
For Information

REPORT TITLE: **Update on Modular Units as an Alternative Housing Solution**

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OBJECTIVE

To provide information on prefabricated/modular housing as one of the ways to address the growing and diverse housing needs in Peel.

REPORT HIGHLIGHTS

- Prefabricated housing can enable faster delivery of units, but requires development-ready sites, streamlined approvals, and consistent funding, as delays in site readiness or permitting can erode any potential time and cost savings.
 - Current Peel Region projects, including the Basswood Senior Residences and Wilkinson Shelter redevelopment, are already integrating prefabricated components to improve construction speed, sustainability, and cost-effectiveness, alongside the future prefabricated expansion opportunity at the Surveyor Shelter site.
 - To support broader implementation, a coordinated approach is needed across all levels of government, focusing on accelerating planning approvals, simplifying permitting processes, and securing sustained funding to enable delivery at scale.
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DISCUSSION

1. Background

The Region of Peel is facing a growing housing crisis. Currently, the supportive housing stock meets only 4 per cent of community need, while community housing addresses just 26 per cent. These gaps highlight the urgent demand for more supportive, deeply affordable, and emergency housing options.

As the Service Manager for housing, the Region of Peel plays a leading role in supporting and developing new community housing and shelter facilities. This is done through programs such as the Peel Community Housing Development Program and the Non-Profit Housing Development Program. In response to the deepening crisis, the Region is also exploring innovative approaches to deliver emergency shelter, supportive housing, and deeply affordable homes faster and more effectively.

Staff previously advised Council in an October 2023 report that temporary manufactured units do not fulfill the objective of providing permanent, stable housing for individuals experiencing homelessness. Key concerns identified at the time by staff include the stand-alone appearance of temporary cabin-style units and the associated stigma, risk of social exclusion, challenges with relocation, and potential safety issues, as the heightened privacy

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of individual units may increase risks for residents experiencing domestic violence or substance use. Staff committed to exploring the use of non-cabin style prefabricated housing as a potential solution to address both homelessness and broader housing affordability challenges.

2. Prefabricated, Modular and Manufactured Housing Definitions

Prefabricated housing refers to any dwelling that is constructed in a factory environment before being transported and assembled on site. This includes manufactured housing, volumetric modular, and panelized construction.

Manufactured homes are factory-built dwellings that are delivered to site on a steel frame or chassis and mainly used for temporary cabin-style units on mobile parks or leased land. This is the housing type that was previously advised against by staff.

Volumetric Modular construction involves building three-dimensional modular units in a factory environment and installing them on site, where the module's interior is almost entirely complete, including interior finishes. Once the modules are placed on the foundation, the module's seams are sealed to make them appear as one building.

In **Panelized** construction, a building's design is segmented into wall, floor, and roof sections and prefabricated off-site. The panels are assembled upon arrival on site, to form the building's structure. Cross-laminated timber (CLT) is a prefabricated engineered wood product that is often used during panelized construction.

Benefits of prefabricated housing are that site preparation work happens concurrently while the product is being constructed in an environmentally controlled factory. This allows for Ontario Building Code and Canadian Standards Association requirements to be met at the point of production. The ability to fully construct in off-site factories also significantly shortens construction time on site, causing less disruption to the neighboring community.

This report provides discussion on the feasibility and application of prefabricated housing, in the volumetric modular and panelized forms, as an alternative solution to bring shelter beds or affordable housing units on stream faster. This report also provides information on how other municipalities have utilized these options, and how the Region of Peel has already engaged with the prefabricated industry through current housing projects, including exploring the use of modular units in the future at the Surveyor Shelter.

3. Jurisdiction Scan

While cabin-style manufactured housing has been used as temporary shelter in some parts of Ontario, they do not provide a permanent housing solution, and recent examples have faced significant challenges. In Durham Region, a 2024 staff report on the Oshawa micro-home pilot highlighted conflicts with regional servicing policies, including limitations on water and sewage connections. Municipal staff cautioned that replicating the model at scale would be constrained by zoning bylaws, servicing standards, and infrastructure requirements. Comparable challenges have been reported in other jurisdictions, such as Waterloo, where sewage servicing constraints have limited the feasibility of maintaining individual manufactured units long-term.

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Alternately, the City of Toronto's Modular Housing Initiative is an example of modular housing being used for permanent, long-term housing. In 2020 and 2021, Toronto City Council approved the construction of a total of 275 modular units on City-owned land.

The City of Toronto's Auditor General audited the City's Initiative and noted that to achieve cost and time efficiencies, it is vital that appropriate zoning and site readiness is achieved in parallel to procuring the prefabricated products. For all four modular housing projects in the City, Ministerial Zoning Orders (MZOs) were sought to fast track the municipal re-zoning process, to move these projects forward significantly faster.

Recent studies have noted that while prefabricated housing could be faster and cheaper than traditional housing, this is only the case when manufacturers are operating at full scale, which can only occur when sites are ready for development. Significant support from all levels of government is necessary because without development-ready sites, prefabricated housing cannot be an effective solution to bring units on stream faster.

Prefabricated housing has also become a priority at the federal level, with Prime Minister Mark Carney announcing that the new Build Canada Homes (BCH) entity will supply \$25 billion in debt financing for Canadian prefabricated home builders. Additional plans for BCH include issuing bulk orders for modular housing units. This could support making prefabricated housing a more financially viable solution, but the need for fewer roadblocks in planning and permitting will persist, in order to accomplish significant time savings.

4. Peel Region Projects with Prefabricated Components

Prefabricated housing elements are currently being effectively integrated into several affordable housing and shelter projects in Peel Region, led either by the Region itself or by third-party agencies. One notable example is the Basswood Senior Residences project, which will incorporate mass timber through offsite manufacturing. This approach enhances both sustainability and efficiency by allowing large structural components to be prefabricated and then transported to the site for rapid assembly. In addition to streamlining the construction process, this method helps reduce construction waste and supports both environmental and cost-saving goals. The mass timber for this project will be sourced from Nordic Structures, a Canadian owned and operated facility in Quebec. By procuring Canadian and Ontario-built product helps to ensure compliance with Canadian Standards and the Ontario Building Code.

The third-party led Pathway Arbour Mill Expansion project in Mississauga involved the addition of a two-storey mass timber structure to the existing building, utilizing an encapsulated cross-laminated timber (CLT) system. This innovative construction method supports both structural integrity and environmental sustainability.

For the Wilkinson Shelter Redevelopment project, panelized building sections will be employed, enabling efficient, high-quality, and durable construction while significantly accelerating the building timeline. In addition to reducing construction time, the prefabricated approach is expected to generate cost savings and minimize on-site disruption.

Additionally, staff engaged consultants to assess the potential for infill development at the Cawthra, Dundas, and Surveyor Road shelters, with the goal of increasing the number of much-needed shelter beds using volumetric modular units. Following this assessment and consultation with City of Mississauga staff, it was determined that expansion is not feasible at the Cawthra and Dundas shelter sites due to site constraints, but there is availability of

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land at Surveyor Shelter and therefore, an opportunity for expansion. To avoid placing undue pressure on existing operations, consultants identified a potential to add approximately 40 units to the site using volumetric modular construction. This approach would allow for an efficient increase in capacity while minimizing disruption to current shelter services. In order to move forward with the expansion of the Surveyor Road shelter, capital and operational funding will be required.

5. Key Elements for Success

Prefabricated housing can offer a promising path to accelerate construction timelines and deliver cost-effective, high-quality housing. Drawing on lessons learned from other municipalities and Peel Region's own initiatives, this report highlights three essential elements for successfully scaling prefabricated housing: accelerated planning approvals, streamlined building permits, and committed funding.

Strong collaboration with all three municipal partners is already underway, positioning the Region to move more quickly from concept to construction. One example is the Surveyor Shelter site, where the Region is exploring the use of volumetric modular units through an infill project. Early and productive discussions with the City of Mississauga's planning department have already taken place to explore the addition of new shelter space. This active collaboration demonstrates a shared commitment to innovative solutions and paves the way for future prefabricated housing initiatives.

RISK CONSIDERATIONS

While prefabricated housing can help reduce on-site construction time, the modular housing industry is facing several key challenges that hinder its growth and scalability.

Regulatory considerations such as varying zoning bylaws, differing standards, and permitting processes can sometimes contribute to delays or uncertainty.

Financing and insurance can be an issue for this industry with limited access to financing, and cash-flow challenges affecting project viability. High capital costs demand economies of scale that are often difficult to achieve.

A shortage of skilled labor and limited familiarity with modular construction techniques constrain workforce capacity.

Lastly, **demand uncertainty** in the market, due to fragmented interest and limited funding, makes long-term investment in modular housing difficult to plan for.

Some of these risks may be mitigated by the innovative work underway at the local municipal level to accelerate planning approvals and building permits.

FINANCIAL IMPLICATIONS

There are no direct financial implications with this report; however, in the proposed 2026-10 year Housing Support capital budget, \$30 million is requested in 2027 for the expansion of Surveyor Shelter using prefabricated housing. Staff will also continue to explore funding sources from all levels of government.

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CONCLUSION

There is potential for modular and prefabricated construction to create new permanent housing units / shelter beds in an effective manner; however, accelerated planning approvals and streamlined building permit processes are vital to shorten site readiness timelines. Staff continue to find innovative ways to incorporate prefabricated housing construction methods in current builds. Staff are also exploring the use of modular housing for the expansion of the Surveyor Shelter to create much needed transitional housing / shelter beds, should the funding become available.



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