National Harmonization of Construction Codes

November 27, 2019

Building and Development Branch, MMAH



Purpose

- To provide an overview of MMAH's path towards the cross-country harmonization of construction codes.
- To outline the key milestones related to current and future work to further harmonize Ontario's Building Code with the National Construction Codes.



Mandate

"Ontario's Building Code sets standards for safe, healthy and accessible buildings. We're proposing to harmonize our Code with National Codes to open new markets for manufacturers and bring building costs down."

More Homes, More Choice: Ontario's Housing Supply Action Plan, May 2019

"Ontario supports reducing interprovincial trade barriers. This includes the areas of transporting goods between provinces and territories, harmonizing food regulations and inspection rules across Canada, [and] harmonizing building codes...."

Ontario Budget: Protecting What Matters Most, April 2019

"The Fall Economic Statement reaffirms the federal government's commitment to strengthening freer trade within Canada, and proposes that the federal government will work with provincial and territorial partners to accelerate action to remove regulatory and other barriers [by]...aligning regulations in the construction sector, including the harmonization of building codes across Canada."

Federal Fall Economic Statement, November 2018



Building Code Act and Regulation

- The Building Code Act, 1992 is the legislation governing the construction, renovation, change of use and demolition of buildings in Ontario.
- The Act also states the purposes of the Building Code, which are:
 - To establish standards for public health and safety, fire protection, structural sufficiency, energy and water conservation, environmental integrity and accessibility.
 - o To establish processes for the enforcement of the standards and requirements.
- The Building Code is a regulation made under the Building Code Act, 1992 which sets out detailed administrative and technical requirements.
- The Act and Building Code are generally prospective in nature and primarily apply to new construction, renovations and additions to buildings.
- The Building Code is Ontario's largest regulation and the first edition was issued in 1975.
- New editions or major amendments of Ontario's Building Code are generally released every five years – to coincide with updates of the National Construction Codes published by the National Research Council of Canada.
- The current version of the Building Code was approved in November 2012 and came into effect January 1, 2014. It was amended in May 2019 to align with the 2015 National Construction Codes.
- The Building Code also references technical and supplementary standards that provide additional technical information to Building Code users and have legal effect.



National and Provincial Roles

- Establishing consistent rules for construction standards and building materials across Canada supports public safety, reduces inter-provincial barriers to trade and creates a broader market for manufactured goods across the country.
- While building regulation is constitutionally the responsibility of provinces and territories, the
 federal government plays an important role in funding building science research, testing and
 certifying materials and building products and in developing national construction codes to
 support cross-Canada standardization.
- Provinces and territories use the national construction codes as the basis for provincial and territorial regulatory regimes.
- There are significant differences across Canada in how national construction codes are implemented by provinces and territories, including differences in:
 - Degree of modification and customization
 - Timing of adoption
 - Method of adoption
 - Variation in geography of application province-wide or municipality -specific.
- Aside from Ontario, the other provinces that have a high degree of variation are Quebec and British Columbia.



Federal/Provincial/Municipal Roles

Federal

- The federal government conducts building-related research and coordinates the development of the model National Construction Codes. This role is played by the National Research Council of Canada.
- The development of the National Codes is done through a coordinated federal/provincial/territorial (F/P/T) code development process.
- F/P/T discussions are ongoing about increased harmonization across the country and the funding model for coordinated code development.

Provincial

- MMAH administers the Building Code Act, 1992 and the Building Code.
- MMAH has no authority for enforcement of building permits, construction inspections, or issuance of orders for compliance in municipalities.

Municipal

- Enforcement of the Act and the Building Code is assigned to local "principal authorities", which include municipalities, as well as conservation authorities and boards of health in the case of on-site sewage systems located in certain areas.
- Local enforcement responsibilities include reviewing building permit applications, issuing permits, and undertaking construction inspections.



Canada Wide Code Harmonization

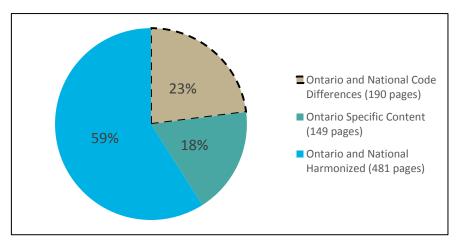
- The Canadian Free Trade Agreement (CFTA) entered into force on July 1st, 2017 with the objective of reducing and eliminating barriers to the free movement of persons, goods, services, and investments within Canada and to establish an open efficient, and stable domestic market.
- The cross-country harmonization of construction codes has been identified as a priority initiative by the Regulatory Reconciliation and Cooperation Table (RCT) under the CFTA.
 - Research conducted by Canadian plumbing component manufacturers estimates that fragmented building code and product certification requirements across Canada cost consumers of \$120-\$150 million per annum in the plumbing industry (Source: Canadian Institute of Plumbing and Heating).
- Federal/Provincial/Territorial (F/P/T) discussions are underway on the development of a Reconciliation Agreement under the CFTA which would set out milestones to achieve harmonized construction codes across Canada, focusing on.
 - 1. Reducing variation in technical requirements having the same rules across the country.
 - 2. Achieving consistent and timely adoption of codes bringing rules into force at the same time.
 - 3. Transforming the National Code Development System to meet provincial and territorial needs.
- A working group of provinces, territories and the federal government expect to deliver a consensus version of a Reconciliation Agreement to the Regulatory Reconciliation and Cooperation Table by November 30, 2019.



Current Ontario Building Code Variation

Ontario Building Code Technical Requirements

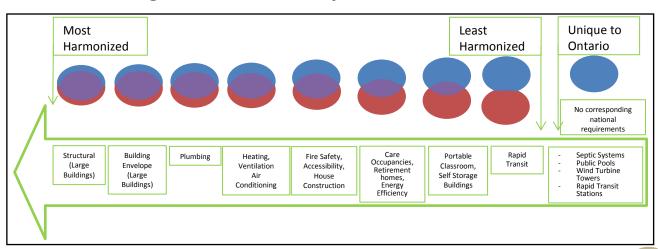
 As a rough measure, approximately 60% of the Building Code's technical requirements currently harmonize with technical requirements in the national codes.



Building Code Variation By Part

 Different parts of Ontario's Building Code are more closely harmonized than others.







Unique Aspects of Ontario's Building Code

- Reducing technical variation between construction codes will also help achieve MMAH's
 commitment to reducing burdens for Ontario builders, manufacturers, and material suppliers as
 part of the government's Red Tape Reduction initiatives.
- MMAH is undertaking analysis to consider how to address the issues below in the context of the proposed Reconciliation Agreement. Ontario's Building Code is expected to continue to differ from the codes implemented in other provinces and territories in a number of significant ways.
- 1. Ontario Leading Practices: In certain fields, such as accessibility and energy efficiency, Ontario has developed construction requirements which exceed the national requirements.
- 2. Scope Differences: Ontario has used the Building Code to regulate types of designated structures and unique areas of construction that are not generally regulated by other provinces through construction codes, for example on-site septic systems; wind turbine towers; pools and spas.
- **3. Code Architecture:** Ontario merges components of four separate National Codes (Building, Plumbing, Farm, and Energy) into the province's Building Code, resulting in a unique structure.
- **4. Regulatory Adoption Differences:** There is diversity across the country in terms of how codes are brought into force. Ontario is the only jurisdiction where the code itself is a cabinet regulation in its entirety.

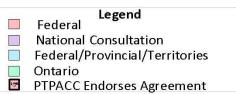


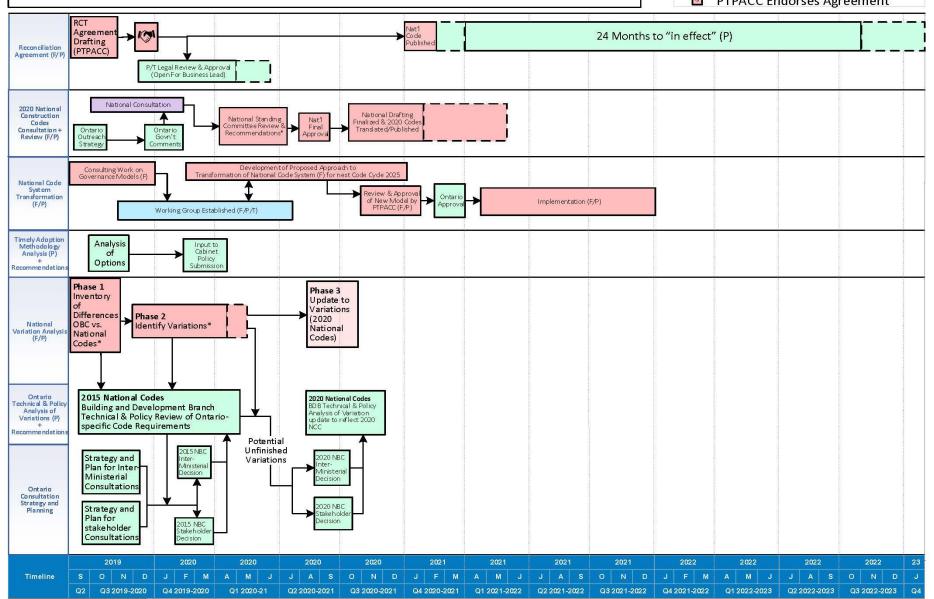
Work to Harmonize Ontario's Building Code

- On May 2, 2019, amendments to Ontario's Building Code were filed to increase alignment with the 2015 National Building and Plumbing Codes.
 - The majority of these amendments will come into effect on January 1, 2020.
- The ministry is currently involved in a working group that is expected to deliver the Reconciliation Agreement by November 30, 2019.
- Next steps include the development of a next edition of Ontario's Building Code following the anticipated release of the next cycle of National Construction Codes anticipated in **January 2021**.



Building Code Harmonization Work Plan & Milestones





Consultation on the National Construction Codes

- From October 22 to December 23, the National Research Council is conducting a public consultation on proposed changes to the National Construction Codes.
- This public consultation will shape the content of the anticipated 2020 national codes and subsequently Ontario's Building Code.
- Ontario code users are strongly encouraged to review and provide comments on the national proposals.
- The National Code consultation will include changes relating to:
 - Building Envelope (e.g., exterior insulation and finishing systems)
 - Fire Protection (e.g., fire alarm and detection systems, fire protection systems, safety glazing, protection near cooktops and ovens, encapsulated mass timber construction)
 - Structural Safety (e.g., climatic loads, dead loads, snow loads, solar collectors, importance categories)
 - Plumbing (e.g., drainage systems, potable and non-potable water systems, piping, water efficiency)
 - Housing and Small Buildings (e.g., insulated concrete forms, grab bars, ventilation)
 - Spatial Separation Between Houses
- In addition, the NRC plans to launch a subsequent consultation in January 2020 that will cover topics that were not covered in this consultation, including proposed changes related to farm buildings, accessibility, and energy efficiency.



Appendix A: Economic Contribution of the Building Sector

- The building sector in Canada generates over \$80 Billion in economic value annually, \$40B of which is generated in Ontario.
- Based on Statistics Canada data, in May 2019 alone, Ontario municipalities issued building permits for construction valued at \$3.8 billion
 - This comprised of approximately \$2.6B for residential building and \$1.2B for commercial/industrial/institutional buildings.
- Ontario's construction industry had a workforce of 467,300 and accounted for 5.4% of provincial GDP in 2014.
 - Canada's construction industry accounted for 7.5% of the federal GDP in 2014 (Statistics Canada).
- Over 16,000 individual building practitioners and organizations are registered by the Ministry as holders of Building Code Identification Numbers.
 - These registered practitioners include municipal building officials, building designers and design firms (excluding architects and professional engineers), and on-site sewage system installers.
- These figures do not include the economic contribution of manufacturers, retailers and installers of building components – for example plumbing fixtures, HVAC systems, insulation, or cross-laminated timber – who contribute to Ontario's economy.

Appendix B: National/Ontario's 5-Year Code Development Process

