
To: Regional Planning Committee

From: Jessica Hayes, Acting Program Manager, Housing Policy and Planning,
Regional Planning and Housing Services

Date: August 14, 2023 Meeting Date: September 7, 2023

Subject: **Streamlining the Delivery of Rental Housing Through Pre-Approved Plans and Off-Site Construction**

RECOMMENDATION

That the MVRD Board:

- a) receive for information the report dated August 14, 2023, titled, “Streamlining the Delivery of Rental Housing Through Pre-Approved Plans and Off-Site Construction”; and
 - b) direct staff to send correspondence to member jurisdictions, in an effort to identify municipalities interested in joining a project led by the Province to explore pre-approved building plans and off-site construction to streamline the delivery of rental housing.
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EXECUTIVE SUMMARY

There is a significant and urgent need for rental housing in the Metro Vancouver region, and the Province as a whole. In recent years, housing delivery (particularly affordable rental housing) has been challenged by unprecedented construction cost escalation, a result of multiple factors including rising interest rates and labour shortages. Exploring new technologies and methods for delivering rental housing such as off-site construction has the potential to drive housing supply, affordability, climate action, and construction sector innovation in the region. The Province, in anticipation of the launch of BC Builds, is seeking municipal partners to advance these efforts in the Metro Vancouver region.

PURPOSE

To seek MVRD Board direction to send correspondence to member jurisdictions in an effort to identify municipal partners interested in exploring the use of standardized zones and guidelines, and pre-reviewed building plans that will enable increased use of off-site construction, in collaboration with Metro Vancouver and the Province. In addition, to seek direction to continue to advance conversations with member jurisdictions, the Province, and industry partners to implement coordinated measures that will streamline the delivery of rental housing.

BACKGROUND

In recent years, housing delivery has been affected by unprecedented construction cost escalation. These rising costs and uncertainty, combined with rising interest rates and skilled trade labour shortages, are driving the cost of housing higher. This year, the economic feasibility of constructing new rental housing has been particularly challenged, as evidenced by the reduced level of housing starts in early 2023. As the region’s population continues to grow, more pressure is being placed on an already strained rental supply. The effects of climate change are also becoming more impactful in our region, and events such as extreme heat, wildfire smoke and poor air quality, and increasing

frequency and intensity of storms and flooding are emphasizing the need for more resilient buildings and communities, and improvements to the way housing is designed and delivered.

Metro Vancouver has been engaged with the Province and industry leaders who have indicated their preliminary interest in jointly advancing supportive policies, investments, and actions to stimulate and grow British Columbia's capacity for off-site construction. With common challenges and housing needs across the Metro Vancouver region, there is an opportunity to streamline the delivery of rental housing through standardized zones and guidelines, pre-reviewed building plans, and by enabling increased use of off-site construction.

STREAMLINING RENTAL HOUSING CONSTRUCTION

The demand for rental housing is significantly outpacing the growth in the supply of purpose-built rental units. In 2022, the average vacancy rate for purpose-built rental apartments and townhouses in the Metro Vancouver region was very low, at just 0.9%. Also, between the 2016 and 2021 Census periods, total renter households increased by 13.2% (from 348,700 to 394,710 households, or a growth of 46,010 renter households), while the purpose-built rental stock increased by just 5.6% (from 110,973 to 117,168 purpose-built rentals, a net increase of just 6,195 units).

The population is growing at a faster rate than new housing supply is being delivered, exasperating access to housing, and housing affordability challenges in all communities within the Metro Vancouver region, and across the province. At the same time, significant inflation, rising interest rates, and labour shortages are posing additional challenges for the delivery of new housing. Current trends will result in these challenges continuing to mount in the coming years including: planned increases in immigration, a slowdown in the number of new rental housing projects initiated due to challenges posed by rising interest rates, and a skilled trade shortage that is expected to worsen as a significant portion of the current labour force retires.

Given these significant factors, there is increased recognition that new approaches are required to facilitate the expedient and efficient delivery of rental housing. Recent initiatives include:

- As part of the recently announced *Homes for People* plan, a provincial commitment to supply focused actions with the launch of BC Builds to use public land to deliver affordable homes for middle-income people; the expansion and spurring innovation in BC's construction workforce; and building more homes and government-funded buildings with mass timber;
- The federal Housing Accelerator Fund which invites applicants to put forward innovative proposals to increase housing supply. Several members are incorporating streamlining of approvals and design for rental buildings as aspects of their applications;
- UBCM resolutions put forward by several BC local governments, seeking to advance a program to streamline the delivery of housing through off-site construction as well as an event being held concurrently to build on this resolution by convening interested parties (Reference 1).
- The National Housing Accord (Reference 2), a set of 10 recommendations to the federal government put forward by a collective of housing industry experts includes creating an

industrial strategy, a national workforce and immigration strategy on housing, an innovation strategy that includes procurement policy and innovation centres for construction, and funding programs that include a catalogue of pre-approved designs.

With common challenges and housing needs across the Metro Vancouver region, shared approaches can be advanced. Staff have had initial conversations with the Province and industry leaders who have indicated their preliminary interest in jointly advancing supportive policies, investments, and actions to stimulate and grow the Province's capacity for off-site construction.

This includes two key components:

1. Incenting and growing the off-site construction industry.

The average number of months to complete an apartment project in BC is greater than most other provinces and has been trending upwards over the past decade. It currently requires 22 months of construction on average for an apartment project to complete, in addition to time required prior to start for planning approvals. Off-site construction (including prefabrication, building component parts off-site, panelized construction, and modular construction), can reduce project delivery times, and can reduce costs by 30 percent. Only a small proportion of housing projects are currently built off-site in BC (~5% of new construction), significantly less than in European countries, like Sweden, for example, which has the world's highest rate of off-site construction (80% of single-detached projects, and 10% of multi-family projects, with up to 50% pre-fabricated components).

2. Creating standardized zones and guidelines, and pre-reviewed designs for rental apartment development.

While each site is unique and projects must be adapted to fit their context, a unified, opt-in, regulatory approach which aims to drive consistency and reduce customization could create a sustained pipeline of similar projects, and further enable economies of scale. Standardized guidelines and zoning regulations, including pre-approved reference plans could be made available open source, and wouldn't need to go through additional design review. These pre-reviewed designs could be well tailored to being realized by off-site construction, but could also be realized using traditional woodframe construction. Actions to drive consistency would simplify and expedite the delivery of six-storey rental buildings in the Metro Vancouver region.

Benefits of Off-Site Construction

Substantially reducing construction times and costs is essential if Metro Vancouver is going to meet the significant demand for rental housing. This will require new approaches. There are many benefits related to off-site construction, prefabrication, and modular construction, including:

- **Housing supply and affordability:** using prefabricated components, including mass timber used in modular applications, has the potential to significantly accelerate construction schedules (20-50% schedule compression) and speed up overall housing supply and affordability as it greatly reduces timelines compared to strictly site-built projects (i.e. conventional woodframe or concrete construction). The use of building components prefabricated offsite in factories / warehouses creates significant efficiencies and eliminates costly delays, as they can be

manufactured in advance, and rapidly assembled on site, minimizing disruption in established neighbourhoods. In addition, prefabricated components are designed to last longer, and costs are less or on par with conventional materials. As local manufacturing increases, costs are expected to reduce further.

- **Climate action and environment:** off-site construction can help decarbonize the building sector, with the potential to significantly reduce carbon emissions. Off-site and modular construction reduces waste, as materials are prefabricated exactly to specifications. As well, it reduces vehicle and truck traffic to construction sites.
- **Economic development and innovation:** the shrinking construction labour force is a significant housing supply constraint that must be addressed to ensure that housing targets can be met in Metro Vancouver and the Province. Fostering innovation within the construction sector and embracing new technologies such as off-site construction and prefabrication will contribute to cutting down construction time and on-site labour needs, while creating new regional and provincial jobs in a new and growing industrial sector.

Growing Demand and Capacity for Off-site Construction

Using industrial technologies and approaches that move construction processes off-site can enable large-scale, low-cost housing production by enabling standardization, improving quality, and reducing construction schedules. These methods can further streamline purchasing and other processes, reducing costs by up to 30 percent. Encouraging uptake through standardized guidelines and zoning regulations, including pre-approved reference plans, has the potential to broaden these practices. Governments can use their purchasing power to build scale for this type of industrial production, therefore growing the demand for a consistent pipeline of rental housing projects that could be supported by the off-site construction industry.

Following a recent Housing Forum “Accelerating Housing”, Metro Vancouver staff and Provincial staff discussed growing the region’s capacity for off-site construction by attracting manufacturers of modular and pre-fabricated housing components to the Metro Vancouver region. Metro Vancouver, with support from the Province, can continue to advance these efforts in various capacities, with the aim of developing off-site construction as an innovative economic sector in BC. For example, through Invest Vancouver; by encouraging manufacturers to locate or expand operations in the region. Additionally, through Metro Vancouver Housing; by partnering with member jurisdictions who standardized guidelines and zoning regulations, and considering off-site construction methods for future projects. Furthermore, Metro Vancouver can support its member jurisdictions by providing best practices and research, and supporting the implementation of standard zones, and pre-approved plans and designs for rental housing that could in turn generate demand for off-site construction.

In addition, Metro Vancouver will advocate to the Province for supportive policies and programs, including potential grants and incentives (e.g. to enhance local government staff and resourcing capacity) and facilitate the use of pre-approved plans and off-site construction. As well, the Province has committed to building innovation and encouraging off-site construction as part of the

roll out of the *Homes for People* plan, and is seeking municipal partners to assist with advancing this strategy.

NEXT STEPS

To identify participants interested in streamlining the delivery of rental housing through pre-approved building plans and off-site construction, and move forward to the planning stages of several initiatives to streamline the delivery of rental housing in the region, several actions are proposed (see Table 1).

These actions would grow the off-site construction industry, and generate demand for a consistent pipeline of rental housing projects, with the aim of driving housing supply and affordability, climate action, and construction sector innovation in the region.

Action	Lead(s)	Desired outcome
Identify Early Adopters – Member jurisdictions	Metro Vancouver Province of BC	Convene and advance conversations with Metro Vancouver member jurisdictions interested in creating demand for the use of off-site and modular construction in their communities by exploring standardized guidelines and zoning regulations for six-storey rental buildings, including the use of pre-approved reference plans. Identify and support a coalition of local government champions committed to modelling public sector innovation by supporting off-site construction as a way to achieve housing targets, and increase housing supply and affordability.
Identify Early Adopters – Industry	Metro Vancouver (Invest Vancouver) Province of BC	Through Invest Vancouver, and with support from the Province, seek to develop off-site construction as an innovative economic sector in Metro Vancouver, supporting manufacturers to locate or expand operations in the region, and encouraging opportunities for job creation, growth, and transformation within the construction sector.
Research, document, and promote best practices	Metro Vancouver Province of BC	Communicate best practices and benefits of off-site prefabrication and modular construction to combat negative perceptions of quality and unclear understanding of economic benefits. Encourage industry transformation and support increased market demand through actions such as implementation of standard zones, pre-approved plans and designs, and modernization of public sector procurement.
Develop regional policy guidance and tools – Member jurisdictions	Metro Vancouver	Support municipal early adopters by co-developing tools such as template guidelines, regulations, building plans, pre-approved designs, opt-in land use policies, and/or standard zones

<p>Pilot the use of Pre-Approved Plans and Off-Site Construction in Metro Vancouver</p>	<p>Metro Vancouver (Metro Vancouver Housing) Province of BC</p>	<p>Advance a program to increase housing supply by harnessing off-site prefabrication and modular construction, in partnership with the Province. Develop industry capacity, support planning and regulatory implementation, and explore funding support for pilot buildings championed by early adopters.</p> <p>Through Metro Vancouver Housing, provide guidance from a non-profit housing provider perspective in terms of alignment with funding partner requirements and program criteria. Seek to partner with member jurisdictions who adopt standardized guidelines and zoning regulations to pilot the approach on specific sites.</p>
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ALTERNATIVES

1. That the MVRD Board:
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 - b) direct staff to send correspondence to member jurisdictions, in an effort to identify municipalities interested in joining a project led by the Province to explore pre-approved building plans and off-site construction to streamline the delivery of rental housing.

2. That the MVRD Board receive for information the report dated August 14, 2023 titled “Streamlining Delivery of Rental Housing Through Pre-Approved Plans and Off-Site Construction”, and provide alternate direction to staff.

FINANCIAL IMPLICATIONS

There are no immediate financial implications associated with this report. Metro Vancouver departments can accommodate regional convening and support as part of its core services and within its existing resources and budget.

Should the MVRD Board direct staff to advance conversations with member jurisdictions, the Province, and other sector partners to streamline the delivery of rental housing, staff will report back to the Regional Planning Committee and MVRD Board in terms of any required resources.

CONCLUSION

There is an urgent need for rental housing in the Metro Vancouver region and the rest of the Province, yet, housing supply has been challenged by several external factors, resulting in escalating costs and timelines that threaten the ability to rapidly deliver the homes that are needed. This report identifies actions that could expedite the delivery of rental housing by growing the off-site construction industry, and generating demand for a consistent pipeline of rental housing projects, with the aim of driving housing supply and affordability, climate action, and construction sector innovation in the region. Staff recommend Alternative 1, to send correspondence to member jurisdictions in order to identify municipal partners that will advance actions to streamline the delivery of rental housing through the use of pre-approved building plans and off-site construction,

and advance this work alongside Metro Vancouver and the Province. If given direction, Staff will continue to advance conversations with member jurisdictions, the Province, and industry partners, and report back to the Regional Planning Committee, the Regional Administrators Advisory Committee, and MVRD Board on the status of the actions identified in this report.

REFERENCES

1. [2023 UBCM Resolutions Book](#)
2. [The National Housing Accord: A Multi-Sector Approach to Ending Canada's Rental Housing Crisis](#)

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