

# **Building Faster, Smarter**

**Unlocking British Columbia's Prefabricated Housing Potential** 

Policy recommendations to support the growth of offsite construction in BC



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# **Letter From The Chair**

RER VALLE BOR

On behalf of the Fraser Valley Real Estate Board (FVREB), I am pleased to present this report on modular and prefabricated housing construction in British Columbia (BC).

FVREB represents more than 5,000 dedicated REALTORS®. Our mission is to enable their success by providing tools, education, and opportunities that enhance their expertise and ensure they deliver exceptional value to clients. As an association, we are committed to developing innovative services that prepare our members to meet the challenges of tomorrow.

Housing affordability and supply are urgent priorities across BC. Prefabricated and modular housing present a powerful opportunity to build faster, more sustainably, and at scale while maintaining the quality British Columbians expect. This report sets out the case for these approaches and offers practical recommendations for helping BC to unlock the full potential of prefabricated housing.

British Columbia can lead the way in delivering more affordable, sustainable housing for our communities. I invite you to explore this report's findings and consider how we can work together to build the homes our province needs.

Sincerely,

#### Tore Jacobsen

2025 Chair / FVREB





## **Letter From The CEO**

British Columbia is facing one of the most pressing housing affordability challenges in its history. Families across our province are struggling to find homes they can afford, while demand continues to far outpace supply. At FVREB, we believe prefabricated and modular construction represents one of the practical and innovative ways forward - one that can deliver more homes quickly, sustainably, and at prices within reach.

Prefabrication brings efficiency and precision to the building process. Homes can be manufactured in controlled environments, transported to site, and assembled in a fraction of the time, reducing costs and delays.

When combined with smart policy, streamlined permitting, and predictable demand, this approach has the potential to add significant new supply each year while maintaining the quality and safety that British Columbians expect.

This report lays out clear, actionable recommendations to help unlock the benefits of prefabricated housing in BC By working together, governments, industry, and communities can embrace this opportunity to accelerate housing delivery and make real progress on affordability.

FVREB is committed to advancing this vision, and I invite you to consider the findings here as a blueprint for building smarter and faster.

Sincerely,

#### **Baldev Gill**

Chief Executive Officer / FVREB



# **Executive Summary**

FVREB has prepared this report to identify policy solutions that will enable modular and prefabricated housing to play a central role in addressing British Columbia's housing affordability and supply crisis. While offsite construction methods offer proven benefits in terms of cost savings, construction speed, environmental performance, and worker safety, their adoption in BC is constrained by regulatory inconsistencies, market uncertainty, financing barriers, and limited workforce capacity. To overcome these challenges, FVREB recommends the following actions:

#1

#### Harmonize Municipal Zoning to Facilitate Prefabricated Housing:

The Province should work with municipalities to harmonize residential zoning requirements such as lot sizes, height limits, density, and parking rules so that prefabricated housing models can be replicated more efficiently across communities. Harmonization would eliminate costly redesigns, reduce approval delays, and allow prefabricated builders to scale efficiently province wide, creating a pathway to deliver more affordable homes across British Columbia.

#2

# Build a B.C. Procurement Roadmap for Prefabricated Housing:

The Province should publish a multi-year demand roadmap that forecasts unit procurement, typologies, and regional distribution for prefabricated housing. To unlock the benefits of prefabricated housing at scale, the industry needs predictable, portfolio-based demand rather than one-off projects. Governments are uniquely positioned to shoulder early risk and catalyze scale through public development on public land and investment in domestic manufacturing capacity.

#3

# Streamline Provincial Standards for Permits and Inspections:

A standardized provincial guide for building permits and inspections, developed in partnership with industry, should complement BC's existing housing design catalogue and updated building codes. Clear, consistent direction across municipalities would reduce reliance on local interpretation and ensure uniform adoption of modular construction methods.

#4

# Create a Prefab-Ready Lending Stream within CMHC's Apartment Construction Loan Program:

To strengthen financing for offsite construction, the federal government should adapt CMHC's Apartment Construction Loan Program (ACLP) by creating a dedicated "Prefab-Ready Lending Stream." By tailoring ACLP to the realities of prefabrication, the program can de-risk projects, encourage private investment, and help deliver affordable housing at scale.

#5

# Advance Federal Building Code Harmonization for Modular and Prefabricated Housing:

BC should advocate for stronger federal Building Code harmonization, ensuring that offsite-manufactured components produced in other provinces can be accepted without redundant inspections. Clearer alignment between federal codes and provincial implementation would accelerate adoption and reduce project delays.

#6

# Measure the Modular Advantage through a Provincial Data Initiative:

The Province should establish a centralized data collection program to measure cost savings, waste reduction, emissions impacts, permitting timelines, and long-term durability of modular housing. Enhanced evidence will build public trust, guide policymaking, and provide industry with insights into best practices and performance benchmarks.

#7

#### **Support First Nations Leadership in Prefabricated Housing:**

The Province should establish dedicated First Nations' procurement streams, support Indigenous-led modular production facilities, and encourage joint ventures with manufacturers. Leveraging First Nations' land stewardship, timber resources, and financial capacity can expand housing supply while advancing reconciliation and local economic development.

#8

# Increase Provincial Funding to TradeUpBC for Modular Construction Training:

Expanding tuition-free or subsidized modular construction programs through TradeUpBC and post-secondary partners will prepare the next generation of skilled workers. By adopting a model similar to Florida's TRAMCON program, BC can upskill tradespeople and ensure the workforce is ready for large-scale adoption of offsite construction.

#9

# Engage Financial Institutions and Insurers to Improve Market Confidence:

Governments should collaborate with real estate, finance, and insurance stakeholders to develop training for appraisers, underwriters, and lenders on the valuation and insurability of modular homes. Public education campaigns should also promote prefabricated housing as a safe, high-quality, and mainstream housing option, drawing on international models such as Sweden and Germany.

# **Prefabricated Housing in Canada**

As Canadian cities continue to grapple with limited housing supply and skyrocketing prices, a gap has emerged in the availability of responsive and flexible policy to support the country's growing population. Even more, stagnant construction rates and ongoing supply chain issues continue to plague Canada's housing landscape, providing little relief in the form of affordable housing for renters and homeowners alike.

Recently, technology and automation have been leveraged to bring forward a way of building homes that is more unconventional than typical onsite construction. Prefabricated and modular homes have become increasingly popular as options for the development of buildings that are high-quality and boast other benefits like energy efficiency and cost-effectiveness.

Though improvements in technology have increased the visibility and reach of prefabricated and modular housing, the use of alternative home building methods is not a new idea. After the Second World War, thousands of veterans returned to Canada, expecting to be able to find a place to raise their families. Faced with an unprecedented number of potential homebuyers, the Federal government released a catalogued of preapproved home designs, "Victory Housing", which made up city suburbs across the country.

With prefabricated walls and roofs, the government was able to build 30,000 homes under the Wartime Housing Corporation, which later became the Canadian Mortgage and Housing Corporation (CMHC) in 1947. At the time, the first Victory Homes sold for \$4,500 each in 1948, an amount that was considered affordable and accessible for young veterans and defense-industry workers. Today, the average home price in BC sits at just over \$950,000, a figure that is increasingly out of reach for individuals and families trying to enter the housing market.

Moreover, in the current political landscape, issues impacting supply chains are increasing prices of key construction commodities and disruptions are being felt among skilled labourers, developers and manufacturers. In fact, prefabricated buildings, frames, doors and windows are subject to Canada's 25 percent retaliatory tariffs, demonstrating the economic uncertainty currently being faced by the offsite construction industry.

While these uncertain conditions have the potential to impact the delivery of affordable housing, Canada must develop its own solutions. As a country that derives the significant benefit from forest product trade in the world, Canada has no shortage of materials to support mass timber construction, a key component in offsite building methods.

National construction employment continues to increase, suggesting that current efforts to train and retain skilled workers are succeeding. With the country moving in the right direction, builders have also done their part to prove that they can meet and even exceed government housing directives. The Rapid Housing Initiative (RHI), launched in 2020 to address the urgent housing needs of vulnerable Canadians, began with a \$1 billion investment to support the construction of 3000 new affordable housing units. The program quickly exceeded its target, resulting in the creation of over 4700 units, many of which used modular construction, in its first year.

Governments at all levels have taken steps to address the ongoing challenges of affordability and administrative red tape that delay or prevent the construction of much-needed homes, some of which echo previous policy approaches used to build these wartime communities.

Prime Minister Mark Carney ran on a platform that brought forward policies to build affordable starter homes to reach the Government's goal of building 500,000 homes per year.

To advance this objective, the federal government dedicated \$25 billion to introduce a new entity called "Build Canada Homes" (BCH) which will re-establish direct government involvement in large-scale new housing construction. This entity, separate from CMHC, will act as a developer to build affordable housing at scale, including on public lands.

In BC, mayors from Burnaby, Prince George, Penticton, Nanaimo and Williams Lake have joined together to form a Mayors Task Force on modular housing. The task force represents municipalities and advocates for standardized provincial policies on modular and prefabricated housing to ensure alignment between municipal and provincial regulatory frameworks, creating a consistent environment in which this emerging technology can thrive.

If adopted at scale, prefabricated construction can reduce per-unit costs through repeatable designs and factory efficiencies, creating a pathway to deliver more affordable homes across British Columbia. This report aims to contribute to the ongoing discussion on strategies that BC can implement to address the significant challenges facing the construction and housing industry. The recommendations focus on broad policy changes designed to meet the growing needs of communities across Canada in ways that are both cost-effective and sustainable.

The findings and recommendations in this report are grounded in a comprehensive research process that combined primary and secondary sources. The authors conducted interviews with industry experts, academics, consultants, and executives from prefabricated construction companies to capture firsthand perspectives on the opportunities and barriers facing offsite construction in British Columbia. These insights were complemented by jurisdictional scans of Canadian provinces and international markets, which allowed for comparative analysis of policy approaches, regulatory frameworks, and procurement models. In addition, the team reviewed primary source materials, including government legislation, building codes, regulatory guidance, and program documents, to ensure accuracy and relevance. By integrating expert interviews, jurisdictional analysis, and primary source review, this report reflects both the lived experience of practitioners and the structural reforms required to unlock the potential of prefabricated housing in BC.

Photo: Courtesy of Intelligent City



Photo: Courtesy of Intelligent City



# **Terminology**

#### Modular vs. Prefabricated Homes

While the terms "modular" and "prefabricated" are often used interchangeably by those outside of these industries, the concepts and types of construction remain distinct.

#### **Types of Prefabricated Construction**

#### **Panelized Construction**

Panelized systems involve the offsite manufacturing of wall, floor, or roof panels, typically using light wood framing. These can range from open-wall formats that require additional trades onsite, to more advanced closed-wall panels that incorporate plumbing, wiring, and insulation before delivery. Once transported, the panels are assembled on-site to form the structure, reducing construction timelines while maintaining design flexibility.

#### **Platformized Panel Systems**

A growing set of product platforms sits between basic open-wall panels and full volumetric boxes: closed-wall, highly integrated panels (structure + envelope + services routing) produced with advanced/ robotic manufacturing and paired with parametric design tools. These systems are optimized for midrise (roughly 6-12+ storeys) and aim to repeat standardized assemblies across a portfolio to drive cost down and quality up.

#### **Volumetric Modular Construction**

Volumetric construction refers to the production of fully enclosed, six-sided modules that are fabricated in factories to near-completion, including finishes and internal systems. These modules are then transported and assembled onsite, much like stacking building blocks. Because each unit arrives nearly finished, volumetric construction can significantly reduce onsite labour, shorten build times, and improve quality control.







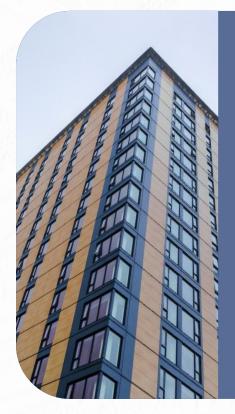
#### Mass Timber Prefabrication

Mass timber construction uses engineered wood products, such as cross-laminated timber, in panelized or modular structural systems. This method supports both single-family homes and larger, multiunit developments, offering a renewable, low-carbon alternative to traditional materials. Research by the University of New Brunswick, building on the United Kingdom's classification system, has identified mass timber as part of a broader framework of prefabricated methods that together expand the potential of industrialized housing.

#### **Expanded Classifications**

The University of New Brunswick has adapted the U.K.'s definitional framework to identify seven categories of prefabricated construction, which include variations of panelized, volumetric, hybrid, and mass timber systems. While this report focuses on the four dominant approaches shaping BC's housing market, the broader classification highlights the diversity of technologies and innovations currently underway in offsite construction.





#### Case Study: Prefabricated Construction: Brock Commons Tallwood House

The Brock Commons Tallwood House is an 18-storey wood hybrid residence building at the University of British Columbia. It was constructed using mass timber prefabrication, which was manufactured offsite and then assembled onsite. This approach showcased how prefabricated panels can serve as structural, load-bearing components while reducing the construction time. Engineered wood is lighter than other construction materials, allowing this project to be completed less than 70 days after the components arrived on site, providing time savings of four months for similar construction projects of this size.

It provides housing for over 400 students in various floorplans. The greenhouse gas (GHG) emission savings from the use of mass timber in Brock Commons are estimated to be equivalent to removing 511 cars off the road for an entire year.

# The Benefits and Challenges of **Modular and Prefabricated Housing**

Prefabrication's economics hinge on stable, repeatable demand. Without it, factories struggle to justify capital expenditure and maintain high utilization, keeping unit costs flat. In Canada, the most promising path to scale is coordinated public demand paired with fit-for-factory financing that releases funds on production milestones, not only on-site progress. Through government interventions and the creation of demand for modular and prefabricated construction, industry can respond appropriately and assess the potential challenges of bringing these structures to the market with greater confidence.

#### **Benefits**

#### **Environmental** and Sustainability Improvements

Building in a factory can reduce greenhouse gas emissions from on-site construction by up to 43 percent. The Manufactured Housing Association of BC estimates that factory-built modular construction can reduce construction waste by 50-70 percent compared to traditional building methods, due to the ability to reuse materials and keep productions environments controlled. Beyond minimizing construction waste, modular design often offers environmentally friendly materials and energy-efficient upgrades, as many innovators in this space are rethinking the entire construction process to prioritize sustainability.

#### **Speed of Construction**

Modular and prefabricated construction offer significant time savings compared to traditional building methods. The Real Estate Institute of Canada (REIC) estimates that Canada currently adds approximately 200,000 new homes to the market each year. With the federal government's goal of achieving completing 500,000 homes per year over the next decade, modular and prefabricated construction can help bridge the gap between supply and demand. According to the REIC, a single modular factory can produce 1000 to 2000 homes annually. If 20 factories across the country operated at this pace, modular construction could increase the national housing supply by 10 to 15 percent per year.



**Beyond minimizing** construction waste, modular design often offers environmentally friendly materials and energyefficient upgrades, as many innovators in this space are rethinking the entire construction process to prioritize sustainability.

20%

Or more savings per project

Source: McKinsey & Company, 2023

#### **Cost Savings**

As prefabricated construction become more common, analysis shows that related cost savings can be upwards of 20 percent or more per project. As companies adopt new, lightweight materials and digital technologies, improvements in manufacturing and delivery of components or units will result in additional cost savings that will be passed on to homeowners and renters.

#### **Increased Safety for Construction Workers**

Construction is a high-risk industry, but modular and prefabricated construction can significantly reduce onsite hazards. With 60 to 90 percent of construction occurring in regulated factory settings, many risks are minimized because work is carried out on level ground under controlled health and safety conditions. Where concerns remain, they relate to noise exposure for factory workers. A recent study by researchers at the University of Concordia developed a probability and simulation-based framework to predict noise levels in modular construction factories. Mapping and managing noise exposure is a key consideration of companies that are aiming to improve worker safety and comply with workplace safety guidelines, while also maintaining efficient operational practices.



#### Case Study:

Intelligent City Project - 1766 Frances Street, Vancouver — 9-Storey Mass Timber

A nine-storey Indigenous social-housing project in East Vancouver delivering ~81–84 homes, daycare and community spaces. The building combines mass timber floors with a factory-made Passive House façade (122 prefabricated panels installed), featuring a basket-weave exterior inspired by Indigenous design.

Panels were robotically manufactured at Intelligent City's Delta facility, integrating design and production to shorten cycles and improve QA before shipment to site.

The project demonstrates how mid-rise prefabrication can deliver culturally appropriate, high-performance housing within existing approvals pathways in Vancouver, offering a replicable model for social and attainable housing portfolios province-wide.



# The Benefits and Challenges of **Modular and Prefabricated Housing**

#### Challenges

#### Financing and Cash Flow Constraints

One of the most pressing challenges for prefabricated housing in BC is the mismatch between current financial tools and the realities of offsite construction. Traditional construction financing is structured around progress payments tied to milestones such as materials arriving on-site or visible components being completed. In contrast, prefabricated housing requires significant upfront investment in factories, production, and logistics before components are ever delivered. This creates a financing gap, as banks and lenders lack established instruments to provide bridge financing for offsite production. While some second-tier lenders fill this space, their higher interest rates increase project costs and reduce financial viability. Without widespread adoption of tailored financial instruments, developers face unstable cash flow and heightened risk when pursuing prefabricated projects.

Uncertain and Insufficient Demand

For offsite construction to succeed, manufacturers require a predictable pipeline of demand to justify the high fixed costs of factory operations. In BC, procurement policies and government programs have been piecemeal, often limited to small-scale pilots or one-off funding allocations. Without a clear roadmap that signals where and what types of units will be required over a multi-year horizon, manufacturers cannot invest confidently in production capacity. This uncertainty discourages large-scale private investment and makes it difficult for the sector to grow beyond niche or custom projects. The federal government's \$1.4-billion loan to fund the first two phases of the Senákw First Nations 6.000-unit rental development which includes modular home construction techniques is a great example of government creating the necessary demand to help the industry develop and scale.

For offsite construction to succeed, manufacturers require a predictable pipeline of demand to justify the high fixed costs of factory operations.



#### Municipal Approvals and Regulatory Barriers

Even when demand exists, municipal permitting processes and local regulatory frameworks create major bottlenecks. Each municipality applies its own zoning, permitting, and design review standards, meaning that prefabricated housing companies must navigate a patchwork of rules that make standardization nearly impossible. This drives up costs, as projects often become "custom builds" tailored to each jurisdiction rather than repeatable models. Municipal review panels and architects also impose aesthetic and design requirements that restrict the ability to replicate modular units across multiple projects. A more coordinated, digitized, and standardized approach to permitting could unlock efficiencies and allow offsite construction to scale more effectively.

#### **Transportation of Components**

Transporting and storing prefabricated components presents logistical challenges. A real concern for manufacturers is effective moisture management, particularly with modular housing, where units are built to a high level of finish before delivery. Additionally, the greater the distance between the manufacturing plant and the site, the higher the risk of damage during transport. Exposure to weather can require costly remediation, making protection strategies a key part of the research, design and planning stages for prefabricated and modular construction.

Modules and prefabricated components can be large and heavy, which can increase transportation costs, especially for remote communities located far from manufacturing sites. Poor road conditions and narrow or seasonally inaccessible roadways can exacerbate transportation challenges, increasing the early planning requirements for modular and prefabricated construction.

#### **Supply Chain Concerns**

To scale modular and prefabricated construction and propel this technology into mainstream development, demand for materials such as lumber and cross-laminated timber will increase. Companies will depend on sufficient resources, factory space and a well-trained workforce to maintain production momentum. While Canada has the material resources to support new home construction through modular and prefabricated methods, ensuring smooth supply chains to prevent bottlenecks during production, transportation or installation will remain challenging. Additionally, because factories, materials and skilled labour may be located far from the communities where construction occurs, governments should consider additional consultations with Northern and remote communities to ensure that modular construction aligns with local housing and community goals.



# Recommendations



Photo: Courtesy of Intelligent City



# **#1 Harmonize Municipal Zoning to Facilitate Prefabricated Housing**

British Columbia comprises 161 municipalities, each empowered under the Local Government Act to adopt and enforce its own zoning bylaws. These bylaws typically divide residential uses into multiple categories such as single-family, duplex, townhouse, and multi-family apartment zones, with definitions and standards that vary substantially from jurisdiction to jurisdiction.

A central challenge facing the prefabricated housing industry is the significant variability that exists across municipal zoning bylaws. Prefabricated construction relies on repeatable designs and modular production efficiencies. If prefabricated housing is able to scale across multiple communities under consistent rules, those efficiencies can translate directly into lower per-unit costs, making homes more affordable for buyers and renters. However, when every municipality imposes different rules regarding size, height, parking, and siting of accessory dwelling units (ADUs) and infill housing, it forces builders to redesign their product line multiple times. This reduces economies of scale, increases costs for consumers, and undermines the province's efforts to accelerate affordable housing delivery.

Looking specifically at municipalities in the Fraser Valley, the City of Chilliwack and the City of Mission provide a good example of some of the challenges that exist (see Table 1). In Chilliwack, infill is encouraged on lots as small as 300 m<sup>2</sup> in its R1-C zone, but minimum building widths of 6.0 m restrict narrower prefabricated modules that could otherwise provide affordable options on tight lots. Height allowances for detached residential forms reach 6.5 m in some zones, which is more compatible with stacked modular housing, but the city's parking requirements scale up quickly for two- and three-bedroom units, consuming valuable lot space and complicating standardized site plans.

In Mission, minimum lot areas are generally larger which reduces the number of infill opportunities compared with Chilliwack. Mission also imposes a six-metre separation requirement between principal dwellings and accessory units, along with height limits of 6.0 m for smaller forms and 9.5 m for single-detached housing. For prefabricated construction, these variations mean that a home designed to fit within Chilliwack's envelope may need to be shrunk or reconfigured to be permitted in Mission.

161

Local governments in BC

Source: Government of BC



#### **Residential Height Allowances**

Chilliwack Min. Lot Area 500m<sup>2</sup>

Mission Min. Lot Area 930m<sup>2</sup>





For multi-unit housing, divergence is just as stark. In some Chilliwack residential zones, townhouses and rowhouses are permitted with density standards tailored to small-lot infill. In Mission, however, equivalent multi-unit forms face different maximum floor area ratios, setbacks, and open space requirements. The result is that a modular fourplex or townhouse row that can be efficiently repeated in one municipality must be redesigned from scratch in another even when serving the same urban growth and affordability objectives.

These kinds of divergences in zoning requirements create inefficiencies that ripple through the industry. For prefabricated builders, it means developing multiple designs or having to custom essentially the same home to satisfy different municipal codes, raising production and compliance costs. For consumers, it means reduced availability of housing choices and higher prices.

The Province should address this inconsistency by encouraging municipalities to harmonize their zoning and permitting provisions for prefabricated housing. At its core, this reform gives builders more predictability and more opportunities to market their units across municipalities across the province. Harmonization should explicitly enable repeatable mid-rise typologies (e.g., standardized floor-to-floor heights and envelopes) so manufacturers can deploy the same product platform across multiple municipalities with minimal redesign.

Regulation	City of Chilliwack	City of Mission	Impact on Prefabricated Builders
Minimum Lot Size (Urban Residential)	R1-C (Urban Infill): 300 m²	UC372: 372 m²; R465: 465 m²	Prefab narrow lot homes are feas ble in Chilliwack but more difficu in many Mission areas
Minimum Building Width	6.0 m required in several residential zones	Not uniformly required across all zones	Narrow prefab modules are les: viable in Chilliwack, but more acceptable in Mission
Height Allowances	Detached forms up to 6.5 m in several zones	Single-detached max 9.5 m; smaller infill max 6.0 m	Stacked prefab modules are moi viable in Chilliwack; Mission cap limit flexibility
Parking Requirements	Higher parking ratios for multi-bedroom units	Generally, one per dwelling unit	Complicates repeatable site designs, especially for multi-uni prefabs
Multi-Unit Housing Rules	Specific townhouse/rowhouse density allowances in infill zones	Varying setback, and separation rules between designations	Modular townhomes or fourplex must be redesigned municipalit by municipality

## **Recommendation:**

The Province should work with municipalities to encourage greater harmonization of zoning for residential development including lot sizes, height limits, density, and parking requirements so that prefabricated designs can be deployed consistently across communities. By harmonizing core standards for both single-detached and multi-unit forms, prefabricated builders could replicate efficient housing models province-wide, reducing per-unit costs, shortening construction timelines, and delivering much-needed housing supply more predictably and more affordably.



# #2 Build a B.C. Procurement Roadmap for Prefabricated Housing

One of the most significant barriers to scaling prefabricated housing in British Columbia is the absence of predictable, long-term demand. Offsite manufacturing requires major upfront capital investments in facilities, automation, and skilled labour. Without a steady pipeline of projects, manufacturers are left producing one-off, custom solutions that cannot deliver the economies of scale necessary to reduce costs. Developers also tend to approach modular housing as individual projects rather than portfolios, which limits the repeatability and standardization needed for industrialized construction.

To address these challenges, British Columbia should create a Prefabricated Housing Procurement Roadmap that sets out a multi-year forecast of housing needs across the province, specifying unit counts, building typologies, and regional distribution. This roadmap could aggregate demand across ministries, Crown agencies, municipalities, and housing partners, sending a clear signal to manufacturers that predictable volumes of work will be available. Moreover, the Roadmap would encourage developers to think in terms of portfolios of midrise projects, ranging from six to eighteen storeys, rather than treating each building as a standalone custom project.

One of the most significant barriers to scaling prefabricated housing in **British Columbia is the** absence of predictable, long-term demand.



In designing the procurement process, the Province should incorporate platform-based product categories, for example, standardized panelized or mass timber mid-rise systems, that can be repeated across sites. Batching procurement by product platform will allow manufacturers to plan production runs more efficiently, lowering the cost of goods sold and improving quality control.

Payment terms should also be restructured to reflect the realities of factory-built housing. Instead of tying financing milestones exclusively to visible site progress, draws should be released at key stages in the offsite production cycle, such as panel fabrication, quality assurance, and shipment. Aligning procurement and financing to these milestones would give manufacturers the working capital they need to operate at scale.

Examples from other jurisdictions demonstrate the effectiveness of this approach. In the United Kingdom, the Platform Design for Manufacture and Assembly initiative coordinated demand across government departments, published a national roadmap, and defined standardized reference modules. This structure provided manufacturers with the certainty to invest in new facilities and equipment, resulting in cost savings, faster delivery, and greater project repeatability. A similar roadmap in British Columbia would give the domestic industry the confidence to expand capacity, attract private investment, and move prefabricated housing from niche pilot projects into a mainstream solution.

#### Case Study:

The United Kingdom's Platform Procurement Model

The United Kingdom's Construction Innovation Hub and its Platform Design for Manufacture and Assembly initiative illustrate the benefits of a coordinated procurement strategy. By publishing a national roadmap, defining standardized reference modules, and coordinating demand across multiple government departments, the UK created the certainty required for manufacturers to invest in facilities and scale production. Evaluations of the program have shown reductions in procurement friction, improvements in project repeatability, and measurable cost savings. A similar approach in British Columbia, administered through the Office of Mass Timber Implementation or a new Office of Off-Site Housing, would provide industry with the longterm predictability necessary to transform prefabricated housing into a mainstream component of the province's housing strategy.

# **Recommendation:**

The Province should publish a multi-year procurement roadmap that establishes clear demand forecasts for prefabricated housing, including unit counts, typologies, and regional distribution. This roadmap should incorporate batch procurement, pre-qualification of manufacturers, and financing mechanisms tied to factory production milestones to give industry the certainty required to invest and scale.



# #3 Streamlining Provincial Standards for Permits and Inspections

BC has been an early leader on prefabricated construction. Modular BC, a leading non-profit in the industry, has estimated that factory-made housing accounts for approximately 4.5 percent of new homes being built in the province annually. Their goal is to increase modular and prefabricated builds to 25 percent in the next five years through stakeholder engagement and training.

In 2023, BC identified prefabrication as a key consideration in cutting down construction time and onsite labour needs as part of the province's Homes for People action plan. In 2024, BC's Ministry of Housing and Municipal Affairs brought forward the BC Building Code Adaptable Dwelling Unit Illustrative Design Guide. This provincial document provides guidance and suggestions for maintaining alignment with National Building Code and provincial requirements for those designing accessible and adaptable spaces.

Similarly, BC's Bill 44, the Housing Statutes (Residential Development) Amendment Act, 2023 offered regulations and requirements for municipalities to update zoning bylaws to override historic zoning exclusions and require local governments to allow multiple units to be built on land traditionally zoned for single-family homes. These regulations, legislation and guidance documents signal to municipalities the need to adapt local policies to support provincial housing objectives. The province now has the opportunity to collaborate with industry stakeholders in the modular and prefabricated housing sector to establish a standardized provincial quide, providing municipalities and stakeholders with clear, consistent direction and facilitating the efficient use of offsite construction.

While BC has updated building codes to allow for the use of mass timber in taller buildings and has introduced seven standardized housing designs (with three alternate configurations) that can be used by builders, designers and homeowners, further expanding these well-researched plans specifically for modular and prefabricated construction would provide stronger incentives for industry groups to scale factory-built housing in the province. When builders and municipalities are left to interpret existing rules like those outlined above on a case-by-case basis, the benefits of modular and prefabricated construction will remain limited.

4.5%

Amount of factory made housing in BC annually.

Source: Modular BC



The Modular Housing Association of BC has taken significant steps in providing a consistent approach for the permitting, construction and inspection of manufactured homes through its Modular Building Permitting Guide. Throughout the guide, references are made to "Authority Having Jurisdictions" (AHJs), the governmental bodies responsible for enforcing aspects of the BC Building Code and advises users to consult AHI bylaws for compliance with energy efficiency, permitting and environmental protection requirements. This reliance on local discretion, as highlighted in the guide, demonstrates the need for standardized provincial guidance to ensure that the government policies support industry efforts and facilitate uniform compliance in the construction of modular or prefabricated structures across BC.

Design and permitting process for prefabricated housing must shift from the current linear approach, where design, approvals, and construction occur sequentially, to a more integrated model that reflects how factory-built housing is actually produced. Without clear province-wide rules, companies face duplicative inspections and inconsistent interpretations that erode efficiency. A standardized provincial permitting and inspection guide should therefore clarify what evidence of compliance (e.g., CSA A277 or Z250 certification) is sufficient to satisfy municipal regulators, and what aspects require local review on-site. By reducing duplicative checks and codifying factory acceptance, BC can shorten timelines and create the predictability that offsite manufacturers need to scale.



#### Case Study: State of Victoria, Australia

Australia has been a leader in regulating offsite construction at the state level. The State of Victoria has created an Offsite Construction Guide which can be used by Victorian Government project teams, as well as stakeholders in the architecture. engineering, construction and operations industry. The guide aims to encourage the uptake of offsite construction on state projects from the perspectives of government and industry experts, providing advice that is consistent with best practices coming from these groups. This guidance is meant to help the construction sector grow and capitalize on new construction methods and make informed decisions that will streamline future projects.

# Recommendation:

The province should develop a comprehensive, standardized building permit and inspection guide in partnership with industry stakeholders that can be used as a complement to BC's standard modular housing designs and updated building codes. This guide must explicitly recognize factory certifications as sufficient for many compliance requirements, clarify what municipalities are expected to verify locally, and establish province-wide rules to prevent duplicative inspections. By creating consistent direction across BC, the Province will reduce permitting friction, shorten timelines, and provide the regulatory certainty needed for prefabricated construction to thrive.



# #4 Create a Prefab-Ready Lending Stream within CMHC's Apartment **Construction Loan Program**

One of the most effective ways to catalyze prefabricated housing in British Columbia is through financing tools that reflect the realities of offsite construction. CMHC's Apartment Construction Loan Program (ACLP) has already proven to be a central instrument in supporting new rental supply, with more than \$20 billion committed to fund over 53,000 homes nationwide. Budget 2024 earmarked an additional \$500 million in low-interest financing specifically for projects using modular and prefabricated methods. Building on this federal investment, CMHC should establish a dedicated Prefab-Ready Lending Stream within ACLP that explicitly prioritizes modular and prefabricated housing projects.

This stream should adapt underwriting criteria to factory-built housing by aligning financing draws with the offsite production cycle rather than exclusively with on-site construction milestones. Prefabricated projects should also receive additional scoring recognition within ACLP for affordability, energy efficiency, and sustainability—factors that are already part of the program's evaluation framework. Integration with CMHC's MLI Select insurance product would further enhance this approach, lowering premiums and extending amortizations for developers who commit to affordability and high-performance building standards.

Early evidence shows the potential of this model. The first CMHC-insured modular apartment loan, provided to the Fuze Lucan project in Ontario, demonstrated how adapting financing and insurance structures can unlock delivery of factorybuilt rental housing that would otherwise struggle to secure conventional financing. A dedicated lending stream for prefabricated projects in BC would de-risk early investments, attract private capital, and create the financial stability needed for manufacturers to expand capacity and deliver affordable housing at scale.



## **Recommendation:**

The Province should work with the federal government and CMHC to create a dedicated Prefab-Ready Lending Stream within ACLP that ties financing milestones to factory production, integrates MLI Select insurance incentives, and explicitly recognizes prefabricated construction in its scoring. By tailoring ACLP to the realities of offsite housing, CMHC can accelerate the adoption of modular and prefabricated methods and help ensure that financing is no longer a barrier to delivering affordable homes quickly and efficiently.

# **#5 Measuring the Modular Advantage:** A Provincial Data Initiative

Evidence of success of offsite construction methods is an essential part of encouraging its adoption across BC. Key questions remain regarding the viability of modular and prefabricated construction for homes and other structures. For industry, these include transparency around municipal permitting timelines and the logistics of transporting modular or prefabricated units to remote communities. For governments and end users, priorities include assessing cost savings, reductions in construction waste and GHG emissions and the long-term performance durability of homes built using offsite construction techniques.

Data analytics allow for greater predictability for project investment, especially in the construction industry. Canadian data to support the country's growing interest in offsite construction should be a priority of the federal government, but provinces have a role to play in gathering evidence of the merits and limitations of modular and prefabricated construction. BC currently collects data through the Provincial Data Plan as well as the Local Government Offsite Housing Accelerator. Additionally, the BC Construction Association maintains a robust library of construction industry statistics. While these avenues provide an overall picture of emerging trends in government areas of interest, a central data repository is essential to maintaining data that will encourage offsite housing construction and public trust.

Scius Advisory, a consulting firm based out of Vancouver, BC, has made significant strides in leveraging prefabrication data to support industry stakeholders across Canada. In 2025, they published the first study that identified companies who are actively engaged in prefabricating components for buildings nationwide. The report provides an overview of every company, what they produce, their approximate revenues and number of employees, with a goal of tracking the sector's evolution and maintaining a comprehensive dataset for policymakers, stakeholders and industry members. Scius Advisory has also developed an interactive Prefab Construction Navigator, allowing companies to voluntarily submit data about their activities.

This market directory is a valuable tool to gain insights into material use for prefabricated construction and company characteristics that are important for government regulators. The tool identifies segments of the market to watch, including productivity, speed, cost and safety – areas for which aggregated data is currently lacking. This gap highlights an opportunity for the provincial government to implement a standardized data-collection initiative to quantify the benefits of offsite construction across BC, complementing and supporting the innovative work that is already being done by industry-partners.



## **Recommendation:**

To build on existing data collection mechanisms, the province should work to collect more evidence through academic and industry partnerships to better understand best practices for modular and prefabricated construction, providing clearer insight into provincial construction landscapes and trends.

# #6 Advance Federal Building Code Harmonization for Modular and **Prefabricated Housing**

The federal government has introduced standardized building models for modular and prefabricated structures through a new entity, Build Canada Homes (BCH), which is tasked with building affordable housing and improving construction productivity. BCH is structured to meet the needs of Canada's working population, students, seniors and individuals living on fixed incomes, for whom affordable housing remains out of reach. One of the main objectives includes accelerating the adoption of modern methods of construction by promoting standardized designs and offsite manufacturing. This approach enables faster assembly while prioritizing Canadian-made materials and manufacturing, creating new jobs and strengthening the national housing market.

This federal effort represents a significant step forward, but challenges remain at the provincial level, particularly around the standardization of building codes for offsite construction. Authority Having Jurisdictions (AHJs) are responsible for overseeing all aspects of regulation related to offsite construction. When AHIs, such as municipalities, apply their own rules for site selection and permitting for modular and prefabricated construction, speed, cost-efficiency and scalability are diminished by regulatory inconsistency and project delays.

Canada has standards in place that support this construction. CSA A277, a standard outlined in the National Building Code, helps ensure that factory-built modules and buildings "meet the requirements of applicable building codes and deliver a consistent level of manufacturing, quality, safety and durability" (CSA Group). Another standard, CSA Z250, outlines the process for completing modular buildings constructed offsite in factories. Similarly, it establishes procedures for design, quality control and logistics, including transportation and assembly, helping to ensure consistency and reliability across projects.





In BC, CSA A277 (the national standard for the factory construction of modular buildings) is recognized, but not required. CSA A277 is a procedural standard and not a binding code, meaning that municipalities in BC can decide whether to rely on it. Homes constructed under CSA A277 undergo review and inspection by an independent certification agency to verify compliance with the National Building Code.

However, per the British Columbia Building Code, 2024, final approval rests with the accepting authorities, such as AHJs, meaning that local discretion ultimately determines whether a modular or prefabricated unit is accepted without additional inspections or approvals. In practice, this creates duplicative reviews and uncertainty for manufacturers.

Enhancing municipal-level education about CSA A277 and CSA Z250 would help reduce confusion and delays, while provincial advocacy at the federal level should press for clearer mutual acceptance of certified offsite components without redundant local re-inspections. Alberta's more integrated adoption of CSA A277 offers a model for BC to follow.

#### Case Study: Alberta

In 2023, CSA Group conducted a study interviewing stakeholders and conducting jurisdictional research about barriers posed by current building codes on modular construction. The study highlighted that Alberta adopts the National Building Code (NBC) with some provincial modifications, including a more 'pervasive and concrete" integration of CSA A277 in the National Building Code – Alberta Edition (NBC(AE)) compared to the standard NBC. While both Alberta and BC require accreditation for offsite modular products, Alberta's NBC(AE) specifies that products that meet CSA A277 standards do not undergo inspections by AHJs in Alberta. This Code provision is applicable to all sizes and types of buildings.

# **Recommendation:**

To promote the consistent adoption of modular and prefabricated construction across Canada, BC should address existing barriers in building code harmonization affecting municipal approvals for offsite construction. The Province should request federal guidance that promotes mutual acceptance of CSA-certified offsite components. while clarifying to municipalities that third-party factory certification is sufficient for many compliance requirements. This would reduce duplicative inspections, shorten approval timelines, and create the regulatory certainty required for prefabrication to scale.



# **#7 Empower First Nations Leaders** in Prefabricated Housing

First Nations in British Columbia are uniquely positioned to lead the growth of prefabricated and modular housing. Their governance structures, land stewardship, and capacity to mobilize both timber resources and capital give them a strong foundation to drive this sector forward.

A central advantage lies in access to timber and wood products. Many First Nations hold stewardship and ownership of forest resources. which positions them to integrate locally sourced. sustainable materials into modular housing production. This not only shortens supply chains and reduces costs but also strengthens British Columbia's leadership in wood-based, lowcarbon construction.

Financial capacity is another key strength. First Nations increasingly generate and manage capital through land development, revenuesharing agreements, and partnerships with government and industry. These resources can be strategically reinvested in modular housing initiatives, whether through direct equity stakes in manufacturers, collaborative procurement agreements, or the establishment of Indigenousled modular production facilities. This financial capacity allows First Nations to participate not just as beneficiaries of prefabricated housing but as leaders in the sector.

Collaborative leadership is already evident in initiatives such as BC Builds, where First Nations work alongside governments, municipalities, and non-profit housing providers to identify land and accelerate development. By extending this model. First Nations can anchor the predictable, largescale demand that prefabricated construction requires, while ensuring projects align with cultural and community priorities.

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#### Case Study: **New Zealand**

A comparable model exists in New Zealand, where Māori organizations have partnered with government and private industry to advance modular housing as part of a broader housing and economic development strategy. Māori-led developments have combined land assets, financial resources, and cultural priorities to deliver modular housing at scale, reducing costs and construction timelines while building industry capacity. This demonstrates how Indigenous leadership, when paired with supportive government frameworks, can transform the housing landscape.

### **Recommendation:**

The Province should empower First Nations as leaders in prefabricated housing by exploring dedicated procurement streams, supporting joint ventures with manufacturers, and encouraging investment in Indigenous-led modular production facilities. This will expand housing supply, reinforce BC's wood-based economy, and build a globally competitive domestic prefab sector.

# #8 Increase Provincial Funding to TradeUpBC for Modular Construction Training

Meeting future needs using offsite construction methods requires efforts to train and equip skilled workers in modular and prefabricated technologies. The industry is facing challenges, with 700,000 skilled workers expected to retire in the period between 2019 to 2028. Canada credits a low participation rate among younger workers in trades as one of the main contributors to existing labour shortages.

The Building Officials Association of BC has created a self-paced course that highlights best practices for modular and prefabricated construction, instruction that is funded by the Ontario Ministry of Labour, Immigration, Training, and Skills Development. TradeUpBC, in partnership with the province, brings together BC's post-secondary institutes to help experienced tradespeople advance their careers through upskilling and future-ready courses.

Through TradeUpBC, the BC Institute of Technology offers a course titled "Introductory Studies in Mass Timber Construction," aimed at teaching construction professionals about the mass timber industry. Expanding government funding could reduce costs further or make these programs tuitionfree, while increasing accessibility to experiential learning and industry-relevant coursework. Investments in existing education platforms and institutional partnerships would prepare BC's workforce for the adoption of offsite construction and encourage young Canadians to pursue certification in new construction technology.



Photo: Frances Street Rendering, courtesy of GBL Architects

#### Case Study: Florida's Training for Manufactured Construction Program (TRAMCON)

Florida's TRAMCON program offers a successful example of how government funding can support upskilling in modular and prefabricated construction. Backed by a \$10M U.S. Department of Labor grant, TRAMCON (2015-2018) partnered with four Florida colleges (Miami Dade College, Santa Fe College, Polk State College and Seminole State College) to deliver tuition-free training programs in manufactured construction. The materials for the program were developed by the University of Florida and included a four-level training program, requiring about 250 hours of instruction per level. Importantly, the TRAMCON program combined existing training programs from the National Center for Construction Education and Research and the Manufacturing Skill Standard Council, as well as industry partners to develop their programming. This program offered a standardized way to upskill workers who were interested in manufactured construction to both increase productivity and reduce employee turnover through additional learning. The program had over 1300 completions when it ended in 2018.

# Recommendation:

To strengthen BC's workforce for modular and prefabricated construction, the province should increase funding to existing education and training programs to expand access to tuition-free or subsidized courses. By adopting a model similar to Florida's TRAMCON program, BC could provide standardized upskilling opportunities that prepare skilled workers for the growing offsite construction sector. By lowering barriers for both new and experienced tradespeople, the government will signal to industry that it is committed to supporting and expanding offsite construction opportunities in BC.

# **#9 Engage Traditional Institutions** and Insurers to Improve Market Understanding of Prefabricated and Modular Homes

With the introduction of the Federal Government's Canada Housing Plan and BC's Standardized Housing Design Catalogue, it is clear that decisionmakers want to take modular and prefabricated construction mainstream. In fact, 26 percent of Canadians want governments to prioritize modular or prefabricated homes that can be built faster than traditional detached single-family homes.

While modular and prefabricated construction is widely accepted for projects that are based on scalability, like student residences, hotels or healthcare facilities, the stigma surrounding modular homes persists from their early post-WWII reputation as functional but uninspiring. Although sharing very few similarities to mobile homes, modular construction or homes made with prefabricated components are still often perceived as being cheap, temporary and unattractive to North American markets.

Sweden has taken the North American dream of housing and made it into a reality through adapting 1920's U.S. policy on industrialization of construction and adapted it to modern needs. In Sweden, 45 percent of construction is industrialized and an estimated 84 percent of Swedish homes have prefabricated elements. Because of Sweden's topography and expansive forest landscape, the country has a long-established tradition and trust in timber construction. With the construction sector accounting for roughly 40 percent of global carbon emissions, Sweden's historic use of wood combined with its leadership in energy efficiency has resulted in construction-related emissions that are approximately half the global average.

Canada, a country with similar topography and weather conditions to Sweden, can build on the success and public trust garnered around modular and prefabricated buildings that have been integrated into communities for decades. Where offsite construction is associated with cookie-cutter design, some of Sweden's largest firms offer more customer-centred business models to offer greater customization and design flexibility.



Learning from Sweden's cultural acceptance of modular and prefabricated buildings as reliable, functional and advanced in terms of design, the federal government has the opportunity to support provincial uptake of offsite construction by showcasing Canadian examples of successful modular projects and communicating their quality. efficiency, affordability, and community benefits to the public.

Another area of consumer skepticism in modular and prefabricated homes stems from a lack of understanding among key housing industry professionals. In traditional construction, appraisers determine a home's value based on the property's condition, size, location compared to the rest of the market. Historical market data for traditionally constructed homes makes it relatively straightforward to establish accurate valuations, ensuring property owners receive a fair price when buying or selling their home.

Across Canada, other organizations have identified financial barriers to modular and prefabricated housing, calling on provincial governments to work closely with the financial services sector to improve consumer access to mortgage products and ensure appropriate insurance underwriting for these homes. BC has an opportunity to partner with the BC Real Estate Association or leverage the BC Financial Services Agency to develop training programs and materials to educate appraisers, underwriters and lenders. These programs would educate key financial stakeholders on the technical aspects and market value of modular homes, promoting fair practices and improving consumer trust in modular and prefabricated construction.



# **Recommendation:**

To improve market confidence in modular and prefabricated construction, provincial and federal governments should address the existing barriers among finance and housing professionals that limit access to these homes. Additionally, government's, particularly at the federal level, should work to normalize offsite construction methods as trustworthy and high-quality options within Canada's housing market.



# **Conclusion**

All levels of government can use emerging modular and prefabricated construction methods to reduce the impact of the housing crisis on Canadians. While these approaches have proven to be reliable, cost-effective, scalable, affordable, and environmentally superior to traditional construction, their success depends on the right conditions and sustained government support. Decision makers must remain committed to fostering innovation in construction technologies, promoting Canadabased supply chains and ensuring equity-building opportunities for Indigenous communities. Through these recommendations, BC can convert today's cost-neutral pilots into cost-advantaged, repeatable product lines by pairing portfolio-scale public demand, platform-based procurement, and factory-aligned financing which are the conditions industry leaders identify as decisive for reaching lower costs of goods sold at scale.

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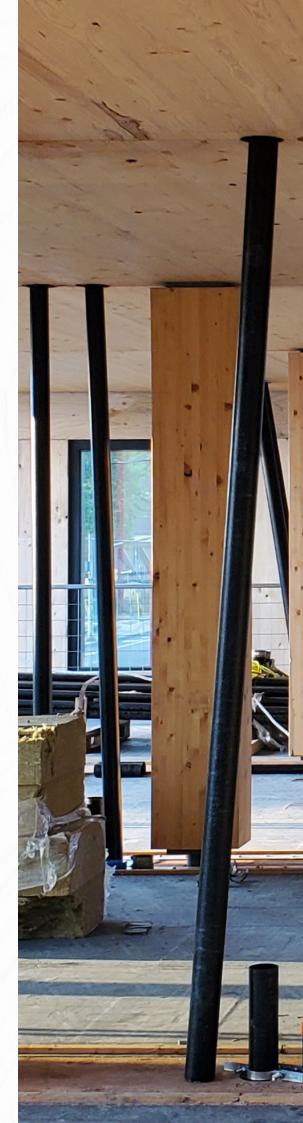
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#### **Works Cited**

Abacus Data. (2025, June 6). Rethinking housing in Canada: Awareness, trust, and the push for change (E. Sheppard, author). abacusdata.ca/ rethinking-housing-in-canada-awareness-trust-and-the-push-forchange

ADL Ventures. (2023, May 3). What Sweden and Japan can teach the U.S. about construction (A. Watson, author). www.adlventures.com/blogs/ what-sweden-and-japan-can-teach-the-us-about-construction

Assembly of First Nations. (2023, March). Closing the infrastructure gap by 2030: A collaborative and comprehensive cost estimate identifying the infrastructure investment needs of First Nations in Canada. afn.bynder. com/m/367574a3a5cb5abe/original/1-AFN-Closing-the-Infrastructure-Gap-by-2030-National-Cost-Estimate-English-report-1.pdf

BC Housing. (2019). Modular housing: Benefits, challenges, lessons learned. buildhomesnotbarriers.ca/wp-content/uploads/2019/10/BK-Research-Summaries-Modular-Housing-Lessons-Learned.pdf

Bertram, N., Fuchs, S., Mischke, J., Palter, R., Strube, G., & Woetzel, J. (2019, June 18). Modular construction: From projects to products. McKinsey & Company. www.mckinsey.com/capabilities/operations/our-insights/ modular-construction-from-projects-to-products

Big Block Construction. (2023, September). Home Fire: Horse Dance Lodge [Project overview]. www.bigblockconstruction.ca/work/home-fire

Big Block Construction. (2023, October 26). Reoccupying the land: Horse Dance Lodge sets a new standard for transitional housing. www. bigblockconstruction.ca/post/reoccupying-the-land-horse-dance-lodgesets-a-new-standard-for-transitional-housing

British Columbia Construction Association. (n.d.). Stat packs & data. bccassn.com/news-publications/stat-packs-data/

British Columbia Ministry of Municipal Affairs. (2024, April 9). British Columbia Building Code 2024: Web version. Government of British Columbia. www2.gov.bc.ca/assets/gov/farming-natural-resourcesand-industry/construction-industry/building-codes-and-standards/ revisions-and-mo/bcbc-revision-3/bcbc-revision-4/bcbc\_2024\_web\_ version\_20240409.pdf

BuildForce Canada. (2025, August 14). Reviewing Canada's construction sector in 2024 – Part 4: Construction labour markets find a new balance. www.buildforce.ca/en/blog/reviewing-canadas-construction-sector-in-2024-part-4-construction-labour-markets-find-a-new-balance/

Canada Infrastructure Bank. (n.d.). Indigenous equity initiative. Government of Canada. cib-bic.ca/en/indigenous-equity-initiative/

Canada Mortgage and Housing Corporation. (2021). Key lessons on modular housing from across Canada. National Housing Strategy Project Profiles. www.cmhc-schl.gc.ca/nhs/nhs-project-profiles/2021-nhsprojects/key-lessons-modular-housing-across-canada

Canada Mortgage and Housing Corporation. (n.d.). Rapid Housing Initiative updates. www.cmhc-schl.gc.ca/professionals/project-fundingand-mortgage-financing/funding-programs/all-funding-programs/rapidhousing/rapid-housing-updates

Canadian Home Builders' Association. (2023, January 26). Code compliance for modular construction. www.chba.ca/code-compliance-formodular-construction/

Canadian Standards Association. (2024, January). Seizing the modular construction opportunity. CSA Public Policy Centre. www.csagroup.org/ wp-content/uploads/CSA-Modular-Opportunity-PublicPolicySnaphot-EN\_Accessible.pdf

Concordia University. (2020, February 18). Concordia researchers develop a noise measuring framework for modular construction factories (P. Lejtenyi, author). www.concordia.ca/news/stories/2020/02/18/concordiaresearchers-develop-a-noise-measuring-framework-for-modularconstruction-factories.html

Construction Innovation Hub. (2020). Platform design for manufacture and assembly (P-DfMA) playbook. UK Government/CIH. constructioninnovationhub.org.uk/platform-dfma-playbook

Department of Finance Canada. (2024, December 16). Canada Indigenous Loan Guarantee Corporation [Backgrounder]. Government of Canada. www.canada.ca/en/department-finance/news/2024/12/canadaindigenous-loan-guarantee-corporation.html

Department of Housing, Infrastructure and Communities. (2025, August). Market sounding guide. Government of Canada. housing-infrastructure. canada.ca/alt-format/pdf/bch-mc/market-sounding-guide-sondagemarche-en.pdf

Department of Treasury and Finance. (2022). Offsite construction guide. Victorian Government. www.vic.gov.au/sites/default/files/2023-02/Offsite-Construction-Guide.pdf

Dentons. (2025, April 23). Building under pressure: How tariffs are reshaping Canada's construction landscape (K. Groulx & D. Cerovina, authors). www.dentons.com/en/insights/newsletters/2025/april/23/trump-2-0-navigating-change-in-canada/building-under-pressure-how-tariffsare-reshaping-canadas-construction-landscape

Dsouza, A. (2025, July 11). Modular momentum: Can prefabricated homes solve Canada's housing crisis? Real Estate Institute of Canada. www.reic. ca/article-july11-2025.html

Ecohome. (2024, May 2). Opinion: Canada must adopt prefab homes to address the housing crisis. www.ecohome.net/en/guides/3929/opinioncanada-must-adopt-prefab-homes-to-address-the-housing-crisis/

Egege, C. O. (2018). Off-site modular construction as a method of improving construction quality and safety. International Journal of Structural and Civil Engineering Research, 7(3), 118–124. www.ijscer. com/uploadfile/2018/0807/20180807112708620.pdf

Farmer, M. (2020). The UK Construction Innovation Hub and Platform Design for Manufacture and Assembly: Lessons for industrialised construction. Building Research & Information, 48(7), 731–745. doi. org/10.1080/09613210301997

Gibb, A. G. F., & Isack, F. (2003). Re-engineering through pre-assembly: Client expectations and drivers. Building Research & Information, 31(2), 146-160. doi.org/10.1080/0961321032000077544

Goodland, H., Walsh, K., Devereux, M., Michaud, E., & Refour, J. (2025, August). Construction prefabrication in Canada. Scius Advisory. sciusadvisory.com/wp-content/uploads/2025/08/Scius-Advisory-Construction-Prefabrication-in-Canada-March-2025.pdf

Government of British Columbia. (2023). Homes for people. news.gov. bc.ca/files/Homes\_For\_People.pdf

Government of British Columbia. (2023, November 22). Provincial data plan: Progress to date and what's up next. www2.gov.bc.ca/gov/content/ data/initiatives/provincial-data-plan#Progress-to-date-and-what's-up-

Government of British Columbia. (2023, December 7). Regulations, policy manuals issued to help deliver more homes for people faster. news.gov. bc.ca/releases/2023HOUS0171-001945

Government of British Columbia. (2024, April 10). B.C. builders can now use mass timber in taller buildings. news.gov.bc.ca/ releases/2024HOUS0055-000522

Government of British Columbia. (n.d.). B.C. standardized housing designs catalogue (Version 1). www2.gov.bc.ca/assets/gov/farming-naturalresources-and-industry/construction-industry/building-codes-andstandards/guides/bc\_std\_des\_catalogue\_v1.pdf

Immigration, Refugees and Citizenship Canada. (2025, April 7). CIMM - Labour shortages - Snapshot of key figures - November 25, 2024. Government of Canada. www.canada.ca/en/immigration-refugeescitizenship/corporate/transparency/committees/cimm-nov-25-2024/ labour-shortages-snapshot.html

Liberal Party of Canada. (2025, March). Mark Carney's Liberals unveil Canada's most ambitious housing plan since the Second World War. liberal.ca/wp-content/uploads/sites/292/2025/03/Mark-Carneys-Liberalsunveil-Canadas-most-ambitious-housing-plan-since-the-Second-World-War.pdf

Manufactured Housing Association of British Columbia. (2025, March 9). Modular building permitting guide – A277. mhabc.com/wp-content/ themes/mhabc/img/A277.pdf

McKinsey & Company. (2019, June). Modular construction: From projects to products. www.mckinsey.com/capabilities/operations/our-insights/ modular-construction-from-projects-to-products

M.G. McGrath, Inc. (n.d.). B2 tower at Pacific Park. mgmcgrath.com/ portfolio/b2-tower-pacific-park/

Mohod, V. (2025, February 8). Why is modular construction not mainstream yet? Hephaestus Ventures. www.hephaestus.vc/p/why-ismodular-construction-not-mainstream-yet

Modular BC. (n.d.). About us. www.modularbc.ca/about-us

Modular BC. (n.d.). Mayor's task force on housing: Prioritized recommendations. www.modularbc.ca/mayors-task-force

Modular Building Institute. (2019, July 20). The modular solution to the construction labor shortage. www.modular.org/2019/07/20/the-modularsolution-to-the-construction-labor-shortage/

OCRC. (2023, September 22). Differentiating off-site, prefabricated and modular construction. Off-site Construction Research Centre, University of New Brunswick. blogs.unb.ca/ocrc/2023/09/off-site-prefabricatedmodular-construction.php

Ogmundson, B. (2025, July 14). Most regions in BC see stronger sales in June. British Columbia Real Estate Association. www.bcrea.bc.ca/ economics/most-regions-in-bc-see-stronger-sales-in-june/

Plan7Architect. (2025, June 18). Modular house – Definition, advantages & disadvantages, features. plan7architect.com/modular-house-definitionadvantages-disadvantages-features-ai1

Razkenari, M., Fenner, A. E., Hakim, H., & Kibert, C. J. (2018, May). Training for manufactured construction (TRAMCON) – Benefits and challenges for workforce development at manufactured housing industry. In Modular and Offsite Construction (MOC) Summit Proceedings. doi.org/10.29173/ mocs42

Sakai, M. (2025, May 30). Why prefabricated housing is on the rise in BC and Canada. British Columbia Real Estate Association. www.bcrea.bc.ca/ advocacy/why-prefabricated-housing-is-on-the-rise-in-bc-and-canada/

Scius Advisory. (2025, August). Construction prefabrication in Canada (H. Goodland, K. Walsh, M. Devereux, E. Michaud, & J. Refour, authors). sciusadvisory.com/wp-content/uploads/2025/08/Scius-Advisory-Construction-Prefabrication-in-Canada-March-2025.pdf

SHoP Architects. (n.d.). B2. www.shoparc.com/projects/b2/

Smith, R. E., & Quale, J. D. (2017). Offsite architecture: Constructing the future. Routledge. doi.org/10.4324/9781315743332

Sondhi, R. (2025, June 3). Canadian federal housing plan: The 500k marathon. TD Economics. economics.td.com/ca-federal-housing-plan

Terner Center for Housing Innovation. (2020). Factory-built housing in California: Opportunities and barriers. University of California, Berkeley. ternercenter.berkeley.edu/research-and-policy/factory-built-housing-incalifornia-opportunities-and-barriers

Think Wood. (n.d.). Brock Commons Tallwood House. In Construction projects. www.thinkwood.com/construction-projects/brock-commonstallwood-house

Union of British Columbia Municipalities. (2024). About local government in B.C. UBCM. www.ubcm.ca/about-local-government

University of New Brunswick – Off-site Construction Research Centre. (2023). Differentiating off-site, prefabricated and modular construction. UNB OCRC Blog. blogs.unb.ca/ocrc/2023/09/off-site-prefabricatedmodular-construction.php

Veterans Affairs Canada. (n.d.). Victory housing. www.veterans.gc.ca/en/ remembrance/memorials/canada/victory-housing

Zero Emissions Innovation Centre. (2025, August 11). Local government offsite housing accelerator. www.zeic.ca/programs/local-governmentoffsite-housing-accelerator/



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