the same regardless of the number of times an inspector visits the site.

The actual cost per square foot or dollar of construction is determined by each of the municipal councils. These costs are not standardized and range significantly from municipality to municipality. Based on a review of fees prepared by the Rural Cape Breton District Planning Commission's, fees for the construction of a small home⁶ range from \$51 to \$395.⁷ Based on the weighted average of the value of building permit construction by municipality, the average permit fee is estimated to be \$290 in Nova Scotia.

To further illustrate the variability in permit fees, the following table compares permit fees for four municipal groups in Nova Scotia.

MUNICIPAL GROUP	PERMIT FEES
Rural Cape Breton District Planning Commission	New construction - \$20.00 plus \$0.14 per sq ft Finished or unfinished basements - \$0.08 per sq ft Additions and alterations - \$20 plus 0.25% of value If construction commenced without permit then fees are doubled
Colchester County	New residential construction and additions - \$0.06 per sq ft Renovations and repairs - 0.1% of value
Cape Breton Regional Municipality	New construction/additions - \$0.12 per sq ft \$30 plans examination fee
Halifax Regional Municipality	New construction/additions - between \$0.10 and \$0.30 per sq ft Renovation - 0.55% of value Plumbing - \$50 new construction; \$25 addition/renovation Grade alteration fee - \$75 Occupancy permit - \$100

⁶ One-storey 24' x 36' with an unfinished basement and five plumbing fixtures, at a cost of \$130,000 to build.

⁷ Memo prepared by John D. Bain, Director of the Rural Cape Breton District Planning Commission prepared November 8, 2001. The memo identifies the permit fees for a small single dwelling charged by twenty jurisdictions located in Nova Scotia. The purpose of the memo was to compare the existing permit fees charged by the RCBDFPC to those charged by other municipalities.



As stated earlier, approximately 3,000 building permits were issued for single dwellings in 2001. Based on this volume and the weighted average fee of \$290, the value of building permit revenues is estimated to range between \$800,000 and \$1 million in Nova Scotia.

Several municipalities reported the following building permit revenues associated with the construction/addition and/or renovation of single dwellings:

- ▲ \$626,000 in Halifax Regional Municipality;
- ▲ \$20,000 in Colchester County; and
- ▲ \$33,000 in Rural Cape Breton District Planning Commission.

2.7 Costs Associated with the Building Permit Approval and Inspection System

The building permit approval and inspection system results in costs to homeowners, builders, and various levels of government. There are a number of costs associated with the system, including delivery, compliance, and liability costs. The following section will explore these costs and the implication of these costs on the residential construction sector in Nova Scotia.

It is important to remember that the building permit approval and inspection process imparts significant benefits to consumers and also to mortgage lenders and insurers. The National Building Code was devised and implemented by legislators to enhance the security and well-being of consumers. Building inspections are critical to achieving the benefits embodied in the Code. Industry leaders affirm that building codes, rules governing certified trades, and other key regulations will be meaningless without an effective inspection and enforcement system. Any presentation of building permits approval and inspection costs must therefore be measured against these benefits.

2.7.1 Delivery Costs

In Nova Scotia, provincial and municipal governments are responsible for the building permit approval and inspection system and therefore incur the costs associated with delivering this service.



The provincial government incurs costs associated with its regulatory responsibilities and overseeing the administration of the system. Each municipality bears the following specific costs related to the administration of the system:

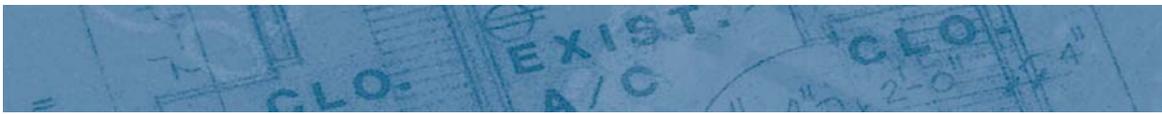
- ▲ wages and employment benefits of municipal building inspectors;
- ▲ travel costs - mileage (to/from job sites) or vehicle purchase/leasing costs;
- ▲ office support, administration, and any other administrative overhead;
- ▲ training costs (courses are offered through the Nova Scotia Building Officials Association); and
- ▲ liability insurance premiums (for example errors and omissions insurance).

To offset the delivery costs, municipalities charge building permit fees. Limited information exists on the total costs of delivering the system in Nova Scotia. A review of delivery service costs for a few municipal groups reveals that municipalities are not generating sufficient revenues to cover the cost of offering the service to the residential construction sector. Depending on the municipality, these costs are covered either by permit revenues received from commercial, institutional, and government properties and/or general municipal taxes.

The Rural Cape Breton District Planning Commission's (RCBDPC) reported wages, employment benefits, and mileage costs associated with building inspections of \$108 per inspection for the construction and/or renovation of single dwellings in the 2000-2001 fiscal year. The total inspection cost per permit issued was \$540 (based on five inspections) compared to a permit fee of \$145 for a small house. In other words, the building permit fee revenues account for 27% of costs. It should be noted that the \$540 cost does not include municipal costs associated with office support and administration, liability insurance, and administrative overhead.

The Cape Breton Regional Municipality reports that permit fees for construction and/or renovation of single dwellings average around \$300. The permit fee revenues cover an estimated 40% of the costs associated with delivering the service.

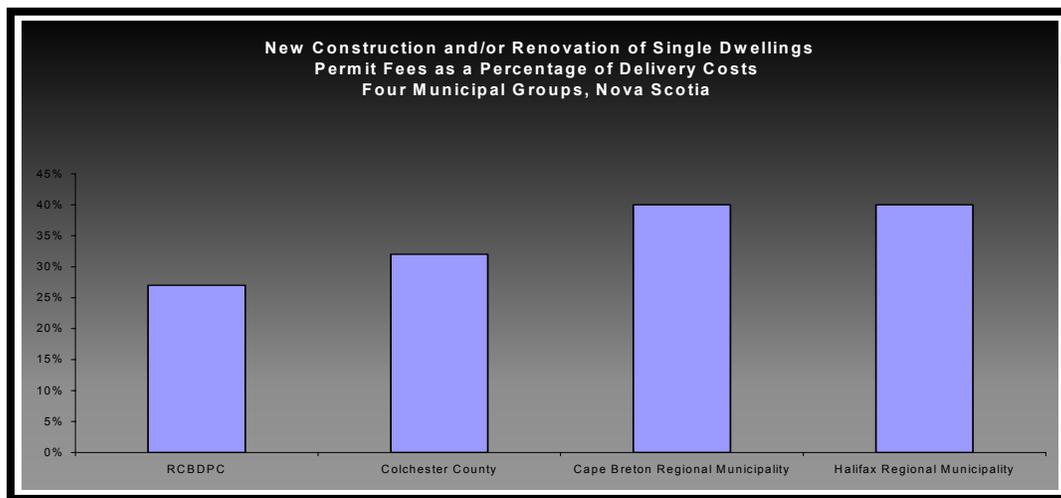
In Colchester County, building permit fees for new construction and/or renovation of single dwellings averaged roughly \$100 per permit issued compared to municipal operating expenditures of



approximately \$316 per permit.⁸ In this case, permit fees cover an estimated 32% of costs.

The Halifax Regional Municipality does not isolate the costs associated with providing building permit approvals and inspection services for new construction and renovation of single dwellings. Nevertheless, municipal representatives did indicate that permit fee revenues cover less than 40% of costs associated with delivering the service.

The cost and permit fee revenue data from the four municipal groups show that municipal revenues represent only 25% to 40% of municipal costs associated with building inspections as shown in the following exhibit (although note that the RCBDDPC costs do not include office support, liability insurance, and administrative overhead). It seems clear therefore that municipalities bear a substantial portion of the costs associated with delivering building inspections.



Homeowners and builders also incur delivery costs. Both parties spend time submitting building plans and dealing with municipal officials on the building site and in general communication and liaison activities with municipal officials. In the case of builders, this time may be built into construction costs,

⁸ In 2001, total municipal budget attributed to issuing all building permits was \$109,000. The county does not track costs related to issuing permits for new housing and renovation. The value of construction for new housing and renovations accounted for 58% of the total. This percentage is used as a proxy to estimate the percentage of the municipal budget attributed to issuing permits for new housing and renovation in Colchester County.



resulting in costs that would be higher than they would have been in the absence of building permit approvals and inspections. That is, homeowners may ultimately bear the builder's costs associated with the system.

There is some question about who bears the cost of disruptions in the construction process stemming from delays in the delivery of building permit approvals and inspections. It is important to differentiate between foreseeable delays and delays that are not expected or are significantly longer than anticipated. For example, it may usually take a few days to obtain an approval to move from one stage of construction to another. This delay is foreseeable and builders may schedule activities so that the delay does not disrupt their operations or the progress of the building project. If this is the case, then this type of delay would impose minimal costs on the builder and the homeowner.

An unexpected delay of, for example, three weeks in obtaining the same approval, could impose significant costs on the builder and/or homeowner. Both parties would not have planned for this delay and might not be able to make alternative plans to offset its potential costs. Builders might lose money if they cannot schedule other construction activity but are locked into paying workers' wages. Unpredictable delays might also have a ripple effect on sub-contractors involved in subsequent phases of the building project, creating timing conflicts that increase construction time and costs. Builders and homeowners faced with unexpected delays also might spend time and money consulting with building inspectors and municipal officials about the delay.

It is important to note that unexpected delays may also be a result of the actions of the homeowner and/or builder. For instance, the permit applicant may provide insufficient permit information or the inspector may be prematurely requested to visit the site.

A building permit approval and inspection system characterized by a high degree of variability and uncertainty in the timing of approvals or inspections will impose more costs than one where the process is more predictable.

In summary, delivery costs are the sum of costs incurred by municipalities and those incurred by homeowners and builders. Data on municipal delivery costs are limited but show clearly that these costs significantly exceed revenues from building permits. Estimating municipal and provincial costs is



difficult due to the complexities associated with allocating administrative and overhead costs to the building permit approval and inspection system in the residential construction sector.

No data exists on costs incurred by homeowners and builders. A survey of builders could provide estimates of the time and costs they incur due to building permit approvals and inspections. The survey should explore the issue of predictable and unpredictable delays and the implications of both for the costs of builders, homeowners, and sub-contractors involved in a building project.

2.7.2 Compliance Costs

Building inspections can result in changes in design and construction. Again, these costs are borne by the homeowner, builder and the municipality. From the perspective of the builder, these costs can be measured by the increase in construction costs attributable to the building inspection requirements. Data on these costs could be collected from a review of a sample of building inspection cases. The review would focus on identifying changes to construction attributable to the inspections and the costs associated with these changes.

2.7.3 Liability Costs

Under the current building permit approval and inspection system, all parties are jointly and severally liable for building defects in Nova Scotia. This means that a plaintiff can collect all damages from any one defendant, even if the party is only partially responsible. The direct costs associated with this liability will be built into the insurance premiums of municipalities, homeowners and builders. A detailed study of insurance premiums would be required to estimate the individual impact of the building permit approval and inspection system on premiums.

2.8 Certification and Training of Municipal Building Officials

Since 1996 efforts have been focused on developing a nationally-recognized certification program for the home and building inspection industry in Canada.



In 1999, the Canadian Association of Home and Property Inspectors (CAHPI) and the Alliance of Canadian Building Officials' Association (ACBOA) agreed to joined efforts “to build a recognizable and professional home and building inspection industry to better serve the general public and their clients.”⁹ The national initiative involves three phases:

- ▲ occupational skills analysis;
- ▲ gap analysis involving an analysis of the differences between training needs and current training and to develop training materials, national certification and accreditation models, code of ethics, and standards of performance; and
- ▲ implementation.

The first phase of the national initiative was completed in March 2001. The Canadian Home Inspectors and Building Officials Steering Committee for National Standards developed a national occupational standard. The occupational standard describes the skills, knowledge, and abilities required to perform the duties of a Professional Building Official.

A proposal has been submitted to Human Resources Development Canada for financial support for the second phase of activities. The approval process should be complete by January 2003. The duration of the second phase is expected to be 12 to 18 months.

At the provincial level, the Nova Scotia Building Officials Association (formerly Building Inspectors Association of Nova Scotia) has established a certification designation and training program for municipal building officials in Nova Scotia. The mission of the association is to develop and maintain a membership, qualified to:

- ▲ ensure buildings comply with the Nova Scotia Building Code Act; and
- ▲ use their training, experience, and professionalism to report in an objective manner on the operation, condition, and safety of existing buildings.

In place for over thirty years, the training program was originally licensed by the province, and

9 Canadian Home Inspectors and Building Officials National Initiative, CMHC, Technical Series Issue 00-131



transferred to the NSBOA in 1995. The current curriculum was developed by the Ontario Ministry of Housing and Municipal Affairs and is used in five of the eight provinces that adopted the National Building Code.

As noted earlier, the provincial Building Code Act does not require that building officials be certified. Nevertheless, the NSBOA and the Province of Nova Scotia report that every municipality has certified inspectors for residential construction and/or renovation.

Areas of Consideration for Change in the Current System

3.0 Areas of Consideration for Change in the Current System

From the perspective of the ongoing development of the current building regulatory system in Nova Scotia, key informants identified the following issues and challenges:

- ▲ liability issues and impacts;
- ▲ supply and demand of municipal building inspectors;
- ▲ certification of inspectors and improved training supports;
- ▲ recognition of the special status and competencies of certified professional builders;
- ▲ recognition of the status of certified inspectors from outside the municipal system;
- ▲ changes to the National Building Code; and
- ▲ service delivery issues, including timeliness of inspections and unscheduled delays.

It is important to note that key informants did not specifically identify costs as a major concern. It is not clear from the work undertaken to date that municipal units have serious concerns about the burden of cost for the building permit approval and inspection system or that they are looking to pursue cost recovery strategies. On a general level, it is not evident that there is any push from government to undertake a major reform of the system to reduce the burden of costs or to shift costs to industry or to consumers. It is also not clear that builders frequently encounter significant financial losses from poor inspection services or unpredictable delays, although some key informants report that these things do occur and can be serious. More systematic survey research would be needed to generate a confident analysis of the nature and scale of cost issues associated with the current building permit and inspection system for the residential construction and renovation sector.

Liability Issues and Impacts

The issue of liability is a critical concern of builders and municipalities involved in residential construction. At present, all parties are jointly and severally liable for building defects in Nova Scotia. The key informants indicated that there is an overall interest in reducing this risk of liability.



Supply and Demand of Municipal Building Inspectors

The existing system is faced with the continual need to balance fluctuating and, in some municipalities, increasing demand with a more stable and limited supply of municipal building inspectors. This issue is most evident in the Halifax Regional Municipality, with demand for inspections fluctuating over the last four years between 9,600 and 13,000.

The recently proposed amendments to the provincial Fire Code Act also have the potential to place increased pressures on existing resources at the municipal level. Since 1976, the Act has required municipalities to inspect public buildings for fire safety but many municipalities did not comply. The proposed amendments clarify this role, specifying that inspections are required on a periodic basis. The frequency of inspections varies depending on the type and use of the public building.

Although the option exists to use private inspectors, some municipalities will either use existing staff or request from their council additional financial resources to hire inspectors. In other words, a municipal building inspector of residential construction could also become responsible for inspecting public buildings for fire safety.

These demand and supply issues are important because the potential exists for the quality of inspections to erode in cases where municipal building inspectors face increasing workload pressures.

Certification of Inspectors

At present, the Nova Scotia Building Code Act specifies the appointment of a building inspector but does not require that municipal building officials be certified. One of the stated objectives of the Nova Scotia Building Officials Association is to convince the provincial government to amend the legislation to specify mandatory certification. Change in the legislation is seen as critical in that it would support the delivery of more consistent services across the province and the professionalization of the building inspector occupation in harmony with an evolving framework of national standards.

Changes to the National Building Code

By the year 2005, the National Building Code will be objective-based; i.e., the code will identify in



quantitative terms a number of specific functional requirements for building products, materials and procedures. This development will have implications in a number of areas, including the:

- ▲ adoption of innovation;
- ▲ uniformity of application of regulations;
- ▲ training of inspectors; and
- ▲ delivery of the building permit approval and inspection system.

Delivery of Permit Approval and Inspection Services

Discussions with key informants reveal that preliminary areas of concern regarding the existing delivery system are:

- ▲ Bottlenecks, time lags - Builders indicated that the most significant time lag relates to the approval process for on-site sewage systems. This is an issue in areas where central sewer services are unavailable. Before the municipality will issue a building permit, approval is required from the Nova Scotia Department of Environment and Labour for the installation of on-site sewage disposal systems for new home construction. At present, the lag is up to thirty days. It is important to note that this lag is outside the control of the municipal building permitting system. Other areas of concern include time lags experienced in (1) rural areas where municipalities do not have sufficient financial resources to provide a timely service and (2) the permit application process for renovators (refer to discussion below).
- ▲ Recognition of the special status of certified builders - Representatives of certified builders would like to see the recognition of their special status built into the current inspection system. Options might include more fast-tracking of applications from certified builders and more flexibility for qualified builders to approve work on their own projects subject to oversight by municipal inspectors. Development of such an approach might require enhanced training about the building code as part of the certification process for builders. Pursuit of this option might pay double dividends: it would reduce the workload for current inspectors and generate incentives for more builders to become certified.



- ▲ Recognition of the qualifications of other professions - There is also interest in considering options for a wider range of professions to be authorized, perhaps with specialized training, as qualified to do building inspections. This might include certified home designers. Any of these groups would be subject to oversight by municipal inspectors.
- ▲ Allocation of municipal resources - According to key informants from various municipalities, owner-builders take up more municipal resources because of their unfamiliarity with the process. This puts constraints on services to the more experienced builders.
- ▲ Interpretation of the Building Code Act - Due to the differing strengths, interests, and technical backgrounds of municipal building inspectors, aspects of the building code can be interpreted differently. Some builders feel that there is widespread inconsistency in inspections, whereas others stated that they have very strong working relationships with inspectors and feel inspectors are reasonable and consistent in the way they interpret the code. This is perhaps an area for further study and evaluation.

Other issues and concerns mentioned by the key informants include:

- ▲ Processing of permit applications - Builders indicated that the processing time for permit approvals is not a major concern, although exceptions do exist. A properly prepared application results in a permit issued within three days. The permit process for the renovation of a home is, however, not as timely. The permit process can take ten to fourteen days. This issue is important given that the current trend of increased activity in the renovation sector is expected to continue in the future.
- ▲ Workload assignments - In Halifax Regional Municipality, building inspectors are randomly assigned to work sites and therefore a number of different inspectors can visit the same site. This process is not efficient from the builders' perspective as additional time is required to familiarize each inspector with the site.
- ▲ Time spent on site - Renovators stated that the amount of time spent by inspectors on the site is insufficient and the inspection is not sufficiently thorough.
- ▲ Occupancy permits¹⁰ - Some builders indicated that occupancy permits are difficult to obtain. One

¹⁰ Note that conditional occupancy permits are allowed under the regulations. However, many municipalities do not issue these permits given that they increase the workload of inspectors and/or the risk of liability.



builder suggested that the system should issue "provisional" occupancy permits in cases where there are one or two minor items to resolve.

- ▲ Accessibility - Municipal inspectors are difficult to contact for clarification on their building code interpretations.
- ▲ Access to information¹¹ - Builders currently do not have access to HRM's database, which tracks the comments of inspectors and of plan reviewers. One builder thought it would be useful to have access to this information.

¹¹ Note that several municipalities are currently pursuing initiatives to allow on-line access to this information.

Alternative Building Permit Approval and Inspection Systems

4.0 Alternative Building Permit Approval and Inspection Systems

The following section describes new building inspection systems in Alberta and Victoria State, Australia. The review of each system considers the context of the building regulatory system, the actual reforms, and the lessons learned.

4.1 The Building Regulatory System in Alberta

4.1.1 Context

Prior to reform, the delivery of, and responsibility for, safety code enforcement was centralized within the provincial Department of Labour in Alberta. The province delegated certain enforcement responsibilities to the municipalities.

In light of government cutbacks and deregulation, the Alberta government was interested in creating an alternate system of service delivery. The reforms needed to:

- ▲ reduce the liability of the municipal government given that recent court rulings were increasing municipal liability;
- ▲ address the issue of shrinking municipal budgets and insufficient numbers of municipal inspectors; and
- ▲ improve the flexibility of the system to enable inspections to be conducted by parties other than municipal inspectors.

4.1.2 Reforms

In the early 1990s, Alberta's system of building and safety code enforcement was changed through the introduction of the Safety Codes Act. Passed in 1991 and implemented in 1994, the Safety Codes Act introduced the following reforms:

- ▲ mandatory certification of all inspectors;



- ▲ accreditation of municipal, private, and corporate agencies to deliver inspections;
- ▲ consolidation of seven building safety related acts under the Safety Codes Act; and
- ▲ consolidation of administration under the Safety Codes Council comprising industry and municipal representatives.

These reforms impacted the delivery of building permit approval and inspection services for all sectors including residential construction, industrial and commercial.

In Alberta, accredited municipalities presently serve the majority of areas. These municipalities have the option of using their own staff or entering into a contract with one or more accredited private inspection agencies to provide some or all inspection functions. In areas where municipalities have chosen not to be accredited, the Ministry of Municipal Affairs takes on additional responsibility for inspections and, in turn, hires one or more accredited private inspection firms. Non-accredited municipalities tend to prevail in the rural areas of Alberta.

In summary, Alberta does not have a system whereby the builder can choose from a number of accredited private inspection agencies. Rather the builder must select from among those private inspection agencies with whom the municipality has entered a contractual arrangement.

The creation of the Safety Codes Council enabled the provincial government to outsource the administration of the system including developing and amending codes, certification, and accreditation. The mandate of the council is to:

- ▲ recommend codes and standards to the Minister for nine disciplines;
- ▲ administer an accreditation system for municipalities, corporations, and agencies;
- ▲ develop and administer a system to certify and designate Safety Codes Officers;
- ▲ hear appeals; and
- ▲ provide support for partners in the Safety Codes Council.

The Safety Codes Council is self-funded with a \$1 million annual budget. The underlying principle of



the council is that “users should pay the costs” of operating the regulatory system. Some examples of fees charged by the council include:

- ▲ \$5 fee per permit issued by all accredited municipalities and private agencies;
- ▲ \$100 certification fee for Safety Codes Officers;
- ▲ \$100 accreditation fee for private inspection agencies and corporations; and
- ▲ \$1,500 annual fee for accredited corporations.

These fees are collected from the nine technical disciplines, namely building, fire, elevator, electrical, plumbing, gas, boilers, amusement rides and passenger ropeways safety.

To deliver services, an enforcing agency must be accredited by the Safety Codes Council. Key elements of the accreditation program include¹²:

- ▲ Voluntary - If a municipality does not wish to be accredited in a particular discipline, then the province takes responsibility and contracts with an accredited private inspection agency.
- ▲ Quality Management Plan - To become accredited, a municipality (or private agency or corporate agency) must complete a Quality Management Plan (QMP) that is approved by the Safety Codes Council.
- ▲ Flexibility - Municipalities (and accredited private and corporate agencies) have the flexibility, within the framework of the Quality Management Plan, to set their own level of service. There are, for example, no minimum required inspections and there is no minimum number of inspectors required for a given volume of construction activity.
- ▲ Geographically limited - Municipalities can only provide services within their boundaries but several municipalities can be jointly accredited.
- ▲ Contract out - Municipalities can provide inspection services through their own staff or by entering into a contract with an accredited private inspection agency.

12 Ministry of Municipal Affairs and Housing, Comparing Building Regulatory Systems in Ontario, New Jersey, Alberta, British Columbia and Victoria, Australia. February 3, 2000. Page 33.



- ▲ Audit - Accredited agencies are subject to provincial “audits” focusing on “coaching” and “support”.

As a result of the reforms, the new system:

- ▲ Shifts responsibility away from inspectors to those that complete the work - The owner, designers, design professionals, manufacturers, and contractors must ensure that the building complies with the code, whereas the role of the government and inspection agencies is to audit these parties.
- ▲ Exempts regulatory agencies (i.e. the Crown, Safety Codes Council, safety code officers, and accredited municipalities and agencies) from liability.
- ▲ Establishes a time cap on liability of 10 years, while maintaining joint and several liabilities.

4.1.3 Lessons Learned

Since implementation, concerns have been raised by industry and consumer representatives about the following aspects of the new system¹³:

- ▲ Service delivery problems - These problems were largely experienced during the initial implementation of the reforms due largely to a lack of planning.
- ▲ Delivery of service and creating consistent levels of service - There is a need for consistency in the issuing of permits, and the quality and timing of inspections. At present, each accredited municipality has its own plan, outlining specific areas of responsibility and standards for service delivery. As a result, permit and inspection requirements, fees, and administrative processes vary by municipality. This lack of uniformity increases the complexity of the system.
- ▲ Low level of service standards for code officers - While there is a well-developed certification system for Safety Code Officers, the accreditation system does not ensure that private inspection firms use certified inspectors.
- ▲ New responsibilities but no real accountability for builders and designers - The system does not

13 Ministry of Municipal Affairs and Housing, Background Report for BRRAG: Comparing Building Regulatory Systems in Ontario, New Jersey, Alberta, British Columbia and Victoria, Australia. Feb 2000. Pages 73 and 74.



require builders/designers to have the technical/financial capacity to take real responsibility for the work. (i.e. through mandatory errors and omissions insurance or warranty coverage).

- ▲ No clear role for owners - Although the Act stipulates that owners are responsible for compliance with the Act, it does not outline how owners ensure that builders, designers, inspectors, and other practitioners, in fact, comply with the Act and its codes.

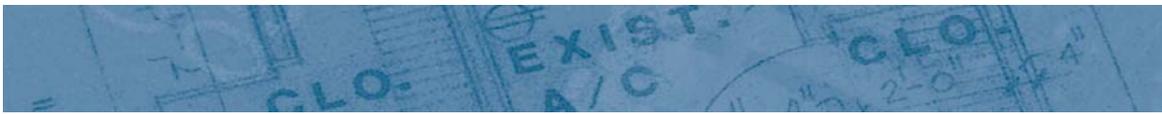
A major component of the Alberta system is the use of accredited inspection agencies. Stakeholder feedback on the use of private inspection agencies includes¹⁴:

- ▲ private inspection agencies can provide better services as they are more responsive and act like a partners, helping the builder identify and correct errors;
- ▲ there are no benefits or incentives for private industry to achieve high levels of safety;
- ▲ competition in permit fees can reduce quality (firms may charge lower fees to get the job and then cannot provide adequate service);
- ▲ some municipalities enter exclusive contracts for two to three years with a single private inspection firm and therefore limit competition and choice for the builders;
- ▲ there is poor coordination among permits (for instance a private inspection agency issuing electrical permits will not coordinate with the municipality or inspection agency issuing building permits); and
- ▲ there is poor auditing of inspection agencies.

Little information and research exists on the cost implications of the implementation of reforms to the residential construction sector in Alberta. Before reform, the municipalities were offering a delivery service that may or may not have reflected the cost of delivering the service for residential construction given that each municipality has varying levels of municipal tax revenues.

After reform, there was a downward pressure on costs due to the introduction of competition. Municipalities were also moving towards cost recovery for the whole delivery system given declining

¹⁴ Ibid, page 72.



budgets. The impact on residential construction permit fees varies by municipality depending on the degree of competition. Certain municipalities may have chosen to increase permit fees as the trend is towards a user pay system rather than a taxpayer subsidized system. Other municipalities have not changed permit fees as they continue to be able to offer the service on a cost recovery basis.

To further illustrate the variability of fees, the following table compares permit fees for two areas in Alberta:

AREA	PERMIT FEES
Calgary	0.8% of construction costs (new construction) 0.6% of construction costs (renovation) Alberta Safety Codes Council surcharge \$131 fee for re-examination of plans originally rejected due to inaccuracies \$66 fee per re-inspection due to non-compliance
Lethbridge	0.65% of construction costs Alberta Safety Codes Council surcharge \$50 fee per re-inspection \$40 fee if site not ready for inspection when visited \$50 fee per electrical permit If work commenced w/o permit then fees are doubled.

4.2 Victoria State, Australia

4.2.1 Context

In 1994, reforms were developed and introduced in Victoria State, Australia to address the following issues¹⁵:

- ▲ costly and lengthy building approvals process;
- ▲ liability concerns for all parties involved in building;
- ▲ barriers to innovation;
- ▲ the need for consumer protection;

15 Greg Lampert, Australian Building Regulation and Liability Reforms: An Update. September 2000. Executive Summary.



- ▲ underground activity in construction; and the
- ▲ need for enhanced professionalization in the building industry.

Similar to Alberta, the Victoria State system involved reform that impacted the delivery of building permit approval and inspection services for all sectors including residential construction, industrial and commercial.

4.2.2 Reforms

The new system includes the following key elements¹⁶:

- ▲ Limitations on liability for building practitioners - (1) A ten-year cap on the liability period for property damage resulting from defects in the design, construction, approval or inspection of buildings. The ten-year cap does not extend to claims for personal injury or death, which may result from building defects. (2) Doctrine of 'joint and several' liability has been replaced with proportionate liability. In other words, no party is required to cover more than their share of the judicial apportionment of damages.
- ▲ Competition for building approval and inspections - The applicants for building approvals (builders and owners) can choose whether to use municipal or private building certifiers for their building approvals and inspections. Consequently, private sector building certifiers compete with municipal building inspectors. Building certifiers examine plans for compliance with the code, issue building permits, carry out inspections, and issue occupancy permits.
- ▲ Compulsory registration and certification for building practitioners - Individuals undertaking the design, construction or demolition of buildings (including building certifiers and inspectors) are required to register annually with the Building Practitioners Board (a state-run organization) and receive a license allowing them to work anywhere in the state.
- ▲ Compulsory insurance for building practitioners - The insurance covers defects in all building work (new or renovations), which is valued at \$5,000¹⁷ or more. Practitioners are also required to have

¹⁶ Ibid.

¹⁷ For the section on Victoria State, Australia, all currency figures are in Australian dollars and have not been converted to Canadian dollars.



10-year automatic run-off coverage. This means that even builders who went out of business would still be required to meet their liability obligations.

To implement these reforms, the Building Code Act 1993 established a new structure comprising the Building Control Commission (BCC) and four associated statutory bodies: Building Advisory Council (BAC), Building Practitioners Board (BPP), Building Regulations Advisory Committee (BRAC), and Building Appeals Board (PAB). These regulatory bodies are separate from the government and thereby operate under distinct mandates without undue interference from the prevailing government. The Building Control Commission is funded through a building permit levy and a practitioner registration fee. In 2001, revenues totalled \$9.2 million. The building permit levy accounted for nearly 70% of these revenues. The levy is payable by the permit applicant at a rate of 0.064% of the cost of construction and is collected on a monthly basis through the building surveyor who issues the building permit.

In Victoria State, building permits ensure that buildings are constructed to comply with the Building Act 1993 (including amendments) and the Building Regulations 1994. The role of the building surveyors is to examine the plans to ensure they conform to the building code, issue permits, carry out inspections, and issue occupancy permits.

The building permit fee covers application assessment, permit issue, mandatory inspections, and issue of occupancy permit or certificate of final inspection. Building permit and inspection fees are set by market rates. Inspections are mandatory; however it is at the discretion of the building surveyor as to the number and type of inspections.

Although permit fees are set at market rates, the Australian Institute of Building Surveyors (AIBS) provides recommended guidelines for building permit fees. As of July 2002, suggested building permit fees for single dwellings are equivalent to the cost of the building divided by 200 (i.e. 0.5%). The suggested minimum fees payable by type of construction are as follows:

- ▲ \$800 for new dwellings (includes 4 inspections); and
- ▲ \$600 for extensions/alterations (4 inspections).

Inspection fees are based on a travel time (one way) of approximately 30 minutes and/or a maximum



travel distance (one way) of 30 kilometres. Additional fees of \$1.00 per kilometre apply to greater travel time and distances. In addition to these fees, other expenses include a state government building permit levy, statutory fees, and additional inspections (at a minimum of \$100 per inspection).

4.2.3 Advantages

In summarizing his findings on the Victoria State reforms, Canadian researcher Greg Lampert writes, “there are clear advantages for the building sector through the types of reforms of building regulations which have been adopted in Australia:

1. Companies and individuals involved in the building industry benefit from liability reform and insurance protection.
2. The building industry benefits through a more transparent and competitive building approval process, a registration system, which encourages increased professionalization in the industry, an efficient dispute-resolution process, and enhanced prospects for innovation.
3. Municipalities are no longer threatened with being 'insurers of last resort' in the event of building defects.
4. Insurers are able to provide insurance coverage at competitive rates through a combination of liability reforms and the registration system, which promotes professional practices among building practitioners.
5. Consumers benefit through an efficient and accountable system, which promotes innovation (and hence lower costs) while also providing protection against building defects.”¹⁸

4.2.4 Lessons Learned

The reforms of building regulations in Victoria State are generally considered by both government and industry to be positive. The key lessons learned from the reform are¹⁹:

- ▲ The reforms are a package - The success of the reform package depends on implementation of the full package.

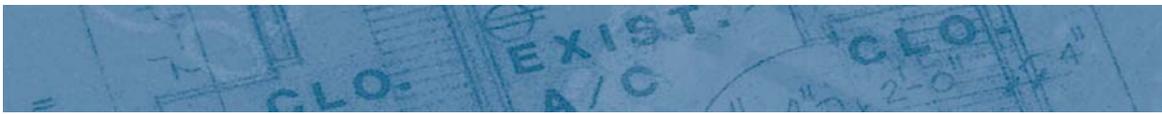
18 Greg Lampert, *Australian Building Regulation and Liability Reforms*, 1999. Pages 35 - 36.

19 Greg Lampert, *Australian Building Regulation and Liability Reforms: An Update*. September 2000. Pages vi and vii.



- ▲ Substantial benefits in including certifiers as part of the design team - This approach reduces the likelihood of revisions to the designs at the approval stage.
- ▲ Enhanced adoption of performance-based building codes - The introduction of competition for building approvals facilitated the adoption of new technologies under the new Building Code Act.
- ▲ Auditing is important - The system requires enhanced policing to ensure the work and practices of builders meet appropriate standards. For instance, some builders cited rumors that large building companies could exert pressure on building certifiers to bend the rules in their favour and, because of concerns about losing large clients, some certifiers may be willing to overlook some deficiencies. It does not appear that the abuse is widespread given that the penalties are severe.
- ▲ Qualifications of building practitioners - The qualifications of building practitioners have improved with the new requirements for registration; however, many in the industry believe the qualifications need to be further tightened (in particular for builders grandfathered into registration at the outset of the reforms) and made more stringent to ensure that existing building practitioners meet the standards, and engage in continuing education.
- ▲ Extension of the system to include planning - Although reforms have improved the building approval system, a major goal of the system is to privatize planning approvals to ensure better integration of planning and building.
- ▲ Common regulations across the country - The lack of similar building regulations in other states has created difficulties for those companies seeking to undertake work outside Victoria State.

Similar to the Alberta system, a major component of the Victoria State system is the use of private certification agencies. In fact, private building surveyors have a significant share of the market. In 2001, private building surveyors issued 58,653 building permits (68%) in the residential sector. Municipal building surveyors issued 27,773 building permits (32%). In rural Victoria State, the market share is evenly split between the municipal and private building surveyors, whereas private building surveyors dominate the metropolitan area.



Stakeholder feedback on the use of private inspection agencies includes²⁰:

- ▲ more responsive service from inspection agencies;
- ▲ due to intensive competition, some inspection agencies are cutting corners to make a reasonable income; and
- ▲ improved climate for innovation.

In general, there have been savings in construction costs due to:

- ▲ reduced time and effort to obtain building approvals and inspections;
- ▲ more certainty in the process; and
- ▲ use of performance-based building codes, particularly in non-residential and high-density residential construction.

The following table summarizes specific cost implications associated with the reformed building permit approval and inspection system:

	VICTORIA STATE, AUSTRALIA
Building Permit Approvals	<p>After introduction of reforms, “there has not been a unanimous view about whether private certification has had the impact of either reducing or increasing the costs (associated with) building approvals. Costs largely depend on building types and jurisdictions... costs have been reduced - largely for volume home builders and large commercial projects”.²¹</p> <p>Residential building companies generally reported a saving of three weeks, with permits now issued within one week (often just a few days) compared with four weeks under the old system.²²</p> <p>“Effort to obtain a permit has decreased for 68% of permit applicants and increased for 74% of building surveyors. These changes in relative efforts of participants in the building permit process reflect a shift in procedures from the previous system where the applicants had to anticipate what the (municipal) building surveyor would require, to the current system where the applicant can</p>

20 Ministry of Municipal Affairs and Housing, Background Report for BRRAG: Comparing Building Regulatory Systems in Ontario, New Jersey, Alberta, British Columbia and Victoria, Australia. Feb 2000. Pages 80.

21 Ministry of Municipal Affairs and Housing, Background Report for BRRAG: Comparing Building Regulatory Systems in Ontario, New Jersey, Alberta, British Columbia and Victoria, Australia. Feb 2000. Pages 55.

22 Greg Lampert, Australian Building Regulation and Liability Reforms: An Update. September 2000. Page B-2.



	VICTORIA STATE, AUSTRALIA
	<p>discuss requirements and adaptations with the building surveyor – and possibly include the surveyor in design meetings. This results in less work for the applicant, but more work for the building surveyor.” As a result, many of the large volume residential builders reported staff cost savings with a 50% reduction in staff required to perform permit related work.</p> <p>Certainty of the building permit approval system has improved. Some builders reported that delays had "cost them \$20,000 a week for large projects."²³</p>
Building Inspections	<p>Residential builders report a savings of one or two days for building inspections. These time savings translate into estimated "labour cost savings of around \$500 per project . . . \$2,000 annually per project."²⁴</p>

4.3 Concluding Comments: Overall Lessons Learned from the Alberta and Victoria State Examples

In reviewing the Alberta and Australian examples, it would appear that successful regulatory reform has depended on a comprehensive approach and consideration of the following issues:

- ▲ The expanded participation of private inspection agencies should be at the discretion of permit applicants or municipalities;
- ▲ There need to be more stringent limitations on liability through proportionate liability and time caps on the duration of liability;
- ▲ There needs to be mandatory insurance for building practitioners for construction of new buildings and/or major renovations; and
- ▲ There is a need for mandatory certification and training of building inspectors.

In considering the further development of the Nova Scotia building permit approval and inspection system for residential construction and renovation, it would be worthwhile to consider the potential benefits relative to the costs or disadvantages for each or all of these areas of change.

23 Ibid. Page B-3.

24 Ibid. Page B-4.

Comparison of Building Inspection Systems

5.0 Comparison of Building Inspection Systems

The following table compares the building regulatory system of Nova Scotia to that of Alberta and Victoria State, Australia.

	ALBERTA	VICTORIA STATE, AUSTRALIA	NOVA SCOTIA
Type of Delivery Method	Dual Delivery System - Accredited municipalities or private agencies or builders. Accredited agencies are contracted by the municipality.	Dual Delivery System - Accredited municipal and private inspection agencies compete with each other for business. Owners or builders can choose whichever they prefer.	Municipal Delivery - Although the option exists for municipalities to use third party private inspectors.
Delivery Costs/Permit Fees	Varies by municipality. Before reform, the municipalities were offering a delivery service that may or may not have reflected the cost of delivering the service for residential construction. After reform, there was a downward pressure on costs due to the introduction of competition. Municipalities were also moving towards cost recovery for the whole system given declining budgets. The impact on residential construction permit fees varies by municipality depending on the degree of competition and the level of permit revenues from other sectors.	Varies by council. Costs are going down due to intensive competition.	Municipalities are not offering service on a cost recovery basis for residential construction.



	ALBERTA	VICTORIA STATE, AUSTRALIA	NOVA SCOTIA
Timing of Permit Approval and Inspection Process	No mandatory service levels. Varies by municipality. There is a need for consistency in the issuing of permits and the quality and timing of inspections.	Yes mandatory service levels. Service levels are also driven by liability exposure and insurance premiums. Permits are now issued within one week compared with four weeks. Inspections are now timelier by one or two days.	No mandatory service levels. Service levels vary among municipalities, depending on local policies and resources. The permit approval process varies by municipality. Key informants report that generally the permit approval process is within three days for building a new home and ten to fourteen days for renovation of a home. The timeliness of inspections varies by municipality and by inspector.
Liability of building practitioners²⁵ for building defects	Time Cap - Limited to 10 years Joint and Several Liability ²⁶	Time Cap - Limited to 10 years excluding personal injury Proportionate Liability ²⁷	Time Cap - None Joint and Several Liability
Insurance for Building Practitioners	Not Mandatory	Mandatory ²⁸ Accredited private inspectors (\$1M/claim, \$2M /yr) Accredited Municipal Inspectors (\$5M/yr)	Not Mandatory The voluntary certification program requires members to carry liability insurance.

25 The term building practitioner refers to those involved in the design, approval or construction of a building - in addition to builders; it includes such participants as architects, engineers, and building approval authorities.
 26 One defendant can be held responsible for all damages related to rectifying a building defect, even if responsibility for the defect is shared among several parties.
 27 Defendants are responsible only for their share of the judicial apportionment of damages.
 28 The type varies depending on the profession of the practitioner.



	ALBERTA	VICTORIA STATE, AUSTRALIA	NOVA SCOTIA
Certification of Building Inspectors	Mandatory Although there is a well-developed certification system for Safety Code Officers, the accreditation system does not ensure that private inspection firms use certified inspectors.	Mandatory	Not Mandatory

Change Options for Nova Scotia

6.0 Change Options for Nova Scotia

Based on the examination of the current system in Nova Scotia and the review of alternatives in Alberta and Victoria State, Australia, the following are areas of possible change that might be examined in further depth to support the continuing development of the building permit approval and inspection system for residential construction and renovation in this province.

6.1 Innovations in the Provision of Inspection Services

Although the present system provides municipalities with the option of using third party private inspectors, this option is not often exercised. In general, municipalities use their own staff to complete permit approvals and inspections.

One recent exception to this practice occurred in 1999, when Halifax Regional Municipal staff was on strike. For several weeks, the municipality was forced to use third party private inspectors.²⁹ Due to the lack of availability of building inspectors familiar with Part 9 of the building code, many of these inspectors were professional engineers and not certified building inspectors. The Atlantic Home Warranty Program also offered inspection services to its members by employing a certified building inspector.

The municipality was still able to provide a service to clients through the use of third party inspectors but viewed it as a stopgap measure under unusual circumstances. Based on this experience, the following observations are reported:

- ▲ some builders favoured the use of third party inspectors because of the improved timeliness of service;
- ▲ other builders did not experience a change in the quality of service; and
- ▲ the municipality and consumers experienced a more expensive and lower quality service because professional engineers charged by the hour but were not certified or trained building inspectors.

²⁹ The home-owner was responsible for paying for the service and was then reimbursed by the municipality. The municipality reports that they reimbursed roughly \$175,000 in inspection fees.



In Nova Scotia, the expanded use of private inspector services would need to be considered in the context of the existing system. There are three identifiable circumstances where a significant expansion of private inspection services might be considered:

1. Municipalities decide that they will no longer be involved in building inspection delivery to save costs and, therefore, shift the full costs of inspection to consumers and/or builders who in turn begin to look for better prices through competition among private inspection service providers.
2. Municipalities decide to reduce their costs by contracting out inspection services to private providers.
3. Consumers and/or builders are deeply dissatisfied with the quality of service provided by municipal inspectors and demand an alternative system.

There is no evidence to date that these circumstances now pertain to Nova Scotia, or that any major reform of the current system is under active consideration.

Consumers do not currently pay anything close to the full cost of the existing system in the residential construction sector, and are not actively demanding cost savings in this area. Municipalities are much more likely to become concerned about the costs of providing this service. In theory, the expansion of private sector participation in inspections might place a downward pressure on service costs. However, there would continue to be a significant discrepancy between the permit fees collected and the real cost of delivering the service unless fees to consumers and/or builders were substantially increased. Key issues to consider, therefore, are whether the expansion of private inspection services would in practice significantly reduce the costs of delivery for municipalities, and whether it might jeopardize the quality of service.

If building applicants have the option of hiring a third party inspector and delivery costs did not equate to permit revenues, then permit fees would need to be increased to absorb delivery costs (i.e., the consumer would pay more). If the municipality contracted out services to a private agency and did not raise permit revenues, then the municipality would continue to absorb the cost and existing staff would either be downsized or have more time to spend on other responsibilities.

From the perspective of the builder, the introduction of competition might reduce construction and compliance costs because private inspectors might be more responsive to requests for inspection. That is, there would be fewer delays and more timely inspections.



The Australian example suggests that private inspectors might be more involved in the planning stage of the design process and potentially reduce downstream costs for the builder.

One possible way of reducing the costs of delivery and of speeding up approval processes would be to allow certified builders to complete their own inspections, subject to audit and oversight by the municipality. In this case, the builder, who has met certification standards and is adequately trained in the requirements of the Building Code, would complete the inspection on site. Based on discussions with key informants, the possible advantages of this option include the following:

- ▲ builders would have little to no waiting time for inspections;
- ▲ there would be added incentives for builders to become certified; and
- ▲ large builders would benefit from economies of scale.

Possible risks or constraints include the following:

- ▲ the loss of the arms-length relationship might increase non-compliance; and
- ▲ builders might need to commit additional financial and time resources to train staff, which would be more of a burden for small builders.

In conclusion, such innovations to the Nova Scotia system might have direct impacts on costs for consumers, builders, and municipalities. The potential exists for municipalities to reduce their costs but quality assurance would be an issue. The level of impact is difficult to determine without further research to quantify the total delivery, compliance, and liability costs of the existing system and to compare these costs to those associated with alternative approaches.

If the demand for inspections increases in future due to the changes in the fire code and national building code, then municipalities might not be able to continue to afford the system and, in the near term, quality and timeliness might become more of an issue.

6.2 Liability and Mandatory Insurance

As mentioned earlier, there is a general interest in reducing the liability risk of all parties involved



in the residential construction sector in Nova Scotia. The certified builders are particularly concerned given that they can be held liable for errors whereas the underground economy operators generally do not carry insurance and tend to avoid liability by declaring bankruptcy. The municipalities are also interested in any options that would reduce their risk as 'insurers of last resort' in the event of building defects. Therefore, liability reform that would address time caps on liability, proportionate liability, and compulsory insurance has direct applicability to the Nova Scotia system.

6.3 Certification and Training Issues

In Nova Scotia, certification and training of building inspectors is already taking place through the efforts of the Nova Scotia Building Officials Association. A near term objective of the Association is to convince government to change the legislation to specify mandatory certification. This is, therefore, an area that the industry is already pursuing.

The Atlantic Home Building and Renovation Sector Council has been carrying out research and industry consultations for two years to develop a professionalization model appropriate to the home building and renovation sector. Based on the expressed interests of industry members in this region, and the experience in other jurisdictions, a model is being elaborated with four key components:

1. Industry leadership and governance through an effective sector council structure;
2. Licensing of builders and renovators;
3. A new training and certification system based on competencies; and
4. A revitalized apprenticeship system with improved relevance to current practices and human resources needs in the sector.

These developments hold three implications for the building permit approval and inspection system for residential construction and renovation:

1. There might be more interest in, or pressure for, mandatory training and certification of building inspectors if the wider industry is moving in this direction;
2. If builder licensing or new competency-based standards become mandatory, these will need to be supported by a monitoring and enforcement capability. Part of the responsibility for this might logically fall to the building inspectors, with possible implications in terms of workload and



knowledge and skills requirements; and

3. If there are larger numbers of certified builders, there might be more pressure for self-regulation with regard to building inspection processes.

In pursuing the development of the professionalization strategy for the sector, industry leaders will need to consider fully these issues and work closely with building inspectors, and the provincial and municipal agencies with responsibilities in the field, to seek consensus on the best ways to move forward.

Conclusion

7.0 Conclusion

The information presented in this situational analysis report is meant to provide a starting point for future stakeholder consultations and policy development around possible linkages between the evolving professionalization system and the building inspection system in Nova Scotia.

The report identifies the following issues concerning the Nova Scotia building permit approval and inspection system in the residential construction and renovation sector:

- ▲ permit fees are low relative to actual delivery costs;
- ▲ the issue of liability is a concern of builders, inspectors, and municipalities;
- ▲ municipal building inspectors are not presently required to be certified;
- ▲ the impending changes to the National Building Code with the introduction of the objective-based building code;
- ▲ continual need to balance fluctuating and, in some municipalities, increasing demand with a more stable and limited supply of municipal building inspectors; and
- ▲ specific service delivery quality issues.

It is noted that these findings are based on a limited methodology. The issues were those identified by a small number of key informants and may or may not reflect the perspective of all parties operating in the sector. A study of much wider scope would be needed to quantify and evaluate the significance of these areas of concern.

The major question is whether these issues are significant enough to warrant major changes to the current system in Nova Scotia. While it does identify options and possible directions for change, within its limited scope, this study could not provide answers to that basic question. In reviewing other jurisdictions, the impetus for reform can vary from the need to respond to a crisis situation (such as the case with the 'leaky condos' in British Columbia), to a political will for change (for instance in Alberta), to longstanding issues within the industry (such as in Victoria State, Australia). It is yet to be established whether any of these conditions exists in Nova Scotia.



The next step in the process could involve presenting these issues to stakeholders (consumers, builders, municipalities, and provincial government) to determine whether the impetus exists to undertake a more substantial review or evaluation of the Nova Scotia building permit approval and building inspection system.

If changes to the existing system are to be pursued, then additional research should be completed to fill in several information gaps. These gaps include the actual costs associated with delivery, compliance, and liability of the system and a comparison of these to estimated costs associated with a reformed system. To determine the full impact, the costs would need to be estimated for all parties involved in the residential construction sector. Again, the costs would need to be compared against the benefits associated with the reformed system.

There is also a need to carry out a scientifically valid survey of the views and experiences of building industry stakeholders, to assess their concerns and to develop a thorough analysis of the quality and costs of current service delivery systems from the industry perspective.

Although this discussion paper focused on the residential sector, clearly there are implications for the institutional, commercial, and industrial (ICI) sector. In other jurisdictions, reforms impacted all of the sectors. If the impetus exists to pursue changes to the system, then the next step may be to explore the implication of pursuing any changes on the ICI sector.

Appendix A

APPENDIX A

LIST OF KEY INFORMANT INTERVIEWS

Edmund Benoit
Riverview General Construction
NEW GLASGOW, NS

Jim Donovan
Supervisor Permits & Inspections, Western Region, Halifax Regional Municipality
HALIFAX, NS

Rick Fraser
Building Inspector, Cape Breton Regional Municipality
SYDNEY, NS

Michael Hennigar
Mike Hennigar's General Construction
CLARKS HARBOUR, NS

John Kenward
President, CHBA
OTTAWA, ONTARIO

Jack Leedham
Nova Scotia Building Officials Association
DARTMOUTH, NS

Nigel Lilley
Registrar
Builders' Registration Board of Western Australia
WEST PERTH, W.A

Michael MacKinnon
Building Inspector
Pictou County District Planning Commission
Stellarton, NS



Richard Miller (Note: Mr. Miller provided the study team with input from four experienced builders from HRM).

President and Board Chair, AHB&RSC
Clayton Developments
HALIFAX, NS

Pat Mulcahy
CEO, Atlantic Home Warranty Program
HALIFAX, NS

Larry Oakey
LSO Construction Services
DARTMOUTH, NS

Ted Ross
Building Code Coordinator
Municipal Services Division
Service Nova Scotia and Municipal Relations
HALIFAX, NS

Michael Senz
A&H Renovations
DARTMOUTH, NS

Darrel Smith
Senior Researcher, CMHC
OTTAWA, ONTARIO

Ed Thornhill
Manager, Permits and Inspections
Planning and Development Services, Halifax Regional Municipality
HALIFAX, NOVA SCOTIA

Chris Tye
Director/Administrator
Building and Fire
Alberta Municipal Affairs
EDMONTON, ALBERTA



Rob Williams
Interhabs Ltd.
HALIFAX, NS

Mannie Withrow
UNSM Representative
Building Inspector - Municipality of Colchester County
TRURO, NS



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