

**METRO VANCOUVER HOUSING CORPORATION (MVHC)
BOARD OF DIRECTORS**

REGULAR BOARD MEETING

Friday, July 29, 2022

9:15 A.M.

**Meeting conducted in-person pursuant to the Procedure Bylaw
28th Floor Boardroom, 4515 Central Boulevard, Burnaby, British Columbia
Webstream available at <http://www.metrovanancouver.org>**

[Membership and Votes](#)

A G E N D A¹

A. ADOPTION OF THE AGENDA

1. July 29, 2022 Regular Meeting Agenda

That the MVHC Board adopt the agenda for its regular meeting scheduled for July 29, 2022 as circulated.

B. ADOPTION OF THE MINUTES

1. May 27, 2022 Regular Meeting Minutes

Pg. 4

That the MVHC Board adopt the minutes for its regular meeting held May 27, 2022 as circulated.

2. July 7, 2022 Regular Joint Board Meeting Minutes

Pg. 8

That the MVHC Board adopt the minutes for its regular joint meeting of the MVRD, MVHC, GVWD and GVS&DD Boards held July 7, 2022 as circulated.

C. DELEGATIONS

D. INVITED PRESENTATIONS

E. CONSENT AGENDA

Note: Directors may adopt in one motion all recommendations appearing on the Consent Agenda or, prior to the vote, request an item be removed from the Consent Agenda for debate or discussion, voting in opposition to a recommendation, or declaring a conflict of interest with an item.

¹ Note: Recommendation is shown under each item, where applicable. All Directors vote unless otherwise noted.

1. HOUSING COMMITTEE REPORTS

- 1.1 Metro Vancouver 10-Year Plan – Progress Update** *Pg. 14*
That the MVHC Board receive for information the report dated June 14, 2022 titled “Metro Vancouver 10-Year Plan – Progress Update”.
- 1.2 Benefits of Building Rehabilitation: Evergreen Downs** *Pg. 48*
That the MVHC Board receive for information the report dated June 10, 2022, titled “Benefits of Building Rehabilitation: Evergreen Downs.”
- 1.3 Metro Vancouver Housing – Extreme Heat Protocols** *Pg. 52*
That the MVHC Board receive for information the report dated June 16, 2022, titled “Metro Vancouver Housing – Extreme Heat Protocols”.

2. CHIEF ADMINISTRATIVE OFFICER REPORTS

- 2.1 Welcher Affordable Housing Redevelopment – Grant and Loan Application to the Federation of Canadian Municipalities** *Pg. 56*
That the MVHC Board authorize staff to apply for capital project grant and loan project funding through the Federation of Canadian Municipalities Green Municipal Fund Program.

F. ITEMS REMOVED FROM THE CONSENT AGENDA

G. REPORTS NOT INCLUDED IN CONSENT AGENDA

H. MOTIONS FOR WHICH NOTICE HAS BEEN GIVEN

I. OTHER BUSINESS

- 1. MVHC Board Committee Information Items and Delegation Summaries** *Pg. 58*

J. BUSINESS ARISING FROM DELEGATIONS

K. RESOLUTION TO CLOSE MEETING

Note: The Board must state by resolution the basis under section 90 of the Community Charter on which the meeting is being closed. If a member wishes to add an item, the basis must be included below.

That the MVHC Board close its regular meeting scheduled for July 29, 2022 pursuant to the *Community Charter* provisions, Section 90 (1) (e) and (g) as follows:

90 (1) A part of the meeting may be closed to the public if the subject matter being considered relates to or is one or more of the following:

- (e) the acquisition, disposition or expropriation of land or improvements, if the board or committee considers that disclosure could reasonably be expected to harm the interests of the regional district; and
- (g) litigation or potential litigation affecting the regional district.”

L. RISE AND REPORT (Items Released from Closed Meeting)

M. ADJOURNMENT/CONCLUSION

That the MVHC Board adjourn/conclude its regular meeting of July 29, 2022.

**METRO VANCOUVER HOUSING CORPORATION
BOARD OF DIRECTORS**

Minutes of the Regular Meeting of the Metro Vancouver Housing Corporation (MVHC) Board of Directors held at 9:55 a.m. on Friday, May 27, 2022 in the 28th Floor Boardroom, 4515 Central Boulevard, Burnaby, British Columbia.

MEMBERS PRESENT:

Burnaby, Chair, Director Sav Dhaliwal
North Vancouver City, Alternate Director Angela Girard* for Vice Chair Linda Buchanan
Anmore, Director John McEwen
Belcarra, Director Jamie Ross*
Bowen Island, Director David Hocking
Burnaby, Director Pietro Calendino*
Burnaby, Director Mike Hurley*
Coquitlam, Director Craig Hodge*
Coquitlam, Director Richard Stewart*
Delta, Director Jeannie Kanakos
Delta, Alternate Director Bruce McDonald* for George Harvie
Electoral Area A, Director Jen McCutcheon*
Langley City, Director Gayle Martin*
Langley Township, Director Jack Froese*
Langley Township, Director Kim Richter*
Lions Bay, Director Ron McLaughlin*
Maple Ridge, Director Mike Morden*
New Westminster, Director Jonathan Côté
North Vancouver District, Director Lisa Muri*
Pitt Meadows, Director Bill Dingwall*

Port Coquitlam, Director Brad West*
Port Moody, Director Rob Vagramov*
Richmond, Director Malcolm Brodie*
Richmond, Director Harold Steves*
Surrey, Director Linda Annis*
Surrey, Director Doug Elford*
Surrey, Director Laurie Guerra*
Surrey, Alternate Director Brenda Locke* for Mandeep Nagra
Surrey, Director Doug McCallum*
Surrey, Director Allison Patton*
Tsawwassen, Director Ken Baird*
Vancouver, Director Christine Boyle*
Vancouver, Director Adriane Carr
Vancouver, Director Melissa De Genova*
Vancouver, Director Lisa Dominato*
Vancouver, Alternate Director Pete Fry* for Kennedy Stewart
Vancouver, Director Colleen Hardwick*
Vancouver, Director Michael Wiebe
West Vancouver, Director Mary-Ann Booth*
White Rock, Director Darryl Walker*

MEMBERS ABSENT:

None

STAFF PRESENT:

Jerry W. Dobrovolny, Chief Administrative Officer
Chris Plagnol, Corporate Officer
Amelia White, Legislative Services Supervisor, Board and Information Services

*denotes electronic meeting participation as authorized by Section 3.6.2 of the *Procedure Bylaw*

A. ADOPTION OF THE AGENDA

1. May 27, 2022 Regular Meeting Agenda

It was MOVED and SECONDED

That the MVHC Board adopt the agenda for its regular meeting scheduled for May 27, 2022 as circulated.

CARRIED

B. ADOPTION OF THE MINUTES

1. April 29, 2022 Regular Meeting Minutes

It was MOVED and SECONDED

That the MVHC Board adopt the minutes for its regular meeting held April 29, 2022 as circulated.

CARRIED

C. DELEGATIONS

No items presented.

D. INVITED PRESENTATIONS

No items presented.

E. CONSENT AGENDA

It was MOVED and SECONDED

That the MVHC Board adopt the recommendations presented in the following items as presented in the May 27, 2022 MVHC Board Consent Agenda:

1.1 Construction Cost Escalation Since 2020

2.1 Change of Address for MVHC Registered Office

CARRIED

The items and recommendations referred to above are as follows:

1.1 Construction Cost Escalation Since 2020

Report dated April 25, 2022, from Laurel Cowan, Program Manager, Housing Planning and Policy, Regional Planning and Housing Services and Jason Hingley, Director, Housing Planning, Development and Finance, Regional Planning and Housing Services, providing the MVHC Board with an update on construction cost escalation impacts experience by Metro Vancouver Housing since 2020.

Recommendation:

That the MVHC Board receive for information the report dated April 25, 2022, titled "Construction Cost Escalation Since 2020".

Adopted on Consent

2.1 Change of Address for MVHC Registered Office

Report dated May 12, 2022, from Chris Plagnol, Corporate Officer, seeking the MVHC Board's authorization to a change of address for the Metro Vancouver Housing Corporation's registered office.

Recommendation:

That the MVHC Board authorize the change of the mailing address and delivery address of the corporation's registered office to c/o Metro Vancouver Regional District, 4515 Central Boulevard, Burnaby, BC, V5H 0C6, and authorize the Corporate Officer to undertake all necessary actions to complete the foregoing address change.

Adopted on Consent

F. ITEMS REMOVED FROM THE CONSENT AGENDA

No items presented.

G. REPORTS NOT INCLUDED IN CONSENT AGENDA

No items presented.

H. MOTIONS FOR WHICH NOTICE HAS BEEN GIVEN

No items presented.

I. OTHER BUSINESS

1. MVHC Board Committee Information Items and Delegation Summaries

It was MOVED and SECONDED

That the MVHC Board receive for information the MVHC Board Committee Information Items and Delegation Summaries, dated May 27, 2022.

CARRIED

J. BUSINESS ARISING FROM DELEGATIONS

No items presented.

K. RESOLUTION TO CLOSE MEETING

It was MOVED and SECONDED

That the MVHC Board close its regular meeting scheduled for May 27, 2022 pursuant to the *Community Charter* provisions, Section 90 (1) (e) as follows:

- "90 (1) A part of a board meeting may be closed to the public if the subject matter being considered relates to or is one or more of the following:
- (e) the acquisition, disposition or expropriation of land or improvements, if the board or committee considers that disclosure could reasonably be expected to harm the interests of the regional district."

CARRIED

L. RISE AND REPORT (Items Released from Closed Meeting)

No items presented.

M. ADJOURNMENT/CONCLUSION

It was MOVED and SECONDED

That the MVHC Board adjourn its regular meeting of May 27, 2022.

CARRIED

(Time: 9:56 a.m.)

CERTIFIED CORRECT

Chris Plagnol, Corporate Officer

Sav Dhaliwal, Chair

53037229 FINAL

**REGULAR JOINT MEETING
MVRD, MVHC, GVWD, and GVS&DD BOARDS**

Minutes of the Regular Joint Meeting of the Metro Vancouver Regional District (MVRD), Metro Vancouver Housing Corporation (MVHC), the Greater Vancouver Water District (GVWD), and the Greater Vancouver Sewerage and Drainage District (GVS&DD) Board of Directors held at 9:15 a.m. on Thursday, July 7, 2022 in the 28th Floor Boardroom, 4515 Central Boulevard, Burnaby, British Columbia.

MEMBERS PRESENT:

Burnaby, Chair, Director Sav Dhaliwal
North Vancouver City, Vice Chair Director
Linda Buchanan*

Anmore, Director John McEwen
Belcarra, Director Jamie Ross
Bowen Island, Director David Hocking*
Burnaby, Director Pietro Calendino*
Burnaby, Director Mike Hurley
Coquitlam, Director Craig Hodge*
Coquitlam, Director Richard Stewart* (arrived at 9:17 a.m.)
Delta, Alternate Director Dylan Kruger* for
Director George Harvie (arrived at 9:33 a.m.)
Delta, Director Jeannie Kanakos* (arrived at 9:16 a.m.)
Electoral Area A, Director Jen McCutcheon*
Langley City, Director Gayle Martin*
Langley Township, Director Jack Froese
Langley Township, Director Kim Richter*
Lions Bay, Director Ron McLaughlin
Maple Ridge, Director Mike Morden*
New Westminster, Director Jonathan Coté*
(departed at 11:30 a.m.)
North Vancouver District, Director Lisa Muri*
Pitt Meadows, Director Bill Dingwall*

Port Coquitlam, Director Brad West* (departed at 11:04 a.m.)
Port Moody, Director Rob Vagramov
Richmond, Director Malcolm Brodie* (departed at 9:57 a.m.)
Richmond, Director Harold Steves*
Surrey, Director Linda Annis*
Surrey, Director Doug Elford* (arrived at 9:18 a.m.)
Surrey, Director Laurie Guerra*
Surrey, Director Doug McCallum*
Surrey, Director Allison Patton*
Vancouver, Director Christine Boyle*
Vancouver, Director Adriane Carr
Vancouver, Director Melissa De Genova (arrived at 9:47 a.m.)
Vancouver, Director Lisa Dominato
Vancouver, Director Colleen Hardwick*
Vancouver, Alternate Director Pete Fry* for
Director Kennedy Stewart
Vancouver, Director Michael Wiebe* arrived at 9:19 a.m.)
West Vancouver, Director Mary-Ann Booth*
(arrived at 9:16 a.m.)
White Rock, Director Darryl Walker*

MEMBERS ABSENT:

Surrey, Director Mandeep Nagra

Tsawwassen, Director Ken Baird

STAFF PRESENT:

Jerry W. Dobrovolsky, Chief Administrative Officer
Dorothy Shermer, Deputy Corporate Officer
Natalia Melnikov, Legislative Services Coordinator, Board and Information Services

*denotes electronic meeting participation as authorized by Section 3.6.2 of the *Procedure Bylaw*

A. ADOPTION OF THE AGENDA

1. July 7, 2022 Regular Joint Board Meeting Agenda

The Chair called the meeting to order and confirmed the agenda as circulated.

9:16 a.m. Directors Booth and Kanakos arrived at the meeting.

9:17 a.m. Director Stewart arrived at the meeting.

9:18 a.m. Director Elford arrived at the meeting.

9:19 a.m. Director Wiebe arrived at the meeting.

B. PRESENTATION AND DISCUSSION

1. Board Strategic Plan – A Look Back at 2019-2022

Sav Dhaliwal, Chair, Metro Vancouver Board of Directors, and Linda Buchanan, Vice Chair, Metro Vancouver Board of Directors, acknowledged the traditional territory of Metro Vancouver First Nations, welcomed members, and provided an overview of the Board's goals and priorities for each of Metro Vancouver's service areas, highlighting the impacts of the extreme weather events and COVID-19 pandemic on the region.

Liquid Waste Committee

Richard Stewart, Chair, Liquid Waste Committee, provided an overview of the Liquid Waste Committee and its work, highlighting Liquid Waste Services' accomplishments, including the approved Project Definition for the Iona Island Wastewater Treatment Plant, the expansion of the Annacis Wastewater Treatment Plant, the resumption of the construction of the North Shore Wastewater Treatment Plant, and the ongoing collaboration with the BC Centre for Disease Control and the University of British Columbia to track the presence of COVID-19 virus in the region's wastewater.

9:33 a.m. Director Kruger arrived at the meeting.

Members were shown a Metro Vancouver video on the Renewable Natural Gas Project at Lulu Island Wastewater Treatment Plant, which is not retained with the agenda.

Water Committee

Malcolm Brodie, Chair, Water Committee, provided an overview of the Water Committee and its work, highlighting Water Services' accomplishments, including the completion of the Port Mann Corridor Project, the Second Narrows Water Supply Tunnel, and the Clayton and Jericho Reservoirs. Other accomplishments included the upgrades of the Annacis and Stanley Park Water Supply Tunnels, and the implementation of the Cleveland Dam Safety Enhancements Program. He also noted the updates to the *Drinking Water Conservation Plan* and the *Water Supply Outlook 2120*, highlighting the importance of drinking water quality and preservation.

In response to questions, members were informed about the ongoing discussions with First Nations regarding the pipe removal in Stanley Park to restore the area.

Members were shown a Metro Vancouver video regarding the *Water Supply Outlook 2120*, which is not retained with the agenda.

9:47 a.m. Director De Genova arrived at the meeting.

Zero Waste Committee

Jack Froese, Chair, Zero Waste Committee, provided an overview of the Solid Waste Committee and Solid Waste Services' accomplishments, including the new United Boulevard and Central Surrey Recycling and Waste Centres, the upgrade of the Waste-to-Energy Facility in Burnaby, an update of the *Integrated Solid Waste and Resource Management Plan*, and the waste reduction campaigns.

In response to questions regarding excess packaging, members were informed about the work with the Canada Plastics Pact.

Members were shown a Metro Vancouver video regarding the enhanced recycling and waste services, which is not retained with the agenda.

Housing Committee

Mike Hurley, Chair, Housing Committee, provided an overview of the Housing Committee and Metro Vancouver's Housing Services accomplishments, including the advancement of seven affordable housing projects, the adopted Metro Vancouver Housing 10-Year Plan, expanded tenant programs promoting community building and community gardens, the revised *Tenant Selection Policy*, and the start of the construction of Kingston Gardens and Welcher Avenue apartments.

9:57 a.m. Director Brodie departed the meeting.

Members were shown a Metro Vancouver video regarding the adoption of the 10-Year Housing Plan, which is not retained with the agenda.

Regional Parks Committee

John McEwen, Chair, Regional Parks Committee, provided an overview of the Regional Parks Committee, highlighting accomplishments in Regional Parks, including record park visitations, park acquisitions, trail upgrades, the update to the *Regional Greenways 2050 Plan*, the completed *Regional Parks Alternative Transportation Study*, the signed Cultural Planning and Co-Operative Agreement for t̓əmtə́míxʷtən/Belcarra Regional Park with the Tsleil-Waututh Nation, advanced design for enhancements in Crippen Regional Park, Campbell Valley Regional Park, and Grouse Mountain Regional Park, and advanced planning for Widgeon Marsh Regional Park.

Regional Culture Committee

Lisa Muri, Chair, Regional Culture Committee, provided an overview of the Regional Culture Committee and the regional arts and culture program challenges during the COVID-19 pandemic. Director Muri highlighted program accomplishments, including adapted grant provision as part of the Regional Cultural Grants Program, and the annual allocation of \$150,000 of grant funding supplemented with an additional \$150,000 from BC Safe Restart funding.

Invest Vancouver

Sav Dhaliwal, Chair, Invest Vancouver Management Board, provided an overview of Invest Vancouver, the regional economic prosperity service, highlighting its funding initiatives and accomplishments, including collaboration with Amazon Web Services to create a workforce development initiative for technology, \$200,000 Federal funding received through the CanExport Community Investment Program, declaration of June as Clean Transportation Month, and the *Motivate Vancouver* event cohosted with CoMotion Global.

In response to a question regarding opportunities to discuss the idea of wind turbine manufacturing, members were informed about plans to begin discussions through the Canadian Consulate in Copenhagen.

Members were shown a Metro Vancouver video regarding the launch and highlights of Invest Vancouver, which is not retained with the agenda.

Mayors Committee

Brad West, Chair, Mayors Committee, provided an overview of the Mayors Committee and its work, outlining Metro Vancouver's initiatives and collaborations with other orders of government, including work on the overdose crisis, municipal harm reduction discussion with Local Leadership United, 2021 All-Party-Federal Election Forum, and the joint event between the Mayors Committee, Invest Vancouver, and European Union Consulate Generals to discuss the potential trade, investment, and partnership opportunities.

Regional Planning Committee

Jonathan Côté, Chair, Regional Planning Committee, provided an overview of the Regional Planning Committee and Regional Planning Services' challenges and accomplishments, highlighting the completed draft of *Metro 2050*, which is now in the approval phase, the approved *Regional Industrial Land Strategy*, the *Industrial Intensification Analysis Study*, and the *Social Equity in Regional Growth Management Study*.

In response to a question, members were informed that the School Board was invited to participate in *Metro 2050* consultations as legislatively required, but the inclusion of police services is up to local jurisdictions.

Electoral Area Committee

Jen McCutcheon, Chair, Electoral Area Committee, provided an overview of the Electoral Area Committee and Metro Vancouver Electoral Area A, highlighting a geotechnical study to map rural portions of the Electoral Area, community engagement and cleanup events, electric vehicle charging, recycling, and active transportation projects, and the emergency preparedness efforts for at-risk communities. Members were informed about the ongoing engagement with the Katzie First Nation and the Province to mitigate potential flooding impacts.

Performance and Audit Committee

Lisa Dominato, Chair, Performance and Audit Committee, provided an overview of the Performance and Audit Committee's role, highlighting Metro Vancouver's financial reporting improvements and accomplishments, including the 2022 Excellence in Financial Reporting Award received from the Government Finance Officers Association of the United States and Canada.

Finance Committee

Sav Dhaliwal, Chair, Finance Committee, provided an overview of the Finance Committee, highlighting Metro Vancouver's financial planning process and accomplishments, including Metro Vancouver's high credit rating and budget reductions to keep the 2022 levy rate increase below the inflation rate, and the amended *Federal Gas Tax Fund Expenditures Policy* to improve processes and apply a climate action lens.

George Massey Crossing Task Force

Sav Dhaliwal, Chair, Board of Directors, on behalf of George Harvie, Chair, George Massey Crossing Task Force, provided an overview of the George Massey Crossing Task Force and its work, highlighting Metro Vancouver's accomplishments in the George Massey Crossing Project development, which is intended to facilitate efficiency and movement of people and goods in the region.

Flood Resiliency Task Force – 10:49

Bill Dingwall, Chair, Flood Resiliency Task Force, noted the effects of the Atmospheric River flooding events affecting multiple communities in British Columbia in November 2021, and provided an overview of Metro Vancouver's accomplishments and engagement with the affected municipalities and First Nations to identify regional risks and gaps in existing infrastructure and the priority areas in need of regional investment while reviewing the existing *Lower Mainland Flood Management Strategy*.

Climate Action Committee

Adriane Carr, Chair, Climate Action Committee, provided an overview of the Climate Action Committee and Air Quality and Environmental Planning Services, highlighting climate change impacts, and regional challenges and accomplishments, including the adopted *Clean Air Plan*, improved air quality

monitoring, and the amended *Climate 2050* strategic plan with a goal of becoming a carbon neutral region by 2050.

Members were shown a Metro Vancouver video titled “Metro Vancouver Achieves Carbon Neutrality”, which is not retained with the agenda.

Indigenous Relations Committee

Mary-Ann Booth, Chair, Indigenous Relations Committee, provided an overview of the Indigenous Relations Committee and its work, highlighting Metro Vancouver’s accomplishments, including the cooperation agreement with the Tsleil-Waututh Nation and renaming of təmtə́míxʷtən/Belcarra Regional Park, treaty negotiations with the Katzie First Nation, Lunch-and-Learn opportunities for staff, and strengthening relationships with First Nations through project-related engagement work.

Members were shown Metro Vancouver videos of the təmtə́míxʷtən/Belcarra Regional Park Renaming Ceremony and the Board Strategic Plan 2019 – 2022 Look Back, which are not retained with the agenda.

Presentation material titled “2019 – 2022 Look Back – Board Strategic Plan” is retained with the July 7, 2022 MVRD/MVHC/GVWD/GVS&DD Regular Joint Board Meeting agenda.

Closing Remarks

Vice Chair Buchanan and Chair Dhaliwal offered closing remarks highlighting members’ contributions and Metro Vancouver’s role in delivering essential services.

11:30 a.m. Director Coté departed the meeting.

C. ADJOURNMENT/CONCLUSION

It was MOVED and SECONDED

That the MVRD/MVHC/GVWD/GVS&DD Board conclude its regular joint meeting of July 7, 2022.

CARRIED

(Time: 11:32 a.m.)

CERTIFIED CORRECT

Dorothy Shermer, Deputy Corporate Officer

Sav Dhaliwal, Chair

53822623 FINAL

To: Housing Committee

From: Laurel Cowan, Program Manager, Housing Planning and Policy
Metro Vancouver Housing

Date: June 14, 2022

Meeting Date: July 7, 2022

Subject: **Metro Vancouver Housing 10-Year Plan – Progress Update**

RECOMMENDATION

That the MVHC Board receive for information the report dated June 14, 2022 titled “Metro Vancouver Housing 10-Year Plan – Progress Update”.

EXECUTIVE SUMMARY

The *Metro Vancouver Housing 10-Year Plan* was adopted in November 2019 to provide a framework for how the organization will provide, preserve and expand its portfolio of affordable housing across the region. Since this time, the world has changed dramatically. The global pandemic and climate change have impacted people and organizations—from the ways we interact with tenants, to the ways in which we design homes and buildings. Significant inflation, rising interest rates, and ongoing uncertainty also pose challenges for the delivery of new housing.

Despite these challenges, Metro Vancouver Housing has taken significant action towards implementing its *10-Year Plan*. With 7 development projects underway to provide ~800 new and redeveloped homes, and 8 major rehabilitation projects to renew 558 homes, MVH is working towards its targets for growth, renewal, energy efficiency, and reduction in greenhouse gas emissions, while providing a diverse mix of accessible homes to suit a range of needs and mix of incomes.

PURPOSE

To inform the Housing Committee and MVHC Board about the context and progress to date since the launch of the 2019 *Metro Vancouver Housing 10-Year Plan*.

BACKGROUND

The *Metro Vancouver Housing 10-Year Plan* was adopted in November 2019 to provide a framework for how the organization will provide, preserve and expand its portfolio of affordable housing across the region. The Progress Report (Attachment 1) outlines what has changed since the launch of the plan, outlines progress to date towards targets and goals, and highlights the ways in which the organization is adapting and moving forward.

10-YEAR PLAN PROGRESS UPDATE

Context

Since the launch of the *10-Year Plan*, the world has changed significantly. The COVID-19 pandemic spread throughout the world, highlighting existing inequities, and further emphasizing the need for

affordable housing. Global markets and supply chains were shaken, resulting in unprecedented construction cost escalation. Rising costs and uncertainty, combined with rising interest rates, are driving the cost of housing higher. As the region's population continues to grow, more pressure is placed on an already strained rental supply, and social housing waitlists continue to rise, particularly for family and seniors housing. The effects of climate change are also becoming more impactful in our region. Events such as extreme heat, wildfire smoke and poor air quality, and increasing frequency and intensity of storms and flooding have hit BC dramatically in the past two years. These events emphasize the need for more resilient buildings and communities, and to re-think the way we design and deliver housing.

Despite these challenges, implementation of the *10-Year Plan* is underway and strong.

Progress on 10-Year Targets

Metro Vancouver Housing (MVH) has taken significant action in the first two years of the 10 Year Plan, and is on track or making progress towards all target areas. With 7 development projects underway that will provide ~800 new and redeveloped units, MVH is 60% of the way towards its growth target, and strives to deliver even more housing and deeper affordability with provincial and federal funding partnerships. These projects, along with 8 major rehabilitation projects to renew 558 homes, are advancing MVH's goals for growth, renewal, energy efficiency, and reduction in greenhouse gas (GHG) emissions, while providing a diverse mix of accessible homes to suit a range of needs and mix of incomes.

Given the rising cost of construction and inflation, it will continue to cost more to build and renew housing in the future, so it is critical to act today to leverage MVH's equity. By 'frontloading' the 10 Year Plan and pursuing a significant number of renewal and development projects early on, MVH is striving to get new homes on the ground more quickly, and make the most of available funding. But we know we can't do it alone. Moving forward, it will be even more important to collaborate, to seek innovative partnerships with public, private, and non-profit sectors, and seek funding support from provincial and federal governments as we work towards common goals.

Progress on Plan Goals & Actions

The 10-Year Plan goals include the following, with a series of actions under each goal:

- Goal 1: Support healthy, engaged communities
- Goal 2: Preserve and renew existing housing to maintain affordability and improve sustainability and accessibility
- Goal 3: Grow strategically through redevelopment and expansion
- Goal 4: Develop partnerships to expand affordable rental housing across the region

The Progress Report outlines how MVH has progressed work under each action and highlights key projects and initiatives since the launch of the Plan.

Moving Forward

Given the challenges of a changing world, it is critical to adapt and stay flexible as MVH implements its *10-Year Plan*. Some of the key approaches will include:

- working closely with tenants to tailor programs to best meet their needs and interests;

- working with tenants to raise awareness and shift practices to support sustainability (i.e., conserving energy and water, reducing waste);
- collaborating with other organizations to broaden the programs MVH offers to tenants;
- working closely with other non-profits and housing stakeholders to share resources, practices, and learnings, and to support each other in leadership and innovation;
- upgrading existing buildings and building new housing that is energy efficient, reduces our carbon footprint, and is more resilient to climate change and extreme weather;
- continuing to seek and apply best practices for operations, renewal, and development of new housing to support tenant well-being, environmental sustainability, and financial viability;
- solidifying funding partnerships to leverage MVH’s equity and increase what the organization is able to deliver, whether reaching higher levels of sustainability in retrofits, providing more housing, or deepening affordability for tenants;
- seeking partnerships with public, private, and non-profit sectors to advance affordable rental housing across the region;
- monitoring local and global markets and supply chains to assess how they will impact current and future projects; and
- continuing to invest in major capital maintenance and development projects, recognizing that costs will continue to rise and it is critical to move forward and keep momentum.

ALTERNATIVES

This is an information report. No alternatives are presented.

FINANCIAL IMPLICATIONS

There are no financial implications to this report.

CONCLUSION

The *Metro Vancouver Housing 10-Year Plan* was adopted in November 2019 to provide a framework for how the organization will provide, preserve and expand its portfolio of affordable housing across the region. Since this time, the world has changed significantly. The global pandemic and climate change have impacted people and organizations—from the ways we interact with tenants, to the ways in which we design homes and buildings. Significant inflation, rising interest rates, and ongoing uncertainty also pose challenges for the delivery of new housing. Despite these challenges, MVH has taken significant action towards implementing its *10-Year Plan*. With 7 development projects underway to provide ~800 new and redeveloped homes, and 8 major rehabilitation projects to renew 558 homes, MVH is working towards its targets for growth, renewal, energy efficiency, and reduction in greenhouse gas (GHG) emissions, while providing a diverse mix of accessible homes to suit a range of needs and mix of incomes. The Progress Report (Attachment 1) outlines progress to date and highlights how the organization is moving forward and adapting to a changing context.

Attachment

“Metro Vancouver Housing 10-Year Plan – 2022 Progress Update”

52642987



Metro Vancouver Housing 10-Year Plan 2022 Progress Update



Metro Vancouver Housing provides safe and affordable rental homes for more than 9,400 people on 49 sites across the Metro Vancouver region. Our sites are diverse, mixed-income communities that include families, seniors and people with disabilities. Supported primarily by our tenants' rents, we are a non-profit organization that has partnered with tenants, governments and service providers to support healthy and engaged communities since 1974.

Metro Vancouver acknowledges that the region's residents live, work, and learn on the shared territories of many Indigenous peoples, including 10 local First Nations: Katzie, Kwantlen, Kwikwetlem, Matsqui, Musqueam, Qayqayt, Semiahmoo, Squamish, Tsawwassen, and Tsleil-Waututh.

Metro Vancouver respects the diverse and distinct histories, languages, and cultures of First Nations, Métis, and Inuit, which collectively enrich our lives and the region.

Metro Vancouver Housing 10-Year Plan – 2022 Progress Update | July 2022

Metrotower III, 4515 Central Blvd, Burnaby, BC, V5H 0C6

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T: 604-432-6200

metrovancover.org

Front Cover: Metro Vancouver Housing resident

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Introduction

The *Metro Vancouver Housing 10-Year Plan* was adopted in November 2019 to provide a framework for how Metro Vancouver Housing will provide, preserve and expand its portfolio of affordable rental housing across the region.

Since the launch of the 10-Year Plan, the world has changed dramatically. The COVID-19 pandemic spread throughout the world, highlighting existing inequities, and further emphasizing the need for affordable housing. Global markets and supply chains were shaken, resulting in unprecedented construction cost escalation. Rising costs and uncertainty, combined with rising interest rates, are driving the cost of housing higher. As the region’s population continues to grow, more pressure is placed on an already strained rental supply, and social housing waitlists continue to rise, particularly for family and seniors housing.

The effects of climate change are also becoming more impactful in our region. Events such as extreme heat, wildfire smoke and poor air quality, and increasing frequency and intensity of storms and flooding have hit BC dramatically in the past two years. These events emphasize the need for more resilient buildings and communities, and to re-think the way we design and deliver housing.

For more information, see [Appendix 1: Factors Influencing Affordable Housing](#).




Despite these challenges, implementation of the 10-Year Plan is underway and strong. This report outlines what has changed since the adoption of the plan, highlights progress to date towards targets and goals, and describes how Metro Vancouver Housing is adapting and moving forward.





Implementing the Plan – Progress to Date

The *Metro Vancouver Housing 10-Year Plan* set key goals, actions, and targets to provide, preserve, and expand affordable rental housing across the region. The following section outlines progress towards plan targets and highlights key initiatives undertaken to date to deliver on goals and actions.

Targets

10-YEAR TARGET	PROGRESS TO DATE	STATUS
 Mixed-income Maintain at least 30% of our portfolio as Rent-Geared-to-Income to support a range of affordability needs and ensure long-term financial sustainability.	<p>Currently 31% of units are Rent-Geared-to-Income (as of Q1 2022).</p> <p>By providing a mix of incomes, MVH is able to subsidize rents across its portfolio, and support inclusive communities.</p>	On Track
 Diverse housing types Maintain at least 70% of portfolio as 2-bedroom units or larger to support family-friendly housing and provide a mix of unit sizes to allow flexibility and suit a range of needs.	<p>Currently 81% of units are family sized units (2-bedroom or larger).</p> <p>New development projects are targeting 50-60% family units to maintain a focus on family housing while providing more options for seniors, singles, and couples. Having a range of home sizes within each building allows people to stay in the community as their needs change.</p> <p>With ~800 units currently in design or construction, this will help bring the total of family sized units in our portfolio to 75%.</p>	In Progress
 Energy efficient Reduce energy consumption by 25% for major rehabilitations, such as building envelope upgrades, and for new construction (from 2015 National Energy Code for Buildings).	<p>All current and planned projects are designed to reduce energy consumption by at least 25%.</p> <ul style="list-style-type: none"> • Major building rehabilitations are targeting 25–50% better • New construction projects are targeting 25–55+% better 	On Track

10-YEAR TARGET	PROGRESS TO DATE	STATUS
 Low emission Reduce GHG emissions in housing portfolio by 45% (from 2010 levels) over the next 10 years to work towards the region's goal of being carbon neutral by 2050.	<p>In 2021, MVH's entire portfolio produced 7.88 gCO₂/m², a 10% reduction from 2010 levels. Reducing total GHG emissions will be a challenge as we continue to build more housing; even though all new MVH buildings are fully electric, there's still a small portion of GHG emissions associated with electricity use.</p> <p>When adjusted for what is within MVH's control, such as operational changes and upgrading equipment (but not accounting for changes in weather or increased floor space from new construction), the 2021 measure (7.88 gCO₂/m²*HDD) show a 23% reduction from 2010 levels.¹</p> <p>With its 10-Year Capital Maintenance Plan underway, MVH is currently on track to reach 42% reduction from 2010 levels with upgrades to existing systems. And, as technology becomes more readily available and cost effective, MVH may exceed the 45% reduction target.</p>	On Track
 Well-maintained Maintain a portfolio-wide Facility Condition Index at or below 20% over the next 10 years to support safe and healthy homes for existing tenants.	<p>Current Facility Condition Index (FCI): 13.5% (FCI is an industry standard used to measure the condition of buildings in our portfolio.)</p> <p>Metro Vancouver Housing's asset management program monitors FCI and uses this measure to help prioritize maintenance and renewal projects to meet our 10-year target. This program also feeds into redevelopment planning by identifying which properties are candidates for renewal vs. redevelopment.</p>	On Track
 Age-friendly Work towards 20% of units as adaptable or fully accessible to support people of all ages and abilities.	<p>Currently 6% of homes in our portfolio are accessible or adaptable</p> <p>All new/redevelopment projects are being designed as 100% adaptable and/or accessible. With ~800 units in design or construction, this will help bring our total portfolio to 24%, exceeding our 10-year target.</p>	On Track
 Growth Increase housing portfolio with 1,350 new and redeveloped units approved over the next 10 years.	<p>7 projects are underway to provide ~800 new and redeveloped units. This represents close to 60% of the target with projects in the first two years of the plan. Given the rising cost of construction, projects were 'front-loaded' to best leverage available funding.</p> <p>Metro Vancouver Housing is seeking additional funding support to continue with additional projects and to provide even deeper affordability, with an aspirational target of 2000+ new and redeveloped units.</p>	In Progress

¹ The gCO₂/m²*HDD measure eliminates the impact of increased floorspace (m²) as well as weather variables (HDD = Heating Degree Days, HDD is a count of the amount of hours needed throughout a year to heat your building. i.e. higher HDD = colder year)



Support Healthy, Engaged Communities

We know that homes are more than just buildings. By working closely with our tenants, Metro Vancouver Housing (MVH) supports a wide range of tenant engagement and community building programs tailored to tenant needs and interests.

1.1 Continue to engage and expand tenant associations and deliver quality programs to support community building.

- Continuing to work with existing tenant associations to deliver programs that support community building such as clean up days, spring flower program, crime prevention programs, community gardens, community/environmental clean-ups, food skills for families, educational workshops, tenant social events, housing extreme makeovers, and mural painting.
- Working closely with tenants who are interested in creating associations to support engagement initiatives that are tenant-led.
- Implementing a welcome process for new tenants, to provide information at move-in and a check-in with them a few months after move-in. This helps to form relationships between tenants and staff, share information about resources and programs, and encourage participation in tenant associations and community building programs.
- Working to provide programs and opportunities at housing sites where there are no tenant associations. This helps to provide flexibility for tenants and families who may be interested in participating in activities but don't have time or interest in participating in an ongoing way, or to generate interest in creating tenant associations where they don't exist.

1.2 Explore opportunities for new programs and partnerships to engage and empower tenants.

- Seeking new partnerships to expand tenant programs, such as:
- Collaborating with other Metro Vancouver departments to deliver tenant programming (e.g., partnering with Regional Parks to coordinate field trips and custom programs for MVH tenants).



- Working with Immigrant Link Society to introduce a Free Food Program to help minimize food waste and support families in need.
- Collaborating with FortisBC to hold energy saving competitions with tenant groups to raise awareness and promote energy conservation.
- Collaborating with BC Hydro to engage tenants on decorative wrap designs for hydro boxes and involve tenants in beautifying housing sites.
- Collaborating with local police on crime prevention programs for housing sites.
- Introducing and expanding new programs targeted to tenant needs and interests. For example:
 - Free Food Program to help minimize food waste and support families in need
 - Hydroponics and Fogponics Pilot Projects at Community Gardens, with tenant-led training and gardening workshops
 - Playspace Design Projects to engage tenants in designing and painting new outdoor play areas to provide safe spaces for kids to play and ride bikes away from roadways
 - Pop-up vaccine clinics at select seniors housing sites, to provide easy access for flu shots and COVID booster shots
- Updating tenant communications to make information more engaging and easier to access (e.g., website, online forms, tenant newsletters, tenant handouts and information guides).
- Engaging and educating tenants around waste management and the roll out of new waste management systems, in partnership with other Metro Vancouver departments and municipalities.

1.3 Complete a full review of all tenant policies and tenancy agreements to ensure alignment with industry standards and best practices.

- Complete (2021). Moving forward, MVH will continue to review policies annually and monitor industry standards, best practices, and tenant/staff needs to update or add policies on an ongoing basis.

1.4 Explore affordability models to support financially sustainable operations and tenant affordability.

- Approved a new Tenant Selection Policy (2020) to clearly outline income limits and eligibility criteria to further align with BC Housing, and provide greater clarity for staff and tenants.
- Exploring a range of affordability models and financial scenarios for new development projects to assess the impacts of funding partners, construction escalation, rising interest rates, and financing.

1.5 Continue to invest in staff resources to deliver and maintain quality housing and tenant services.

- Implementing staff training and supporting capacity building in topics such as health and safety, operations and tenant management during inclement weather, tenant well-being and mental health, diversity and inclusion, respectful workplaces, crime prevention, emerging practices in sustainable/high-performing buildings, accessibility, Indigenous relations, archaeology practices, community building and tenant engagement, and emergency preparedness.
- Creating and implementing new standards, templates, and processes to enhance efficiency of operations, maintenance, and development projects. For example, project management reporting, tenant relocation supports, community engagement materials, moving forms online, and standardizing processes for site maintenance.

Free Food Program

Metro Vancouver Housing, in partnership with Immigrant Link Centre Society, introduced a Free Food Program at a number of its housing sites, redistributing perishable food that is being disposed of from grocery stores prior to its "best before" date. This important program assists residents with their grocery bills and provides healthy, nutritious food. This successful program is currently serving 150 families across 13 housing sites and will be expanded across Metro Vancouver Housing sites to serve even more communities in need.

"Thank you so much for the free food program. It helps so many families."

— Metro Vancouver Housing Tenant



Hydroponic gardening towers at MVH's Habitat Villa community gardens



"The hydroponics pilot program is a wonderful learning experience and a great way to teach kids about hydroponics and the life cycles of plants."

—Metro Vancouver Housing Tenant

Hydroponics and Fogponics – Gardening Pilot Project

Benny, a Metro Vancouver Housing resident and avid gardener, worked with Metro Vancouver Housing to roll out these two hydroponic tower systems as a pilot project to add to existing community gardens. These systems support plants to grow in nutrient-rich water without soil. This makes growing much faster so that food plants can be harvested up to three times per season. Residents have embraced this project and engaged kids in gardening, from growing seedlings to placing them in the towers to grow and mature. Plantings have included arugula, spinach, and bok choy.

Interest in the project is quickly spreading to other buildings and organizations. Building on this success, residents are now exploring fogponics, another form of growing plants without soil, that uses humidity to deliver nutrients to plant roots.

GOAL 2

Preserve and Renew Existing Housing to Maintain Affordability and Improve Sustainability And Accessibility

Due to the cost of development, existing housing tends to be more affordable than new housing, making it critical to maintain our existing stock of affordable rental housing. At the same time, older buildings tend to be less energy efficient and produce higher carbon emissions than newer ones. By investing in renewing its existing housing stock, Metro Vancouver Housing (MVH) can maintain quality affordable homes, improve tenant comfort, and enhance sustainability.

2.1 Continue to implement Metro Vancouver Housing's asset management program to maintain and renew existing housing.

- Metro Vancouver Housing uses a comprehensive asset management program and ongoing monitoring and assessment to prioritize minor and capital maintenance across the portfolio. Eight major projects are underway that will renew 558 homes, upgrade buildings and outdoor amenities, enhance energy efficiency, and reduce GHG emissions.
- Evergreen Downs, Delta: construction completed in 2022
- Kelly Court, Vancouver: construction phase
- Strathearn Court, Vancouver: design and approvals phase
- Reframed Initiative: MVH is collaborating with other organizations to explore innovative and replicable design approaches for building rehabilitation for six different housing sites, including three MVH properties (Crown Manor in New Westminster, Le Chateau Place in Coquitlam, and Manor House in the City of North Vancouver)
- Minato West, Richmond: conceptual design phase
- Somerset Gardens, Surrey: conceptual design phase

2.2 Continue to explore and implement new technology to improve energy efficiency and reduce greenhouse gas emissions of existing housing.

- In combination with asset management, MVH uses an energy management program to strategically replace equipment and take action towards its energy and carbon goals. The program assesses



energy use across existing buildings and identifies where upgrading specific equipment could make the most significant impact towards reducing its energy and greenhouse gas emissions. Recent projects include:

- Hugh Bird Domestic Hot Water (DHW) Project: replaced a mid-efficiency unit with a Gas Absorption Heat Pump (GAHP) unit and high-efficiency condensing boiler backup that was 100% fully funded by FortisBC. This reduced natural gas usage and GHG emissions by roughly 30%.
- Following on from the success to the Hugh Bird project, MVH is now undertaking a second pilot project with FortisBC to replace a natural gas make up air unit with a GAHP unit.
- This strategic approach to energy management is also used to assess and prioritize capital maintenance projects and create a 10-year plan for capital investment to address existing housing needs and work towards MVH's *10-Year Plan* goals for GHG emission reductions.

2.3 Incorporate adaptable, barrier-free design elements upon renovation of units and common areas to enhance accessibility of existing housing.

- Construction is underway for a full building rehabilitation at MVH's Kelly Court property, a 100% wheelchair accessible building. The rehabilitation will give new life to the building and make outdoor amenities more accessible (i.e., wheelchair accessible community garden planters and paths).
- When renovating units, MVH takes step to enhance unit accessibility wherever possible. For example, adding reinforcements in bathroom walls to add custom grab bars, and upgrading items like door handles and faucets to more accessible versions.

- Where possible, MVH is also exploring opportunities to expand housing through rehabilitation projects (e.g., if there is potential to add additional units while renewing the building). This could provide the opportunity to add more accessible units to existing buildings.

2.4 Update MVH Building Standards to support attractive, age-friendly housing that is durable and cost-effective to maintain.

- Updating Building Standards to integrate new products and practices that support livability and accessibility. For example, switching from carpeted flooring to vinyl plank flooring presents fewer trip hazards for people with mobility challenges, while also making floors more durable and easier to clean, and reducing allergies and respiratory issues. Other examples include upgrading door handles and faucets, and using colour contrast for critical surfaces and edges to support people with visual impairments.

2.5 Continue to explore funding and partnership opportunities to support capital maintenance and enhance sustainability of existing housing.

- Since 2019, MVH has obtained over \$660,000 in funding from FortisBC and CleanBC for energy related projects. Additional applications and processes are underway to seek an additional \$11 million to support capital maintenance projects that enhance energy efficiency and reduce GHG emissions.
- Financing building rehabilitation projects to better leverage MVH equity and advance more projects sooner to mitigate rising construction costs and interest rates.
- Collaborating with the BC Non-Profit Housing Association, BC Housing, Pembina Institute and City of Vancouver through the "Reframed Initiative" to explore ways to innovate and improve non-market building rehabilitation (see Goal 4 for details).

Upgraded and expanded outdoor amenity space and community gardens



"Thank you for a wonderful, well-thought out project. I'm very happy with the renovations."

—MVH Tenant

The Benefits of Building Renewal— Evergreen Downs Project Highlight

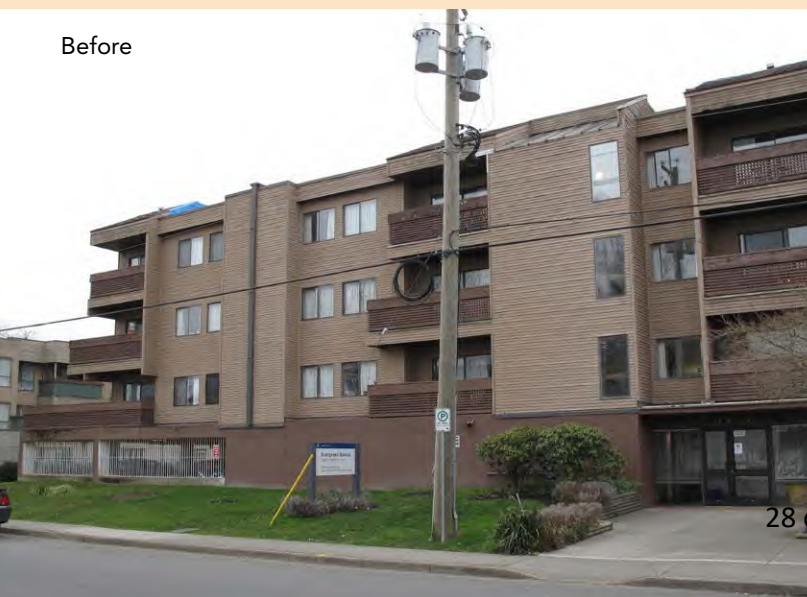
Metro Vancouver Housing recently completed a building rehabilitation at its Evergreen Downs property in Delta. The project involved replacing the exterior wall cladding, windows and doors, roof membrane, and balconies, as well as upgrading the outdoor amenity space. Additional insulation was added, along with a new system for heating/cooling and air ventilation in hallways, making the building more energy efficient and comfortable for tenants throughout all seasons.

Tenants were engaged in the re-design of the outdoor amenity space and expansion of community gardens. The project will extend the life of the building by at least 40 years and result in significant savings in energy and GHG emissions, provide a more comfortable building for tenants, improve building resilience to extreme weather events, lower energy bills for MVH and tenants, and refresh the building's aesthetic, helping to promote a sense of pride for tenants and staff.

"I saw a reduction of \$50 over a two-month period from the same period last year on my heating bill. And the windows are so nice and quiet compared to the old ones."

—Metro Vancouver Housing Tenant

Before



After





2021 FortisBC Efficiency in Action Award for Outstanding Achievement in Energy Savings

Metro Vancouver Housing won the Innovation Award for a Gas Absorption Heat Pump Project at its Hugh Bird Residence. This project reduces GHG emissions by 10 tonnes CO₂ per year (equivalent to driving a gas vehicle 40,000 kilometres) and provides operational savings of about \$2,000/year.



Gas Absorption Heat Pump
at MVH's Hugh Bird property

“[Metro Vancouver Housing’s] willingness to learn about this new technology and leadership in participating not only led to an impressive 35% savings for domestic water heating at their site, but also contributed to a successful pilot project that is leading to the launch of a gas heat pump rebate program for all FortisBC customers.”

– FortisBC

GOAL 3

Grow Strategically Through Redevelopment and Expansion

At a time when land costs are ever-rising, Metro Vancouver Housing (MVH) has a real opportunity to provide more housing through redevelopment and expansion of our existing housing sites, and partnerships to build new housing on public land. Having access to land means we can use our funding more effectively and have a more significant impact.

3.1 Pursue opportunities to expand through redevelopment and acquisition of new housing sites, buildings, and/or units in strategic locations across the region.

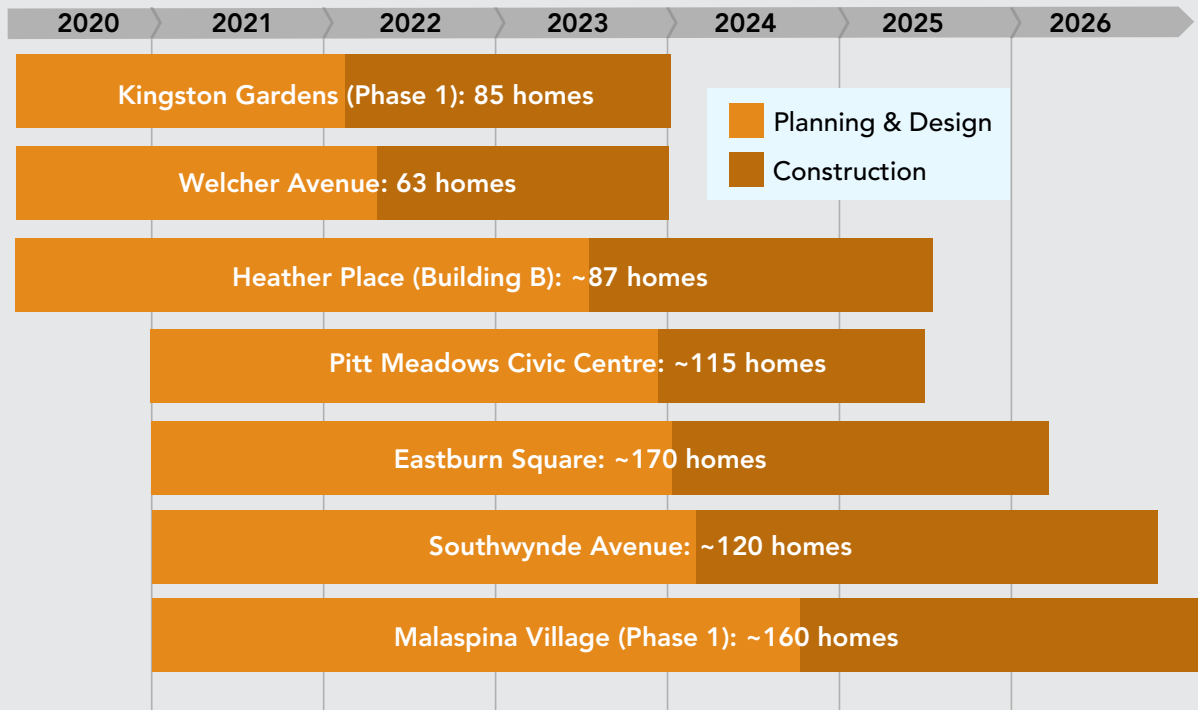
- Seven projects underway will provide roughly 800 new and redeveloped affordable rental homes
 - Two projects (Kingston Gardens and Welcher Avenue) in the construction phase will provide 148 homes in Surrey and Port Coquitlam.
 - Five projects in the design/approval phases will provide over 650 homes as well as roughly 220 affordable childcare spaces in the municipalities of Vancouver, Burnaby, Pitt Meadows, and Coquitlam. These include redevelopment (Heather Place B, Eastburn Square, Malaspina Village Phase 1) and new development (Southwynde Avenue, Pitt Meadows Civic Centre) projects.
- Metro Vancouver Housing is also undertaking feasibility studies and concept planning to explore potential for a new housing site in the District of North Vancouver.

3.2 Create and implement a Redevelopment Plan to assess and prioritize existing housing sites for renewal or redevelopment over time.

- Completed (2020). Implementation of the plan is underway and feeds into ongoing strategic planning for redevelopment and capital maintenance projects.



Metro Vancouver Housing Development Timeline



3.3 Use sustainable design and construction methods to develop housing that is energy efficient and minimizes greenhouse gas emissions.

- The seven projects in design and construction phases integrate a range of sustainable design approaches:
 - Projects in construction phase (Welcher Avenue and Kingston Gardens)—Net Zero Energy Ready/ BC Energy Code Step 4
 - Projects in design/approvals phase (Heather Place B, Eastburn Square, Southwynde Avenue, Pitt Meadows Civic Centre, and Malaspina Village Phase 1)—minimum BC Energy Code Step 3 with low carbon systems, and exploring feasibility and funding opportunities to further enhance energy efficiency and reduce GHG emissions.
- Working with municipalities to ensure appropriate parking supply for new affordable housing and exploring options to support alternative transportation (e.g., secure bike parking, car share).
- Integrating electric vehicle charging and/or capacity in all new housing developments, and exploring opportunities for electric bike charging where possible.
- Exploring opportunities to enhance sustainability in new housing developments (see Welcher Avenue Net Zero Energy Study below), and exploring the feasibility of applying new technologies (e.g., exploring solar thermal for domestic hot water).

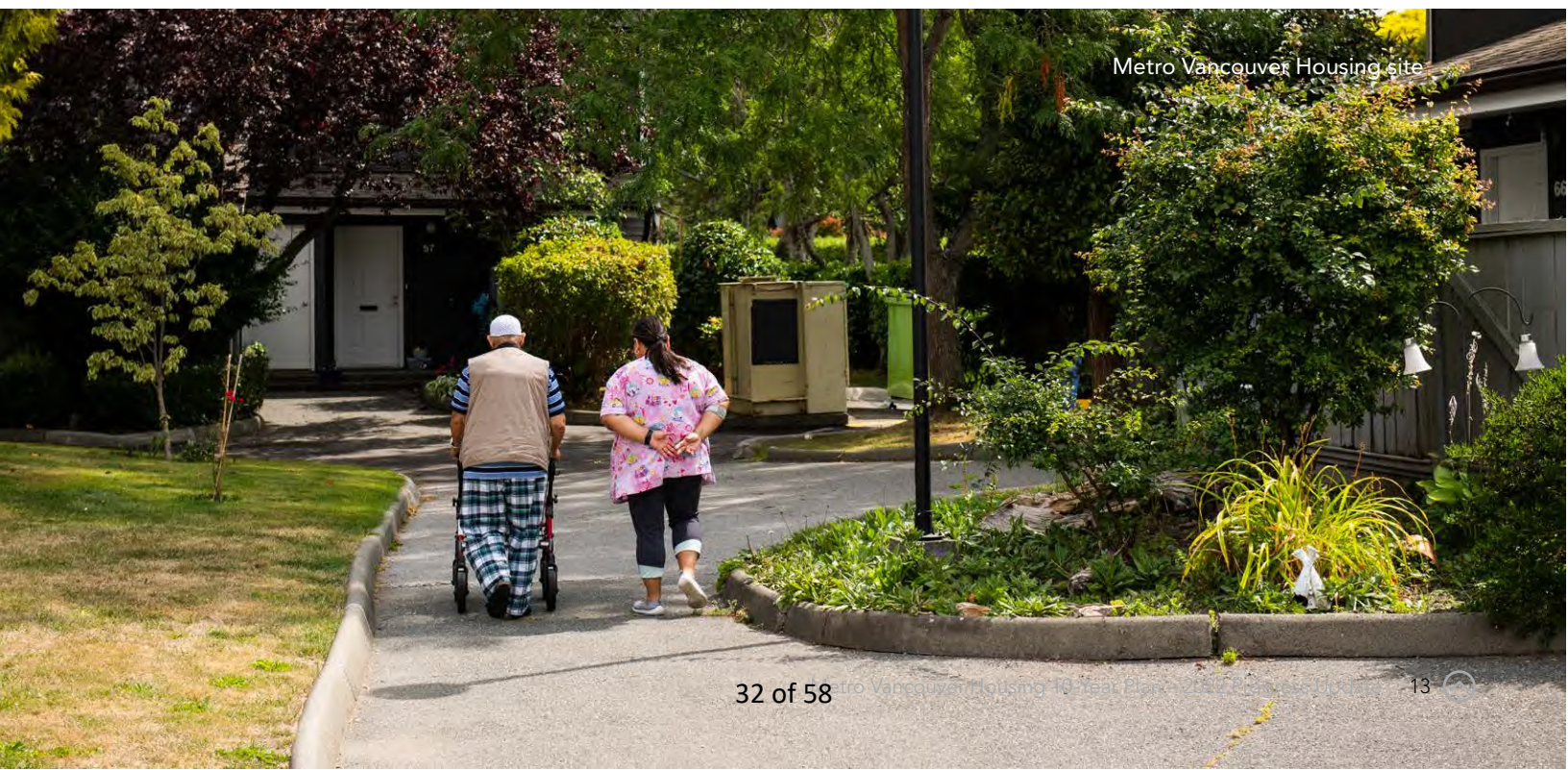
3.4 Apply barrier-free, age-friendly housing design to all new housing construction to support people with disabilities and aging in place.

- The seven projects in design and construction phases integrate a range of accessible, barrier-free, age-friendly design approaches:
 - 5 to 10 per cent wheelchair accessible units in all buildings, with the remainder of units and common areas applying barrier-free and universal design principles.
 - All units will be designed so that they can easily be adapted as tenant's needs change (i.e., reinforced walls to install custom grab bars).
 - Accessible parking and parking for mobility scooters, located as close to elevators as possible.
 - Projects integrate a mix of unit sizes to suit singles/couples, as well as larger units (two- and three-bedrooms) to suit families. By integrating a mix of unit sizes in every building, we will better support tenants to remain in the community as their needs change.

- Indoor and outdoor resident amenities are designed to be flexible, multi-use spaces to suit a wide range of ages and uses. Continuing to explore accessibility standards and best practices to enhance accessibility in new housing developments (see Approach to Accessible, Age-Friendly Housing below).

3.5 Explore opportunities to expand revenue sources to support financially sustainable development and operations.

- Metro Vancouver Housing's mandate is currently to provide affordable rental housing. MVH also has a range of current partnerships to provide related amenities in buildings for tenants and the broader community, such as affordable childcare or seniors centres. However, there is potential to develop mixed-use buildings where ground floor retail spaces could be leased (e.g., for commercial uses) to provide additional revenue, and ideally, also provide convenient access to businesses and services for tenants. Further exploration is needed to assess feasibility and identify specific opportunities.



Welcher Avenue: Net Zero Energy Study

Net Zero Energy (NZE) is defined as a building that has 100% of its energy met by renewable sources of energy, through either on-site or off-site sources. Using funding from Metro Vancouver and the Federation of Canadian Municipalities (FCM), MVH undertook a study for its Welcher Avenue development project to assess the potential to bring the project from the municipal minimum requirements (BC Energy Step Code 3) to NZE, or as close as possible.

The study examined a series of measures to reduce energy use and greenhouse gas emissions, looked at lifecycle costs over 25 years (capital costs, ongoing maintenance, utility costs for tenants and MVH), comfort for tenants, durability, and resilience to changes in climate. The results of this study were applied to the Welcher Avenue project design to enhance sustainability and make the project Net Zero Energy Ready. This means that additional measures could be added in the future to bring the building to NZE, such as adding solar panels to the roof and other renewable energy technology. As an affordable housing development, the trade-offs between affordability and sustainability must be carefully balanced.

Metro Vancouver Housing is undertaking further study to explore the feasibility of renewable energy sources such as solar thermal to help take the building to the next level, and show leadership in providing affordable housing that is also highly sustainable.



Rendering of MVH's Welcher Avenue development

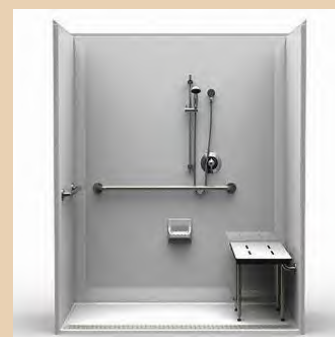
Approach to Accessible, Age-Friendly Housing

One of MVH's goals is to enhance accessibility in existing and new housing to better support people with disabilities and allow people to remain in their homes as they age.

To help guide its approach to accessibility for new housing projects, MVH undertook a detailed review of various accessibility standards, including municipal requirements, BC Building code requirements, funding program design requirements (BC Housing Design Guidelines, and CMHC Co-Investment Fund) to identify the highest minimum standards that must be applied. Following this, MVH worked with an accessibility consultant, as well as an Accessibility Advisory Committee made up of representatives with lived experience, to perform a gap analysis and identify additional best practices that could be applied to further enhance accessibility and livability for people with disabilities. This will be an ongoing assessment as standards, regulations, and best practices continue to evolve.



(top) Example of a wheelchair accessible unit in MVH's Heather Place A property. Appliances, such as microwaves and laundry are located lower to the ground with spaces for wheelchairs to maneuver under sink and stove areas.



(bottom) In washrooms, grab bars and "roll-in" showers are used.

GOAL 4

Develop Partnerships to Expand Affordable Rental Housing Across the Region

Given the challenges of developing affordable housing to meet the needs of our region, we know we can't do it alone. Partnerships between public, private, and non-profit sectors will be critical to achieve our shared goals for a more inclusive, affordable region that everyone can call home.

4.1 Partner with member jurisdictions to support and develop affordable rental housing across the region.

- In 2020, MVH issued an Expression of Interest to member jurisdictions to identify municipally-owned land for Metro Vancouver Housing to develop affordable rental housing. Evaluation criteria were created to help assess opportunities based on: development readiness, density (number of units), livability and proximity to transit and amenities, local government incentives, and regional equity (presence of existing MVH housing).
- Two sites were identified through this first call, in the City of Burnaby and City of Pitt Meadows. Projects are currently in the schematic design and development approvals phase.
- A second round was issued in 2022 that identified a new site in the District of North Vancouver for further exploration. Feasibility studies and concept planning are underway.

4.2 Seek opportunities for partnerships with public sector land owners to develop new affordable rental housing on publicly owned land.

- See action 4.1 for progress in partnering with member jurisdictions.
- Continuing to explore opportunities with other public sector land owners.



4.3 Pursue portfolio-based funding partnerships with other levels of government to support the development and preservation of affordable rental housing.

- Actively pursuing portfolio-based funding partnerships with BC Housing and CMHC to deliver a package of 10-year development priorities.
- Exploring opportunities for other government funding including the Federation of Canadian Municipalities Sustainable Affordable Housing Initiative, BC Hydro, FortisBC, CleanBC, New Childcare Spaces Fund, Enabling Accessibility Fund, Low Carbon Economy Challenge Fund, and more.

4.4 Expand housing management services across the region by taking on affordable rental housing units developed through inclusionary housing policies.

- Metro Vancouver Housing is continuing to explore the feasibility of providing a service to manage affordable units in private developments, and elements that would be required to facilitate successful partnerships. In new developments, private sector developers are often required to build a certain amount of affordable rental units in exchange for additional density. In most cases, municipalities require that these units be managed by a non-profit housing provider. However, policies vary as to how these partnerships occur and there are many considerations such as the distribution of units throughout the building, the design of units to suit specific demographics, use of shared or separated spaces (such as parking and amenity spaces), costs and maintenance of units and the building, and ownership or lease of the affordable units (ideally at a nominal rate).

4.5 Explore opportunities to create new affordable rental housing through innovative partnerships with the development sector and other housing stakeholders.

- Developed principles to guide the exploration of development partnerships and operational partnerships to ensure alignment with MVH objectives.
- Exploring the potential for development partnerships on select sites where there is potential for high density high-rise development, which is not financially feasible for MVH to develop as non-market housing.
- Undertaking land value analysis studies for select sites to support further exploration with the development community.
- Exploring the potential for operational partnerships to meet a broader range of housing needs and/or support mission-aligned goals, such as family-oriented amenities like childcare facilities or other amenities to serve the needs of tenants and broader communities.

4.6 Collaborate and partner with other non-profits to support affordable rental housing in the region.

- Continuing to build relationships, engage, and collaborate with other non-profits and housing stakeholders to share learnings and best practices throughout the affordable housing industry. For example:
 - Collaborating with other organizations through the “Reframed Initiative” to explore ways to innovate and improve non-market building rehabilitation (see Innovation and Leadership in Building Rehabilitation below)
 - Meeting regularly with the BC Nonprofit Housing Association to discuss energy management best practices and learnings to share with the broader sector
 - Engaging with other non-profits and housing stakeholders to share resources, approaches, and lessons learned (e.g., tenant relocation policies and strategies, approaches to operations and maintenance during COVID, working with tenants during elevator rehabilitations, etc.)
- Presenting learnings at conferences and webinars to share knowledge among the industry (e.g., Welcher Avenue Net Zero Energy Feasibility Study, Capital Planning, Deep Retrofits to Protect Affordable Housing)
- Participating in the Housing Registry Steering Committee to monitor demand for affordable housing, connect with other non-profits, and advise on provincial policy
- Advocating to provincial and federal governments for affordable non-profit housing (e.g., providing feedback on reports, budgets, and initiatives)
- Participating in municipal housing action planning initiatives and housing provider round tables to advance affordable housing and inform local housing needs reports
- Supporting other non-profit housing providers (e.g., letters of support for rezoning applications)

Innovation and Leadership in Building Rehabilitation – Pembina Reframed Initiative

Metro Vancouver Housing is working together with BC Non-Profit Housing Association, BC Housing, Pembina Institute and City of Vancouver to make homes safer, more energy-efficient, more resilient and less polluting through the “Reframed Initiative.” Through six demonstration projects (three from Metro Vancouver Housing’s portfolio), “Reframed” brings together the construction industry, building owners, policy makers, and the financial industry to shift current retrofit approaches towards advancing healthier, more comfortable, and resilient low-carbon homes.

Projects are currently in the concept design phase and all six design consultants are working together on “exploration labs” with support from technical experts on climate change, energy efficiency, and health. The findings from these explorations will be implemented in the deep energy retrofit projects, and learnings will be shared out broadly with the affordable housing industry.



Earth tubes are one concept being assessed through the Pembina Reframed exploration labs. Earth tubes temper incoming fresh air by taking advantage of stable soil temperatures (at least 1.8 m deep). A key benefit of this approach is avoiding the use of mechanical equipment that relies on refrigerants, which is a major source of GHG emissions.

Moving Forward

Adapting to a Changing World

Given the challenges of a changing and uncertain world, it will be critical to adapt and stay flexible as Metro Vancouver Housing implements its *10-Year Plan*. Some of the key approaches will include:

- Working closely with our tenants to tailor programs to their needs
- Collaborating with other organizations to broaden the programs MVH can offer to tenants
- Working closely with other non-profits and housing stakeholders to share resources, practices, and learnings, and to support each other in leadership and innovation
- Working with tenants to raise awareness and shift practices to support sustainability (i.e., conserving energy and water, reducing waste)
- Upgrading existing buildings and building new housing that is energy efficient, reduces our carbon footprint, and is more resilient to climate change and extreme weather
- Continuing to seek and apply best practices for operations, renewal, and development of new housing to support tenant well-being, environmental sustainability, and financial viability
- Seeking funding partnerships to leverage MVH's equity and increase what the organization is able to deliver, whether reaching higher levels of sustainability in retrofits, providing more housing, or deepening affordability for tenants
- Seeking partnerships with public, private, and non-profit sectors to advance affordable rental housing across the region
- Monitoring local and global markets and supply chains to assess how they will impact current and future projects
- Continuing to invest in major capital maintenance and development projects, recognizing that costs will continue to rise and it is critical to move forward and keep momentum

Next Steps

Metro Vancouver Housing will continue to move forward with implementing the *10-Year Plan*, and use the plan to guide decision-making for operations, maintenance and renewal, and development of new housing.

Targets and performance measures will be tracked and reported on an ongoing basis, with Progress Reports every two years.

Appendix 1: Factors Influencing Affordable Housing

Pandemic – Short & Long Term Impacts

Starting in 2020, just months after the *10-Year Plan* was adopted, the COVID-19 pandemic spread throughout the world, affecting every industry and community. The effects, however, were not the same for all. The pandemic highlighted existing inequities, and disproportionately impacted those who were already disadvantaged such as lower income households, people who are or at risk of homelessness, Indigenous and racialized families, people with disabilities, and seniors. The pandemic also highlighted issues around childcare, domestic violence, essential workers, wage inequity, unemployment, food security, access to healthcare, social isolation, mental health and well-being, affordability issues, access to appropriate housing and outdoor spaces, and the ways in which we live, work, shop, and socialize. These issues further emphasized the need for affordable housing to support equitable and resilient communities.

For MVH, some of the biggest impacts at the start of the pandemic included:

- **Operational safety.** Staff quickly adapted to new safety procedures for interacting with tenants and housing sites such as sanitizing and distancing measures, use of personal protective equipment, and where possible, switching to virtual communications.
- **Tenant affordability.** At the start of the pandemic, federal and provincial financial assistance was available for those who had been impacted by job loss and rent increases were frozen. Metro Vancouver Housing worked closely with our tenants to ensure that resources were in place and that no evictions occurred due to financial issues caused by the pandemic.
- **Tenant programs and support.** Metro Vancouver Housing worked with tenants and other organizations to tailor programs to the issues that were most pressing for tenants including affordability, food security, and mental and physical well-being. Metro Vancouver Housing introduced programs like the Free Food Program, expanded community gardening, provided pop-up vaccine clinics at seniors housing buildings, and helped to find safe ways to exercise and socialize such as exercise challenges and the creation of new outdoor play spaces.
- **Development delays.** As the world adjusted to safe distancing protocols on job sites, and switching from in person to digital communications, there were some delays to municipal development approvals, and to construction contractors which affected project timelines.
- **Escalation.** The start of the pandemic triggered major global and local impacts to supply chains, material shortages, and labour shortages, which led to significant increases in costs across many industries. This impacted everything from construction costs for housing projects, to operating/maintenance costs, to the cost of food and everyday items which impacted overall affordability for residents across the region, particularly for lower income households.



There are also many longer-term implications, and uncertainties moving forward:

- **Challenges related in inequity and affordability will continue.** With rising housing costs and stagnating wages, the demand for affordable housing will continue to rise, particularly for vulnerable populations.
- **Reconsidering how we design housing to live, work, and gather.** The pandemic highlighted the importance of certain features of our homes and the need to reconsider how we design homes for the future. For example, planning for live/work spaces, the need for larger mail/parcel rooms, the importance of personal/private outdoor space, the ways in which shared amenity spaces can be used, the importance of outdoor spaces for social gathering, and integration of gardening for food security.



- **Ongoing uncertainty.** With numerous waves and strains of the COVID-19 virus, the world continues to adapt to an uncertain future. This will continue to affect and guide how MVH designs and delivers housing, operations, and tenant programs.

Rising Housing Costs

As housing costs continue to rise across the region, households at all points of the housing continuum are feeling the effects. The following outlines some of the key factors driving the need for more affordable housing:

- **A growing and changing population.** Between 2016 and 2021, Metro Vancouver's population grew by 7.3 per cent, an additional 179,395 people.² The population continues to increase, however, the land base available for housing construction is limited by the region's natural geography and policy framework. At the same time, the average household size is decreasing.³ Fewer people per household combined with a growing population means that we need even more dwellings in order to accommodate everyone. Our population is also aging and there is a need to provide more accessible and age-friendly housing for seniors.
- **Stagnating incomes.** Rental rates in the region have been growing at a much faster pace than incomes, making it harder for lower income households to make ends meet. Between 2002 and 2021, median rents in the region increased by 97 per cent, while average wages increased by only 65 per cent.⁴

There is not enough rental housing in our region. Over the past 5 years in Metro Vancouver, the number of renter households grew by over 22% while the number of new rental homes grew by only 2.5%.

- **An insufficient supply of rental housing.** Construction of purpose-built rental housing has not kept pace with the growing number of renters. Between 2006 and 2016, the number of renter households in Metro Vancouver increased by 22.4 per cent,⁵ while rental units increased by just 2.5 per cent.⁶ It is also challenging to provide affordable rental housing where it is needed most, such as near transit and amenities, due to higher land costs and demand in these areas. Research has shown that lower income renter households can spend up to two-thirds of their pre-tax income on housing and transportation costs alone, and that living near frequent transit makes it easier to absorb high housing costs.⁷

² Statistics Canada, Census of Population, 2021

³ Statistics Canada, Census of Population, 2016, 2021

⁴ CMHC, Rental Market Survey, 2021

⁵ Ibid.

⁶ CMHC, Rental Market Survey, 2021

⁷ Metro Vancouver, *Housing + Transportation Cost Burden Study*, 2015

- **Affordability challenges, particularly for low and moderate income households.** Low and moderate income households face significant challenges in finding units that they can afford in the Metro Vancouver region. Close to one-third of renter households are in 'core housing need', meaning that they are living in housing that is unaffordable and/or falls below acceptable housing standards.⁸ In 2021, Less than 25 per cent of purpose-built rental units were affordable to households earning less than \$48,000 per year.⁹

- **A significant need for family-sized housing units.** The availability of family-sized rental units continues to be a serious challenge, with only 27 per cent of all purpose built rental units in the region having two or more bedrooms.¹⁰ This is even more challenging for affordable family housing. The number of families waiting for subsidized housing has increased significantly in recent years (+40.6 per cent between 2016 and 2021 and +76.6 per cent between 2009 and 2021).¹¹

Social housing is not keeping pace with population growth.

Over the past 5 years in Metro Vancouver, our population grew by 7.3% while social housing waitlists grew by over 38%.

- **Growing waitlists for subsidized housing.** The demand for affordable housing is outpacing population growth. Between 2016 and 2021, the population in Metro Vancouver increased by 7.3 per cent while social housing waitlists increased by 38.6 per cent. In 2021, there were 14,552 households on the waitlist, of which 5,527 were senior households, and 4,933 were family households.

8 Statistics Canada, Census of Population, 2016

9 CMHC, Rental Market Survey, 2021

10 Ibid.

11 BC Housing, Research and Corporate Planning Department, May 2021

Climate Change and Extreme Weather Events

The effects of climate change are becoming more and more impactful in our region. Events such as extreme heat and “heat dome” impacts, wildfire smoke and poor air quality, and increasing frequency and intensity of storms and flooding have hit BC dramatically in the past two years.

Such events emphasize the need for more resilient systems, organizations, buildings, and communities. For MVH, this means:

- **Building design for resiliency.** Moving forward, MVH will continue to approach the design of new housing, and explore required upgrades in existing housing, to ensure tenant safety and well-being (e.g., effective cooling and air filtration, spaces of refuge, backup power in the event of emergencies).
- **Tenant communications and support.** Sharing information quickly and effectively with tenants during extreme weather events, such as heat advisories, to ensure tenants are aware of potential health risks and are connected with resources they may need.
- **Community building.** Tenant engagement and community building is also critical. In the case of emergencies or extreme events, studies have shown that social fabric is one of the most important indicators of resilience.¹² Connecting neighbours and forming supportive communities is one of the ways that MVH can help to support and empower tenants and build community resilience. Another example, is using programs such as community gardening to support food security.
- **Emergency preparedness.** Metro Vancouver Housing has emergency preparedness plans and works with tenants and staff around education and awareness. Information is shared with tenants at move-in, through community bulletins, and through engagement with Tenant Associations (e.g., holding events and workshops with first responders). Staff also participate in regular safety and emergency training.



Example of an active in-suite cooling unit used in major capital projects where energy modelling has identified potential for overheating. Such units are used along with other active and passive approaches to address overheating.



New Electric Air Source Heat Pump (ASHP) installed at Meridian Village Apartment in 2021. Metro Vancouver Housing is replacing existing air handling units with electric ASHPs to provide fresh air and ventilation to the common area hallways in apartment buildings. Most existing systems blow air at ambient temperature, whereas the new electric versions have the ability to heat and cool the outside air, providing a much higher level of comfort in all seasons.

¹² Community Housing for Resilient Communities Report, BC Housing Research Centre, 2019

Cost Escalation, Risk, and Uncertainty

The past two years have seen unprecedented escalation in construction costs, as well as increased fuel prices, interest rates, and geopolitical challenges. These can impact new housing development as well as the operation of existing housing. Moving forward, MVH will continue to monitor global and local markets and assess potential implications for project budgets as well as long-term budgeting and strategic planning. Some of the key challenges include:

- **Rising escalation rates.** Over the past decade (before 2020), BC has seen a steady increase of around 2.4 to 2.8 per cent in construction escalation, with a high demand for housing construction driven by population growth and immigration. Since January 2020, escalation rates across Vancouver and BC have averaged approximately 15 per cent per year.¹³
- **Rising interest rates.** Starting in spring 2022, interest rates have begun to rise significantly, with increases expected to continue. This will impact development projects that do not yet have financing in place by reducing the amount that can be borrowed and increasing the need for equity from MVH or other funding sources.
- **Fuel prices.** Fuel prices have increased dramatically, rising by 25 to 30 per cent in the Lower Mainland over the past two years and hitting all-time highs. This impacts existing building operations that rely on natural gas, as well as new construction that relies on fuel for transporting materials and manufacturing building materials such as steel, cement, bricks, and glass.
- **Geopolitical challenges.** Major geopolitical issues can impact development projects, from increased costs and uncertainty during planning stages, to a lack of materials and supply chain issues during construction. Major events such as the Russian invasion of Ukraine and China's Zero-COVID Strategy have had significant impacts on global markets and supply chains and will continue to have impacts moving forward. Additionally, major initiatives, such as the United States' plans to invest \$1.2 trillion in building and upgrading national infrastructure over the next five years, could have significant impacts on the Canadian construction markets in terms of access to materials and labour.
- **Competition with for-profit developers.** As a non-profit, MVH faces the additional challenge of having to compete with for-profit developers who are better able to absorb cost increases. With private market housing, construction cost increases are generally passed on to the end consumer. However, for non-market housing, rental revenues are limited, so it becomes much harder for projects to withstand cost increases.

¹³ Hanscombe Quantity Surveyors Report March 29, 2022; and Residential Construction Price Index

Funding

The *Metro Vancouver Housing 10-Year Plan* committed \$190 million from Metro Vancouver Housing (MVH) over the next decade to support the renewal of existing housing (\$90 million), and redevelopment/development of new housing (\$100 million).

To deliver more housing and support deeper affordability for tenants, MVH is seeking to leverage its own investment with provincial and federal funding support. Additional funding and low-cost financing is critical to support the creation of non-market housing with more deeply subsidized rents.

The Province of BC and the federal government have made significant investments in affordable housing and set goals to deliver more affordable rental housing. However, funding programs are highly competitive and there can be challenges in accessing funding.

To be eligible for various funding programs, projects must meet high performance standards and design requirements. Generally, these standards exceed building code and municipal requirements and result in higher project costs. While funding can help support these additional costs and deliver affordable housing that is also high-performing, it is not guaranteed. This requires non-profit housing providers to take a risk in designing more expensive projects, without knowing if

they will receive funding support. If additional funding is not available, this may result in costly re-designs or make projects unviable.

As a mixed-income housing provider, MVH is primarily self-funded when it comes to operations. This means the organization does not rely on property taxes to support operations. Instead, MVH uses a mixed-income approach to provide a range of subsidies across its portfolio. All MVH housing is rented at below-market rents, with about one-third of tenants receiving deeper subsidies based on their income, and the remainder receiving minor subsidies (10-20% below market rental rates).

However, when it comes to building new housing, it is very challenging to support deeper subsidies without additional funding support.

Regulations and Approvals

In addition to meeting funding agency requirements, development projects must also meet municipal and provincial regulations and policies, and move through development approval processes, which can take anywhere from one to two years or more.

Many municipalities strongly support affordable housing and can demonstrate this through their actions, such as pre-zoning land for affordable housing, waiving development cost charges or permit fees, reducing parking requirements, providing additional density, or supporting expedited approval processes. Municipal approval processes, such as rezoning land, help ensure that new developments align with community goals and bylaws, and engage the public on what's happening in their community. However, these processes can be time-consuming and add significant cost to affordable housing projects, particularly where there are delays. In late 2021, CMHC announced a new Housing Accelerator Fund program to help remove barriers and support municipalities to deliver more affordable housing. This program is currently under development but could help to support municipalities and non-profits to streamline affordable housing projects and get homes on the ground more quickly.

Given the rising costs of construction, time is money. As a non-profit housing provider, delays can have a serious impact on project costs, especially given the high costs of construction escalation. For example, for an average MVH development of about 115 units, escalation could cost the project as much as \$200,000 per month. Municipal programs, such as expedited approvals for affordable housing providers, can help save significant time and cost. Supporting the delivery of affordable housing allows non-profit housing providers to better spend their limited resources on providing more homes for people in need.

In addition to meeting current requirements, many regulations are evolving and it is important to understand changes that have occurred or are anticipated in the near future. Some key regulations that will affect the development of new affordable housing include:

- In 2021, the provincial Environmental Management Act (EMA) and Contaminated Sites Regulation was updated to further control the management of contaminated sites. Sites can become contaminated in any number of ways, from historic uses that were never addressed, to the use/storage of certain chemicals or substances like road salt for general maintenance or snow/ice control. The new act requires additional review and approval, which can range from –six to 12 months, depending on the presence of contamination.
- In 2021, the province passed the Accessible British Columbia Act, with the goal of making BC the most progressive province in Canada for people with disabilities by 2024. A process is currently underway to begin developing new accessibility standards.
- The BC Building Code is anticipated to be updated in late 2022. One of the biggest changes will be higher energy efficiency requirements as the BC Energy Step Code is implemented over time.

- Some municipalities are also increasing requirements for new buildings, particularly with regards to energy efficiency and low carbon systems. While MVH currently strives for full electrification for new developments (i.e., not relying on any use of gas or natural gas for mechanical systems), this can add both capital and operating costs to housing projects.
- Both the City of Vancouver and Metro Vancouver are working on establishing GHG regulatory requirements for existing large commercial and residential buildings. This would include energy consumption benchmarking, reporting and performance requirements in coordination with provincial requirements. Metro Vancouver Housing will need to reduce emissions in existing buildings by any combination of operational changes, building retrofits to reduce energy use, or purchasing renewable energy and/or renewable district energy.

As industry standards continue to evolve, they will help support local and national goals for climate change, environmental safety, and livability for all. However, as key elements in the design and approvals process, they can impact the cost of delivering housing quite significantly. Moving forward, it will be important to continue to monitor upcoming and anticipated regulation changes to ensure that MVH stays ahead of the curve in delivering quality housing in a cost-effective manner.



Metro Vancouver is a federation of 21 municipalities, one Electoral Area and one Treaty First Nation that collaboratively plans for and delivers regional-scale services in the greater Vancouver region of British Columbia. Its core services are drinking water, wastewater treatment and solid waste management. Metro Vancouver also provides affordable housing, regulates air quality, plans for urban growth and manages a regional parks system.

www.metrovancover.org

To: Housing Committee

From: Jade Hume, Division Manager, Housing Maintenance & Capital Projects,
Metro Vancouver Housing

Date: June 10, 2022

Meeting Date: July 7, 2022

Subject: **Benefits of Building Rehabilitation: Evergreen Downs**

RECOMMENDATION

That the MVHC Board receive for information the report dated June 10, 2022, titled “Benefits of Building Rehabilitation: Evergreen Downs.”

EXECUTIVE SUMMARY

The *Metro Vancouver Housing 10-Year Plan* sets key targets for Metro Vancouver Housing (MVH) over the next decade, including targets for maintenance of its existing housing sites, and for reducing energy and greenhouse gas (GHG) emissions. By investing in rehabilitating existing housing, Metro Vancouver Housing supports quality, well-maintained affordable housing for tenants, while increasing the sustainability of our existing housing stock.

This report outlines the benefits of building rehabilitation by highlighting a recently completed rehabilitation project at MVH’s Evergreen Downs property. This extended the life of the building by 40 years and resulted in significant energy savings, reduced GHG emissions, enhanced tenant comfort, improved building resilience to extreme weather events, reduced energy bills for MVH and tenants, improved the building’s aesthetic, and provided an upgraded outdoor amenity space for tenants.

PURPOSE

To inform the Housing Committee and MVHC Board about the benefits of building rehabilitation by highlighting the recently completed Evergreen Downs rehabilitation.

BACKGROUND

The *Metro Vancouver Housing 10-Year Plan* sets key targets for Metro Vancouver Housing over the next decade, including targets for maintenance of its existing housing sites, and for reducing energy and greenhouse gas (GHG) emissions. The 10-Year Plan targets also align with Metro Vancouver’s *Climate 2050* plan to reduce GHG emissions by 45% by 2030 (from 2010 levels), and work towards being carbon neutral by 2050. This report outlines how MVH approaches building renewal to meet its targets and highlights the benefits of recently completed building rehabilitation project at Evergreen Downs.

METRO VANCOUVER HOUSING’S APPROACH TO BUILDING RENEWAL

Due to the cost of development, existing housing tends to be more affordable than new housing, making it critical to maintain our existing stock. At the same time, older buildings tend to be less energy efficient and produce higher carbon emissions than newer ones. By investing in renewing its existing housing stock, MVH can maintain quality affordable homes, improve tenant comfort,

enhance sustainability, and maintain deeper affordability. To help achieve these goals, the 10-Year Plan commits \$90M over the next 10 years to support renewal of existing housing, and seeks to leverage this with additional funding support and innovative partnerships.

Asset Management

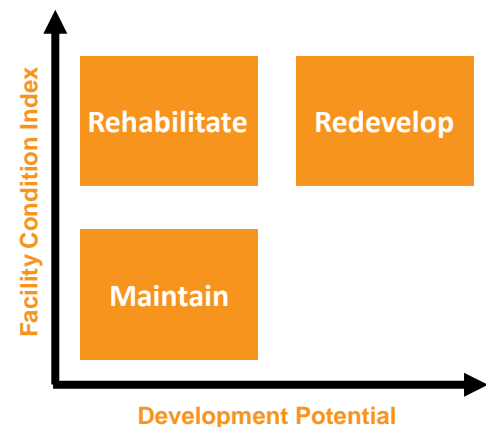
To assess the condition of existing buildings, MVH uses a comprehensive asset management program. Buildings and individual elements such as roofs and windows, are assessed based on their expected life-cycle. These are then validated through regular and ongoing in-person assessments to prioritize investment over the short and long term.

The condition of housing is measured and monitored using a Facility Condition Index (FCI), a consistent industry standard measurement. The FCI represents the percentage of the replacement value that is due for renewal; the lower the FCI, the better condition of the building.

Prioritizing Sites for Renewal & Rehabilitation

Following the creation of the *Metro Vancouver Housing 10-Year Plan*, the *Metro Vancouver Housing Redevelopment Plan* was created to prioritize MVH's existing housing for renewal or redevelopment over time. Housing sites that are in need of investment (have a high FCI) but do not have potential for increased density are candidates for renewal. For some sites, renewal may involve strategic capital maintenance projects. For others, it may require full building rehabilitation.

Building rehabilitation, or deep retrofit, means repairing and replacing exterior components and/or building equipment to extend the lifecycle of the building (i.e., for another 30-50 years). Another benefit, is that most rehabilitation projects can be achieved without tenants having to relocate.



To deliver on its *10-Year Plan* targets, MVH is currently undertaking several building rehabilitation projects with more planned for future years. This report highlights one project that is approaching completion, at MVH's Evergreen Downs complex in Delta.

EVERGREEN DOWNS REHABILITATION PROJECT

Evergreen Downs is a three-level, wood frame apartment building originally constructed in 1982 with 38 residential units. Evergreen Downs was prioritized for rehabilitation due to deteriorated cladding, and active water ingress issues on the roof and at the base of the walls in the courtyard. The intent of the building envelope rehabilitation project was to give this building a new life cycle as it was at the end of its serviceable life with a facility condition index (FCI) of 25%.

The project began in 2019 with conceptual designs, followed by detailed design, which included, adding 4 inches of exterior insulation, installing new fully-electric air source heat pumps (ASHP) that both heat and cool the hallways, replacing the exterior wall cladding, windows and doors, roof membrane, and balconies, as well as expanding and upgrading the outdoor amenity space for

residents. Tenants were informed every step of the way and engaged in the re-design of the outdoor amenity space which included the integration and expansion of community gardens. Following the detailed design completion, colour renderings of the building were provided to tenants, and they were invited to select the final colour of the building cladding.

The project substantially completed construction in May 2022. Final touches are due to be complete by the end of July 2022.

Several benefits are gained with this project including:

- Significant energy improvements: Between October 2021 and April 1st 2022, there has been a cumulative electricity reduction of 111,346 kWh, with an average savings of \$2,400 per month, resulting in lower utility bills for tenants.
- Increased resilience and protection for tenants from extreme weather events: cooling measures were added in hallways to help address extreme heat.
- Improved tenant comfort: new exterior insulation was added to walls and the main level roof, along with conditioned ventilated air.
- Reduced energy bills for tenants: out of 10 responses received from tenants, seven confirmed that their utility bill decreased between \$20-50 per month. One tenant noted that their utility bill decreased by 39%.
- Upgraded and expanded outdoor amenities for tenants: including a new community garden and potting shed in the courtyard.
- An updated aesthetic appearance: the upgraded building brings greater levels of pride and enjoyment for both tenants and staff.



Upgraded and expanded outdoor amenity space and community gardens

Some quotes from tenants that were documented in a post-construction survey include:

- *Thank you for this wonderful, well thought out project! Sincerely, a grateful resident.*
- *The men who came to our unit to work on our windows were most courteous, extremely polite. Thank you.*
- *Everything was handled with care & courtesy. Construction team & management listened to our comments & gave us help when we need it. The building looks great!!! Thank you.*
- *I am very happy with the renovations!*
- Many comments about how quiet the new windows are (compared to old ones).



Before



After

FUTURE BUILDING REHABILITATIONS AT MVH

MVH is currently undertaking several other building rehabilitation projects with more planned for future years. Building on the success of the Evergreen Downs rehabilitation project, MVH is working to enhance innovation and leadership in the existing rental housing market, in particular in the not-for-profit sector for building rehabilitation projects. MVH continues to explore opportunities to maximize our investment in building rehabilitation work and to work with tenants to enhance their experience and comfort in our buildings, their homes.

ALTERNATIVES

This is an information report. No alternatives are presented.

FINANCIAL IMPLICATIONS

The Evergreen Downs rehabilitation total project cost (hard and soft costs) was \$3,605,056 and has extended the life of the building by 40+ years. The project cost was allocated in the 2020-2022 MVHC budget and capital plan.

CONCLUSION

The *Metro Vancouver Housing 10-Year Plan* sets key targets for Metro Vancouver Housing over the next decade, including targets for maintenance of its existing housing sites, and for reducing energy and greenhouse gas (GHG) emissions. By investing in rehabilitating existing housing, Metro Vancouver Housing supports quality, well-maintained affordable housing for tenants, while increasing the sustainability of our existing housing stock.

This report outlines the benefits of building rehabilitation by highlighting a recently completed rehabilitation project at MVH's Evergreen Downs property. This extended the life of the building by 40+ years and resulted in significant energy savings, reduced GHG emissions, enhanced tenant comfort, improved building resilience to extreme weather events, reduced energy bills for MVH and tenants, improved the building's aesthetic, and provided an upgraded outdoor amenity space for tenants.

51283849

To: Housing Committee

From: Jag Klair, Division Manager, Housing Operations,
Regional Planning and Housing Services

Date: June 16, 2022

Meeting Date: July 7, 2022

Subject: **Metro Vancouver Housing – Extreme Heat Protocols**

RECOMMENDATION

That the MVHC Board receive for information the report dated June 16, 2022, titled “Metro Vancouver Housing – Extreme Heat Protocols”.

EXECUTIVE SUMMARY

Following from the ‘heat dome’ experienced in 2021, Metro Vancouver Housing (MVH) established protocols regarding extreme heat events. Protocols were developed in alignment with BC Housing recommendations for pre-season planning, decision making, and response. The approach is twofold: a) how MVH will safeguard tenants and staff regarding extreme heat events within the existing housing stock, and b) how MVH will approach the design of new buildings and retrofits of existing housing.

For existing buildings and tenants, staff a variety of activities will take place on an annual basis to prepare for possible extreme heat events, as well as a set of activities once an event occurs. These include: communications to tenants regarding best practices for staying healthy and comfortable during extended heat advisories, location of cooling stations nearby and emergency contact preparedness. Staff will receive information and training on keeping healthy and safe during events, and staff will perform annual building assessments outlining the condition of air exchange in apartment buildings. For new buildings and full building retrofits, MVH will use a range of active and passive cooling strategies and strategic upgrades for capital maintenance to improve tenant comfort and well-being.

PURPOSE

To inform the Housing Committee and MVHC Board about the steps being taken to prepare for future extreme heat events.

BACKGROUND

Metro Vancouver Housing (MVH) operates 49 sites across the region, housing nearly 9,500 people. MVH housing is independent living geared toward seniors, families and people with disabilities. We care deeply about our residents and staff and their well-being, and actively partner with local service providers to bring relevant programs and services to our sites to support tenants and enrich the community culture. Following from the ‘heat dome’ experienced in 2021, MVH established protocols regarding extreme heat events, and this report summarizes those protocols.

EXTREME HEAT PROTOCOLS FOR EXISTING HOUSING

May of Each Year

The MVH Tenant Programs and Services team issues *Beat the Heat* posters outlining best practices and tips for tenants and staff in case of extreme heat. They also include relevant local information (by municipality/community) on where tenants can go to cool off or breathe in filtered air, such as community centres, libraries, shopping malls, etc. The posters are hung in common areas at each housing site.

Housing Technicians will provide a report on the condition of air exchanges in each MVH apartment building to outline their effectiveness, and identify possible challenges in extreme weather along with solutions or short-term mitigation techniques. Staff will be provided information to ensure they are prepared and informed about how best to perform duties in the event of an extreme heat event.

First Week of June Each Year

Beat the Heat memos are distributed to every household in the housing portfolio. Information on memos includes: tips on how to stay cool, lists of local cooling centres, and other extreme heat messaging. Memos encourage tenants to have a daily contact (family/neighbor), and include an emergency contact form for updated information. Staff also connect with operational partners to share extreme heat protocols.

During a Heat Advisory

Heat advisories are defined as 2+ consecutive days of 29+ degrees Celsius as per Environment Canada. During such events, staff will:

- Ensure cooling rooms in all apartment buildings are open and available for extended hours (24 hours per day) until the heat advisory lifts;
- Look for opportunities to set up shaded outdoor areas for tenants;
- Remind staff and tenants of Beat the Heat tips;
- Provide cooling locations for staff in each Area;
- Provide staff with Iced Electrolytes during shifts; and
- For all apartment buildings, temperature in common areas of each floor will be noted on the daily site walkabout:
 - If the temperature reading is greater than 35 degrees Celsius, staff will alert the Area Manager,
 - For buildings that have high readings, staff will contact Housing Technicians to assess the situation and set up temporary cooling where possible – for example, portable air conditioning units in the corridors or personal mini cooling units to individual tenants.

PLANNING FOR EXTREME HEAT IN NEW DEVELOPMENT & RETROFITS

Extreme weather events are increasingly impacting our region and reinforcing the need for more resilient systems and buildings. The *Metro Vancouver Housing 10-Year Plan* outlines key targets to build more housing and invest in renewing and upgrading our existing housing, while also improving energy efficiency and reducing greenhouse gas (GHG) emissions. The Plan's principles seek balance –

to improve tenant comfort and well-being while also striving to enhance our environmental sustainability and ensure financial sustainability to provide long-term affordability.

When it comes to addressing extreme heat in new housing developments and retrofit projects, balance is key. Cooling is becoming more and more critical as our summers get hotter. This is especially true for the new forms of housing Metro Vancouver Housing is building – high-energy performance wood frame apartment buildings up to 6 stories. Apartment buildings tend to get hotter than townhouses because they include internal corridor spaces, upper stories tend to be taller than trees or landscaping that might offer natural shading, and it's more challenging to provide windows on multiple sides of a unit that could provide cross-breezes to support natural cooling.

However, cooling systems also increases energy use, and contribute to GHG emissions with the use of refrigerants. This is why a layered approach is needed, to apply both passive and active strategies.

- **Passive Cooling Strategies:** Wherever possible, Metro Vancouver Housing will apply passive strategies for cooling in the design of buildings. For example, simple approaches such as building orientation, exterior shading of windows, and landscaping, can have significant impacts on internal temperatures.
- **Active Cooling Strategies:** In all new housing developments, and all major building retrofits, Metro Vancouver Housing will conduct energy modeling and install cooling to prevent overheating where passive strategies are not sufficient. This aligns with BC Housing requirements for housing vulnerable populations (e.g., lower income households and groups like seniors and people with disabilities).
- **Strategic Upgrades for Capital Maintenance:** In existing housing, when rooftop mechanical systems approach their end of life and are in need of replacing, Metro Vancouver Housing will assess options to upgrade systems to provide both heating and cooling to improve tenant comfort.

Ventilation: As our region continues to experience hotter and drier summers, extreme heat is only one of the recurring challenges. The other related challenges are wildfire smoke and air quality. Along with heating and cooling systems, Metro Vancouver Housing is also applying ventilation systems in all new housing developments and major retrofits moving forward.

ALTERNATIVES

This is an information report. No alternatives are presented.

FINANCIAL IMPLICATIONS

For operational protocols for existing housing and tenants, financial implications are included as a part of the Tenant Programs and Services budget.

For new buildings and retrofits, costs associated with integrating or upgrading heating/cooling and ventilation systems are built into the cost of projects. At the planning stage, staff assess and identify the best possible option given budget constraints and current technology. Technologies are quickly evolving, and MVH will continue to monitor and assess options to provide the best alternatives for

tenant comfort and well-being, while meeting our sustainability goals in a cost-effective and efficient manner.

CONCLUSION

As a response to the ‘heat dome’ experienced in 2021, Metro Vancouver Housing has established protocols regarding extreme heat. This report outlines MVH’s approach to safeguard tenants and staff and deal with extreme heat events within the existing housing stock, and approach the design of new buildings and retrofits of existing housing.

For existing buildings and tenants/staff a variety of activities will take place on an annual basis to prepare for possible extreme heat events, as well as a set of activities once an event occurs. These include: communications to tenants regarding best practices for staying healthy and comfortable during extended heat advisories, location of cooling stations nearby and emergency contact preparedness. Staff will receive information and training on keeping healthy and safe during events, and staff will perform annual building assessments outlining the condition of air exchange in apartment buildings. For new buildings and full building retrofits, MVH will use a range of active and passive cooling strategies and strategic upgrades for capital maintenance to improve tenant comfort and well-being.

53354102

To: MVHC Board of Directors

From: Leigh Rollins, Senior Project Engineer, Metro Vancouver Housing

Date: July 12, 2022 Meeting Date: July 29, 2022

Subject: **Welcher Affordable Housing Redevelopment – Grant and Loan Application to the Federation of Canadian Municipalities**

RECOMMENDATION

That the MVHC Board authorize staff to apply for capital project grant and loan project funding through the Federation of Canadian Municipalities Green Municipal Fund Program.

EXECUTIVE SUMMARY

The Federation of Canadian Municipalities (FCM) – Green Municipal Fund (GMF) program supports the construction of high-performance, Netzero Energy Ready (NZER) multi-family affordable housing units by providing up to 20% of project costs contributed equally between grant and loan funding to qualifying projects. The program metrics are directly aligned with Metro Vancouver Housing Corporation's (MVHC) sustainability goals.

With an estimated contribution of \$7.2M, MVHC applied to the FCM-GMF capital funding program to support the redevelopment of its Welcher Avenue site in Port Coquitlam. Having completed the prerequisite steps in the funding process, a Board resolution supporting the application is required to finalize the submission. The request for a resolution was received from FCM after the July 7, 2022 Housing Committee meeting. To maintain momentum with the application and considering the summer committee and Board schedules, the report is being presented directly to the MVHC Board.

PURPOSE

To seek a resolution from the MVHC Board to authorize staff to apply for the Federation of Canadian Municipalities' Green Municipal Fund capital project grant and loan program. This resolution is a requirement of the funding application.

BACKGROUND

At its May 28, 2021 meeting, the MVHC Board authorized the inclusion of energy conservation design elements into the Welcher Avenue redevelopment project scope in support of an application to the Federation of Canadian Municipalities (FCM) – Green Municipal Fund (GMF) program. To progress the application into the final stages of the process, FCM require a Board resolution authorizing an application for funding.

FEDERATION OF CANADIAN MUNICIPALITIES – GREEN MUNICIPAL FUND CAPITAL PROGRAM

The FCM-GMF program is intended to support the construction of new affordable housing projects to a higher environmental standard. The program can provide up to a 20% contribution towards project costs in form of an equal combination of grant and loan to successful applicants. As part of the capital funding application to the FCM-GMF program.

MVHC applied for FCM-GMF funding to support the Welcher Avenue redevelopment project located at 2481 Welcher Avenue, Port Coquitlam. This 5-storey 63-unit development provides affordable rental housing is designed to Step Code 4 and Netzero Energy Ready (NZER) building performance standards that support MVHC's energy and GHG emission targets. If successful, the FCM-GMF application is estimated to contribute \$7.2M split equally between grant and loan funding to the project.

The prerequisite steps in the application process which included a Netzero feasibility study and implementing the necessary energy conservation measures into the final project design were successfully completed. To progress the application, a resolution from the MVHC Board authorizing the application is required. The request for a resolution was received from FCM after the July 7, 2022 Housing Committee meeting. To maintain momentum with the application and considering the summer committee and Board schedules, this report is being presented directly to the MVHC Board.

ALTERNATIVES

1. That the MVHC Board authorize staff to apply for capital project grant and loan project funding through the Federation of Canadian Municipalities Green Municipal Fund Program.
2. That the MVHC Board receive for information the report dated July 12, 2022, titled Welcher Avenue Housing Redevelopment – Grant and Loan Application to the Federation of Canadian Municipalities.

FINANCIAL IMPLICATIONS

There are no costs in submitting an application to the FCM-GMF capital funding program. Should the application be successful, the project would receive up to \$7.2M in combined grant and loan funding, providing financial benefit to the project.

Should alternative two be chosen, MVHC will forfeit this potential grant funding opportunity.

CONCLUSION

The FCM-GMF capital grant and loan funding program requires a resolution from the MVHC Board of Directors confirming the application. If successful, this grant and loan funding could provide a financial benefit to the project of up to \$7.2M. It is recommended that the MVHC Board authorize staff to apply for capital grant and loan funding for up to 20% of project costs through the FCM-GMF program.

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COMMITTEE INFORMATION ITEMS AND DELEGATION SUMMARIES

Metro Vancouver Housing Corporation
Board Meeting Date – Friday, July 29, 2022

This information item, listing recent information received by committee, is provided for the MVHC Board's information. Please access a complete PDF package [here](#).

Housing Committee – July 7, 2022*Delegations:*

Nathan Davidowicz

Subject: New Bill (changes to the Transportation Act) and Missed Opportunities for the New Housing Projects

No summary provided

Information Items:

5.2 Draft Metro Vancouver Housing 2023-2027 Capital Development and Capital Maintenance Plans

53942019