
To: Indigenous Relations Committee

From: Marino Piombini, Program Manager, Indigenous Relations

Date: January 8, 2021 Meeting Date: February 4, 2021

Subject: **Quarterly Report on Reconciliation Activities**

RECOMMENDATION

That the Indigenous Relations Committee receive for information the report dated January 8, 2021, titled "Quarterly Report on Reconciliation Activities."

EXECUTIVE SUMMARY

This report provides a summary of reconciliation events and activities undertaken by Metro Vancouver over the past several months as well as information on upcoming events and activities over the next few months.

PURPOSE

To provide the committee with a quarterly report and update on reconciliation activities.

BACKGROUND

This quarterly report on regional and local reconciliation activities and opportunities is part of the Indigenous Relations Committee's annual work plan. This information report is intended to identify opportunities for Committee and MVRD Board members to learn about, and engage in, reconciliation activities in the region, and includes:

- Reconciliation events and activities that have been undertaken by Metro Vancouver over the past four months (Attachment 1); and
- Upcoming opportunities over the next few months for engaging in such activities (Attachment 2).

The charts in Attachment 1 and Attachment 2 are based on the four objectives established by the Metro Vancouver Board in October 2015 in its review of the Truth and Reconciliation Commission's (TRC) *94 Calls to Action*: Liaising with the TRC and Reconciliation Canada; Raising Awareness of Indian Residential Schools; Providing Cultural Competency Training; and Strengthening Relationships with First Nations.

ALTERNATIVES

This is an information report. No alternatives are presented.

FINANCIAL IMPLICATIONS

The various Metro Vancouver activities identified in 2021 have been included in the Indigenous Relations budget. There are no additional financial implications with respect to the items identified in this information report.

ATTACHMENT 1

Reconciliation Activities Undertaken: September 2020 to December 2020

Objectives	Activity / Date	Notes
Strengthening Relationships with First Nations	Metro 2050 Overview September 8, 2020 on Zoom	Indigenous Relations staff, along with staff from Regional Planning and Housing and External Relations, had a meeting with Musqueam Indian Band staff to present and discuss the First Nation's interest in becoming involved in the Metro Vancouver Inter-governmental Advisory Committee for the update to the Regional Growth Strategy
Providing Cultural Competency Training	Municipal Technical Advisory Committee (MTAC) on Indigenous Relations Meeting September 23, 2020	As part of its regular quarterly meeting, Metro Vancouver's MTAC Committee hosted a training session on updates to the <i>Heritage Conservation Act</i> presented by a City of Vancouver staff archaeologist.
Raising Awareness	Orange Shirt Day September 30, 2020	To commemorate Orange Shirt Day, an Intranet article was prepared on the significance of Orange Shirt Day identifying both online and other activities to involve Metro Vancouver staff and their families.
Liaise with the Truth and Reconciliation Commission of Canada	An online discussion on Reconciliation on Zoom for Metro Vancouver Board members, Municipal Technical Advisory Committee (MTAC) on Indigenous Relations members and regional district staff October 1, 2020 at 11am-12 noon on Zoom	Senator Murray Sinclair, former Chair, Truth and Reconciliation Commission, provided an online presentation and answered questions on the topic of Reconciliation. Over 250 staff, senior managers and elected officials attended this session
Strengthening Relationships with First Nations	Metro Vancouver-Katzie First Nation meeting November 2, 2020 on Zoom	Metro Vancouver's CAO, some senior managers and staff met with a Katzie First Nation Council member and staff to discuss issues of mutual interest,

		including engagement opportunities on future plans and projects.
Strengthening Relationships with First Nations	Training Session for Metro Vancouver staff from Squamish Nation staff November 20, 2020 on Zoom	Approximately 35 Metro Vancouver staff, whose work involves engaging with First Nations, received a training session online from Squamish Nation staff involved in reviewing plans and projects from proponents. As part of the training session, Squamish Nation staff and staff from a private company used Squamish Nation's portal (www.squamishconnect.com) which is used for analyzing referrals.
Strengthening Relationships with First Nations	Metro Vancouver-Squamish Nation meeting November 24, 2020 on Zoom	Metro Vancouver's staff met with Squamish Nation staff to discuss issues of mutual interest, including engagement opportunities on future plans and projects.
Strengthening Relationships with First Nations	Metro Vancouver-Kwikwetlem First Nation meeting November 25, 2020 on Zoom	Metro Vancouver's Board Chair, Chair of the Indigenous Relations Committee, CAO, and staff met with a Kwikwetlem First Nation Chief and Council members and staff to discuss issues of mutual interest, including engagement opportunities on future plans and projects.
Raising Awareness	Meeting of the Community of Practice on Indigenous Relations November 27, 2021 on Zoom	This meeting of staff from various organizations involved in the Community of Practice on Indigenous Relations received presentations and discussed the issue of capacity funding. This meeting was hosted by staff from the Port of Vancouver.
Strengthening Relationships with First Nations	Metro Vancouver-Tsleil-Waututh Nation meeting December 3, 2020 on Zoom	Metro Vancouver's CAO, some senior managers and staff met Tsleil-Waututh Nation's CAO and staff to discuss issues of mutual interest, including engagement opportunities on future plans and projects.
Strengthening Relationships with First Nations	Metro Vancouver-Tsawwassen First Nation meeting December 4, 2020 on Zoom	Metro Vancouver's Board Chair, Chair of the Indigenous Relations Committee, CAO, a senior manager and staff met with Tsawwassen First Nation's Chief, CAO and staff to discuss the topic of

		reconciliation and future opportunities for working together.
Strengthening Relationships with First Nations	Metro Vancouver-Semiahmoo First Nation meeting December 8, 2020 on Zoom	Metro Vancouver's CAO, some senior managers and staff met Semiahmoo First Nation's Chief and Council members to discuss issues of mutual interest, including engagement opportunities on future plans and projects.
Providing Cultural Competency Training	Annual Workshop of the Municipal Technical Advisory Committee (MTAC) on Indigenous Relations December 9, 2020 In-Person and/or on Zoom	Indigenous Relations staff hosted the annual workshop for MTAC members on the topic of the <i>United Nations Declaration on the Rights of Indigenous Peoples</i> (UNDRIP). The firm, Indigenous Corporate Training, facilitated this three-hour training session which was attended by 35 local government/Metro Vancouver staff.

ATTACHMENT 2

Some Upcoming Reconciliation Activities: January 2021 to April 2021

Objectives	Activity / Date	Notes
Strengthening Relationships with First Nations	Metro Vancouver-Kwikwetlem First Nation staff to staff meeting January 13, 2021 on Zoom	Metro Vancouver staff have a meeting scheduled with Kwikwetlem staff to discuss a project of mutual interest within the First Nation's territory.
Strengthening Relationships with First Nations	Metro Vancouver-Kwikwetlem First Nation staff to staff meeting January 14, 2021 on Zoom	Metro Vancouver staff have a meeting scheduled with Kwikwetlem staff to discuss planning-related issues and initiatives at Colony Farm Regional Park.
Providing Cultural Competency Training	Review of Metro Vancouver's draft First Nations engagement guide at the First Nations Monthly Working Group meeting January 22, 2021 on Zoom	Indigenous Relations staff will be hosting a special meeting of its First Nations Monthly Working Group to review and discuss a First Nations engagement guide for staff, which includes opportunities for Metro Vancouver to liaise with local First Nations on various plans, projects and initiatives.
Providing Cultural Competency Training	Presentation <i>Declaration on the Rights of Indigenous Peoples Act</i> at the Indigenous Relations Committee meeting February 4, 2021 on Zoom	At the first meeting of 2021 of the Indigenous Relations Committee, provincial staff are scheduled to present on the <i>Declaration on the Rights of Indigenous Peoples Act</i> (DRIPA) legislation in British Columbia.
Providing Cultural Competency Training	Building Relations with First Nations February 19, 2021 on Zoom	Indigenous Relations staff will be facilitating a 3-hour training session on building relations with First Nations for approximately 50 staff members in Metro Vancouver's Environmental Regulation and Enforcement (ER&E) division in the Parks and Environment department.
Raising Awareness	Meeting of the Community of Practice on Indigenous Relations February 23, 2021 on Zoom	The next meeting of staff from various organizations involved in the Community of Practice on Indigenous Relations will be discussing Cultural Recognition, related to: territorial acknowledgements; art, signage and naming practices; and other best

		practices. This meeting will be hosted by BC Hydro staff.
Providing Cultural Competency Training	Local First Nation "101" Sessions for Metro Vancouver staff Timing: TBA	Indigenous Relations staff are currently in discussions with a number of local First Nations to host First Nation 101 sessions for Metro Vancouver staff as part of the corporate Lunch and Learn sessions. The sessions will focus on First Nations' historical timelines, facts, personal stories, and activities.

To: Regional Planning Committee

From: Erin Rennie, Senior Planner, Regional Planning and Housing Services

Date: January 5, 2021 Meeting Date: February 19, 2021

Subject: **Hey Neighbour Collective Discussion Paper to Inform *Metro 2050***

RECOMMENDATION

That the Regional Planning Committee receive for information the report dated January 5, 2021, titled “Hey Neighbour Collective Discussion Paper to Inform *Metro 2050*.”

EXECUTIVE SUMMARY

Metro Vancouver has partnered with the Hey Neighbour Collective in a research initiative to study best practices to increase social connectedness and resilience in multi-unit rental housing throughout BC’s urban communities. The Hey Neighbour Collective has completed a discussion paper which contains recommendations to better support social connectedness in multi-unit buildings including:

- tenant protections;
- protecting existing rental housing stock;
- expanding the supply of affordable rental housing stock, particularly in transit-oriented locations; and
- considering new social connectedness metrics and performance measures.

These recommendations have been considered, and where appropriate, will be incorporated in the drafting of *Metro 2050*, the update to the regional growth strategy. Socially connected communities are more resilient in times of crisis and are an important means of supporting Metro Vancouver’s efforts to build a more resilient region. This research is supportive of Metro Vancouver’s collective vision of focusing growth into compact, complete, walkable communities by identifying ways to support residents of multi-family buildings being more connected to their neighbours and neighbourhoods.

PURPOSE

The purpose of this report is to convey the attached Discussion Paper titled “*Developing Truly Complete Communities: Social Equity, Social Connectedness, and Multi-Unit Housing in an Age of Public Health and Climate Crises*,” prepared by the Hey Neighbour Collective, to the Regional Planning Committee and summarize its findings (Attachment 1).

BACKGROUND

The 2020 Regional Planning Committee work plan included participation in the Hey Neighbour Collective Project (Reference 1). A report describing Metro Vancouver’s support and participation in the Hey Neighbour Collective Project was received by the Regional Planning Committee at its meeting on May 1, 2020 (Reference 2). The Hey Neighbour Collective Discussion Paper (Attachment) summarizes leading policies and practices for improving social connectedness and resilience in higher density communities,

and is intended to support the *Metro 2040* Complete Communities Policy Review and the development of *Metro 2050*.

HEY NEIGHBOUR COLLECTIVE

The Hey Neighbour Collective is a three-year collaborative initiative focused on researching ways to improve social connectedness and resilience in multi-unit rental housing throughout BC's urban communities. It brings together housing providers, researchers, local and regional governments, housing associations and health authorities to experiment with and learn about ways to build community and resilience in BC's fast-growing multi-unit communities. SFU Morris J Wosk Centre for Dialogue is the coordinating body responsible for the administration of the Hey Neighbour Collective project.

The Hey Neighbour Collective evolved from the City of Vancouver's 2018-2019 Hey Neighbour! Pilot project which experimented with increasing social connectedness, neighbourliness, and resilience in two multi-unit rental buildings, and explored the potential role of rental housing operators in alleviating loneliness and social isolation.

INTENT OF THE DISCUSISON PAPER

Metro Vancouver's participation in the Hey Neighbour Collective project has been focused on informing the policy directions of *Metro 2050*. The goal of this Discussion Paper was to propose policy ideas for consideration that could foster neighbourhood-based social connectedness among residents of multi-unit housing, especially for those who rent.

The Hey Neighbour Collective research team developed the Discussion Paper using the following approach:

- completing a scan of relevant regional, municipal, provincial, and federal policies to establish the current context for supporting social connectedness in multi-unit residential communities;
- interviews with professionals working in relevant fields, including Metro Vancouver Housing Corporation staff, to seek firsthand accounts about barriers and enabling factors; and
- engaging practitioners and stakeholders including the Hey Neighbour Community of Practice, and staff of Happy City, Vancouver Coastal Health, LandlordBC, and the BC Non-Profit Housing Association. This engagement included a workshop held on November 23, 2020, to ground-truth the Discussion Paper's recommendations among practitioners and experts.

SOCIAL CONNECTEDNESS AND REGIONAL PLANNING

The Discussion Paper defines social connectedness as:

...a broad term that encompasses the multiple ways individuals connect emotionally, cognitively, behaviourally, and physically. Social connectedness can operate in multiple spheres, including families, social networks, workplaces, neighbourhoods, and broader society. Neighbourhood social connectedness considers the social relationships and dynamics within neighbourhoods and is closely related to the overlapping concepts of social cohesion, social capital, and social inclusion... The inverse, social disconnection, is often experienced as loneliness and social isolation. (Attachment, page 9)

Social Connectedness Research and Regional Planning

Research into social connectedness is relevant to regional planning because the degree of social connectedness can be directly influenced by changes in housing policy, growth management, and urban design. Improving social connectedness has also shown to benefit communities through better health outcomes, lower crime rates, improved levels of resiliency to a crisis, and higher levels of civic engagement.

Focusing growth into higher density forms of development such as urban centres and transit corridors is a long-standing and foundational policy direction of *Metro Vancouver 2040: Shaping our Future (Metro 2040)*, the regional growth strategy, helping to create compact, complete, and walkable communities. With a growing population and constrained geography, as time goes on more and more of the region's housing stock will be made up of multi-unit housing. For this reason, identifying better ways to promote social connectedness within multi-unit housing forms is an important objective for the development of *Metro 2050*, and the future livability of the region.

Benefits of Social Connectedness

1. **Improved health outcomes:** High levels of social connectedness has been found to be associated with a variety of health benefits including a reduced risk of early death, better sleep, less stress, fewer mental health and addiction issues, and lower incidence and severity of cardiovascular disease.
2. **Improved resiliency in a crisis:** High levels of social connectedness supports community resiliency in the event of a crisis such as a natural disaster and can also support resiliency to chronic stressors such as those associated with climate change impacts. Higher levels of trust between neighbours also supports emergency response efforts and lower mortality rates.
3. **Improved civic engagement:** High levels of social connectedness is associated with higher rates of participation in elections and other forms of civic engagement.

Barriers to Social Connectedness

1. **Income Insecurity:** Financial constraints limit the time and financial capacity for people living on a low income to participate in community life.
2. **Security of Tenure:** Rates of social connectedness are associated with housing tenure, with renters more likely than homeowners to experience lower rates of social connectedness.
3. **Housing Form:** Urban design and built form are also associated with social connectedness, with those living in high-rise buildings less likely to experience social connectedness.
4. **Systemic Discrimination:** Racism, ableism, heterosexism, and other forms of discrimination have a negative impact on the level of social connectedness.

DISCUSSION PAPER RECOMMENDATIONS

The Discussion Paper identifies one “overarching recommendation”, six “recommendations for social connectedness”, and under each recommendation a series of “opportunities to explore”.

Overarching Recommendation: Embrace the principle of social equity

Because social inequalities like income inequality and discrimination are barriers to social connectedness, the Discussion Paper recommends embracing the principle of social equity as a grounding principle of *Metro 2050*.

Recommendations for Social Connectedness:

- 1. Enable residents to stay in their communities:** Involuntary displacement as a result of redevelopment, sometimes called “gentrification”, is a barrier to social connectedness. When residents are forced to leave their homes and neighbourhoods they may lose social connections they’ve built and are less likely to build new ones. Involuntary displacement during redevelopment can be mitigated through tenant protection and relocation policies. Another strategy is to expand the supply of affordable rental housing options, including community housing, co-ops, and missing middle housing forms so that there are options for renters to stay in their neighbourhoods. One way to do that is by protecting publicly-owned land for affordable housing and protecting existing rental stock. This recommendation is consistent with recent regional planning research findings and the recommendations of the *Metro 2040* Housing Policy Review.
- 2. Encourage social connectedness co-benefits in housing upgrade programs:** While more affordable, older rental buildings were often built without design elements that foster social connectedness (event rooms, gardens, etc.). One way to address this may be to encourage social connectedness co-benefits in eco-retrofit government funding programs.
- 3. Foster design education and dialogue for social connectedness in multi-unit housing:** Metro Vancouver, in its role as a convener, may be well suited to disseminating best practices guidance on designing buildings for improving social connectedness throughout the region.
- 4. Advocate for funding and support of social connectedness programming:** This could include new funding streams to support events and activities that promote social interaction among residents within a building (e.g. BBQs, emergency preparedness trainings, holiday parties, etc.). Here, Metro Vancouver likely has a role in advocacy and disseminating best practices.
- 5. Prioritize underserved neighbourhoods for social infrastructure:** Social infrastructure refers to facilities and services that help residents meet their social needs, maximize their potential for development, and enhance community well-being. While these facilities and services are generally provided by municipalities or non-profit organizations, Metro Vancouver could play a role by evaluating whether this infrastructure is distributed equitably.
- 6. Track and report on social connectedness:** Metro Vancouver, through its role in performance monitoring and evaluation, could support a better understanding of social connectedness by including a measure of social connectedness as a performance indicator in *Metro 2050*.

NEXT STEPS

The recommendations of the Discussion Paper have been reviewed and considered as part of the *Metro 2040* Complete Communities and Housing Policy Review processes, which have been endorsed by Regional Planning Committee and the MVRD Board. These reviews have shaped the draft *Metro 2050* policy language. In particular, this includes:

- a greater emphasis on tenant protections;
- a variety of planning strategies to protect existing rental housing stock;
- a variety of planning strategies to expand the supply of affordable rental housing stock, particularly in transit-oriented locations;
- the consideration of social connectedness performance measures; and

- the consideration of social equity in all *Metro 2050* policies.

While some of the recommendations of the Discussion Paper fall outside its role and mandate, Regional Planning can play a supportive role by supporting further research, considering new metrics and performance measures, information dissemination, advocacy, and convening regional dialogues on these challenges.

Metro Vancouver staff will continue to collaborate with the Hey Neighbour Collective on its ongoing work on these challenges. The work is also directly related to the ongoing exploration of social and physical / mental health indicators and measures through the Where Matters study being led by UBC, and the My Health, My Community survey initiative being led by Vancouver Coastal Health and Fraser Health; Metro Vancouver staff continue to engage on these projects as well.

The Social Equity in Regional Growth Management Study is also underway and will be reported out to the Regional Planning Committee in March of 2021. That report will include some potential directions for furthering the integration of social equity as an overarching principle in *Metro 2050*.

ALTERNATIVES

This is an information report. No alternatives are presented.

FINANCIAL IMPLICATIONS

Metro Vancouver contributed \$5,000 from the Board-approved 2020 Regional Planning budget to support the development of the Discussion Paper. External Relations also contributed \$5,000 towards the project's engagement workshop. An additional \$5,000 to continue the project has been approved by the Board in the 2021 Regional Planning budget.

CONCLUSION

The Hey Neighbour Collective completed a Discussion Paper that includes recommendations for *Metro 2050* on how to improve social connectedness in higher density communities. The recommendations have been considered and, where appropriate, incorporated into new policy directions for the update to the regional growth strategy. The findings from social connectedness research will support the region's collective vision of focusing housing and job growth into compact, complete, and walkable communities that are welcoming and supportive places to live, work, and play.

Attachment

Developing Truly Complete Communities: Social Equity, Social Connectedness, and Multi-Unit Housing in an Age of Public Health and Climate Crises, Hey Neighbour Collective Discussion Paper, December 14, 2020 (43233018)

References

1. [2020 Regional Planning Committee Priorities and Work Plan, Regional Planning Committee, January 16, 2020](#)
2. [Manager's Report, Regional Planning Committee, April 3, 2020](#)

DEVELOPING TRULY COMPLETE COMMUNITIES

SOCIAL EQUITY, SOCIAL CONNECTEDNESS, AND MULTI-UNIT HOUSING
IN AN AGE OF PUBLIC HEALTH AND CLIMATE CRISES

A Hey Neighbour Collective discussion paper to inform *Metro 2050*

December 14, 2020



TERRITORIAL ACKNOWLEDGEMENT

We respectfully acknowledge that the research and learning that went into the development of this discussion paper took place on the traditional, ancestral and unceded territories of the xwməθkwəy̓əm (Musqueam), Skwxwú7mesh (Squamish), and Səl̓ílwətaʔ/Selilwitulh (Tsleil-Waututh) Peoples. In addition to the Musqueam, Squamish and Tseil-Waututh Nations, there are eight First Nations with longstanding relationships to the land we refer to as Metro Vancouver. These include Hwlitsum, Katzie, Kwikwetlem, Sto:lo (Matsqui, Kwantlen), Qayqayt, Semiahmoo, and Tsawwassen.

ABOUT HEY NEIGHBOUR COLLECTIVE

The Hey Neighbour Collective (HNC) is a multi-stakeholder collaborative project housed at the Simon Fraser University (SFU) Morris J. Wosk Centre for Dialogue. It brings together housing operators and housing industry associations, non-profits, researchers, local and regional governments, experts in healthy built form, and health authorities to share lessons and experiments in growing community, social connectedness, and resilience in multi-unit housing communities, with a primary focus on rental housing.

It evolved from the 2018/19 Hey Neighbour! pilot, conceived of and coordinated by the City of Vancouver's Healthy City Strategy team. The pilot experimented with increasing social connectedness, neighbourliness, and resilience in two multi-unit rental buildings, and it explored the potential role of rental housing operators in alleviating loneliness, social isolation, and declining feelings of belonging and levels of civic engagement.

This multi-stakeholder collective pursues systems-oriented dialogue that improves the regulatory and funding environment for the sociable design of multi-unit housing (Figure 1). We also pursue resident-engaged programming that seeks to improve health and well-being outcomes.

The core of HNC is a group of rental housing providers and non-profit organizations that are experimenting with different ways of building community, social connectedness, and emergency preparedness in multi-unit housing contexts.

We connect partners with researchers at SFU and Happy City to investigate the impacts of the various programs on resident well-being and their own organizational health. We also explore the role and impact of built form and social, economic, and demographic factors affecting households.

While the evidence is clear that social connections are essential to health and well-being, there is much less evidence on interventions that work to increase social connectedness, and even less in multi-unit housing contexts. Through piloting various approaches in diverse rental housing contexts, HNC partners and researchers aim to build an evidence base around such emerging practices that could be scaled and replicated.

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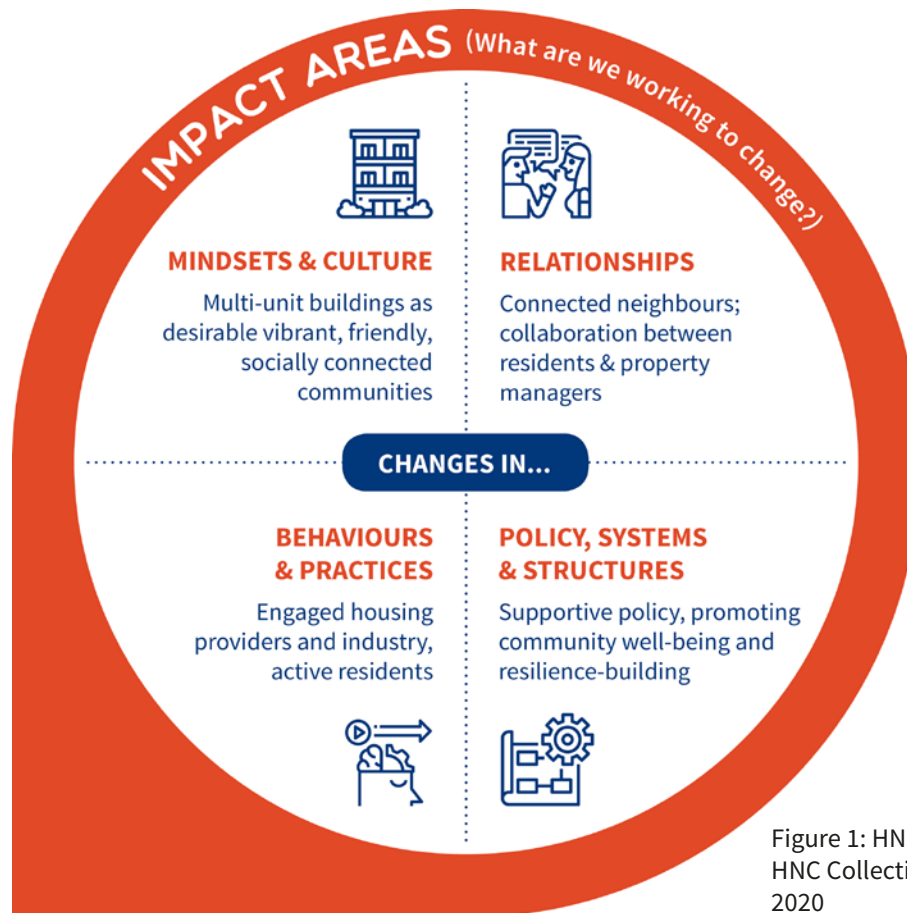


Figure 1: HNC Impact Areas, from HNC Collective Theory of Change, 2020

HNC PARTNERS

PRACTICE PARTNERS

Brightside Community Homes Foundation
Building Resilient Neighbourhoods (Connect & Prepare program in partnership with City of Victoria)
Catalyst Community Developments Society
Concert Properties
West End Seniors Network (Close to Home program)

RESEARCH PARTNERS

Happy City
SFU Gerontology
SFU Health Sciences
SFU Urban Studies

LEARNING NETWORK PARTNERS

BC Housing
BC Non-Profit Housing Association
City of New Westminster
City of Vancouver
City of Victoria
LandlordBC
Metro Vancouver
United Way of Lower Mainland
Vancouver Coastal Health

For more information about HNC partners and their work, visit: <https://www.sfu.ca/dialogue/about-us/partner-organizations/hey-neighbour-collective-.html>.

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Brightside Community Homes Foundation

EXECUTIVE SUMMARY

SEEKING SOCIAL CONNECTEDNESS

The deepening affordable housing crisis in Metro Vancouver is resulting in single-detached homes—and home ownership of any sort—being increasingly inaccessible to the majority of residents. We have seen the proportion of single-detached homes in the region decrease from 50% to 29% of dwellings over the last 25 years. About 42% of the population currently live in multi-unit housing.

Long-term or permanent renting is increasingly the only option for a substantial segment of this region's residents and workforce—and, in particular, for lower-income residents. Over a third of Metro Vancouver residents are renters; within Vancouver this is over 50%. Significantly more than half of renter householders in the greater Vancouver area spend more than 30% of their income on housing.

An increase in the proportion of people living in dense communities and multi-unit housing aligns with the *Metro 2040* goal to “create a compact urban area” that reduces greenhouse gas emissions and pollution, protects agricultural land, and makes transportation alternatives possible. However, the strategy of concentrating denser, more affordable housing typologies within urban centres and on arterials needs to be closely examined for its impacts on social equity and social

connectedness throughout our region and its communities. We can better understand these important dynamics by working in research and practice partnerships in housing communities feeling the impacts now.

The goal of this discussion paper is to propose ideas for *Metro 2050* that would foster neighbourhood-based social connectedness among residents of multi-unit housing, especially those who rent. The Hey Neighbour Collective has prepared this input for the review of *Metro 2040*'s goal area 4.2: Develop healthy and complete communities with access to a range of services and amenities.

THE FOUNDATIONAL PRINCIPLE OF SOCIAL EQUITY

Central to our recommendations for building social connectedness in multi-unit residential buildings is the belief that truly healthy and complete communities are socially equitable. The US-based think tank PolicyLink defines social equity as “just and fair inclusion into a society in which all can participate, prosper, and reach their full potential” and we think this is a good start for a definition for our region, too.

Metro 2040 is underpinned by a Sustainability Framework that informs all goals and strategies, and this framework acknowledges the need to build community capacity and social cohesion as a core imperative. Since 2010, when the Sustainability

Framework was established, our understanding of the policy demands of advancing social equity, and our awareness of the negative consequences of long-term regional planning efforts that neglect social equity, have come a long way. We believe that the *Metro 2050* update should take advantage of the opportunity to update planning goals to align with the principle of social equity. Working towards greater neighbourhood-based social connectedness for our region without a grounding in social equity approaches would be fundamentally incomplete.

Meaningfully addressing social equity concerns and supporting greater social connectedness will be of utmost importance as we recover from the current pandemic, build resilience in advance of future potential public health crises, and prepare to adapt to climate change-related stressors and shocks.

The inter-related crises of growing inequality, unaffordable housing, increasing loneliness and social isolation, and decreasing civic engagement cannot be solely blamed on, or solved by, regional governments and their member municipalities. Far from it. But regional growth strategies and municipal plans can play important roles in creating conditions for positive change well beyond their formal mandate, especially when leveraged as advocacy tools and as a social licence in our ongoing efforts to collaborate and communicate with a widening sphere of willing partners.

Thus, we propose the overarching recommendation to embrace the principle of social equity across the whole of *Metro 2050*. We also propose six specific recommendations that would contribute to a more supportive policy environment for owners, operators, designers, and developers of multi-unit housing that want to foster social connectedness and resilience in their buildings and neighbourhoods. We believe that action on these recommendations would serve to strengthen social connectedness among those living in multi-unit rental housing—promoting connections within buildings as well as in surrounding neighbourhoods.

We welcome engagement around the ideas in this discussion paper as Metro Vancouver drafts and implements *Metro 2050*.

OVERARCHING RECOMMENDATION:

Embrace the principle of social equity

6 RECOMMENDATIONS FOR SOCIAL CONNECTEDNESS:

1. **Enable residents to stay in their communities**
2. **Encourage social connectedness co-benefits in housing upgrade programs**
3. **Foster design education and dialogue for social connectedness in multi-unit housing**
4. **Advocate for funding and support of social connectedness programming**
5. **Prioritize underserved neighbourhoods for social infrastructure**
6. **Track and report on social connectedness**

WHY IS HEY NEIGHBOUR COLLECTIVE PROPOSING RECOMMENDATIONS TO METRO 2050?

The Hey Neighbour Collective (HNC) is a multi-stakeholder collaborative project, focused at the intersection of two key social determinants of health: housing and social connectedness.

Our practice partners are actively experimenting with different ways of building community, social connectedness, and emergency preparedness in multi-unit housing contexts, and our researchers are working with them to build an evidence base for their work.

As this work progresses, we are pursuing systems-oriented dialogue with our wider network of partners to explore change that builds social connectedness and resilience in multi-unit housing. This means that we are scanning for opportunities across the system of housing and social connections as we go. Policy framing at the regional level is one such opportunity.



Neighbour Lab / Connect & Prepare

THE CRITICAL IMPORTANCE OF SOCIAL CONNECTEDNESS

The importance of social connectedness in surviving, buffering the effect of, and responding to emergencies and disruptions has been front and centre in recent public health policy. Canada's chief public health officer's report, *From Risk to Resilience: An Equity Approach to COVID-19*, released in October 2020, points directly to "harnessing of social cohesion" as a key action area to prepare for, respond to, and recover from the pandemic in an equitable way. (1) We know that people who feel connected are more likely to develop a sense of belonging, participate in and take care of their community, live healthier lives, and trust each other. Leaders are recommending habits of social connectedness, and Canadians are responding to the call in a host of ways, from neighbourhood pods that cheer together and facilitate access to essential supplies, to Zoom dinner parties and more frequent phone calls with isolated friends and family.

COVID-19 has resulted in the restructuring of our daily lives, and serious public health concerns are emerging about the "double pandemic" of social isolation. (2–4) Public health officials have relied on notions of togetherness, kindness, and community to inspire actions to "flatten the curve." Mitigating the isolation arising from pandemic restrictions has become a major focus of public health action. (5,6)

Before COVID-19, declining social connectedness in Canada and abroad had triggered increased policy attention and a search for meaningful policy and practice interventions. (7–11) Concerned public health professionals have called for a robust policy agenda to advance social connectedness as a public health priority. (1, 12–14) Governments now see the value of taking a proactive approach to social connectedness across a broad range of policy domains.

Housing is one such critical domain, as social connectedness is impacted by where and how we live. Housing insecurity and material poverty—and the persistent discrimination and stigmatization that those of us living in these conditions also face—affect our sense of belonging and our social relationships.

Higher density living, in the form of multi-unit housing, has implications for social connectedness that we cannot ignore. For example, a 2017 Vancouver Foundation report showed that residents in high-rise buildings (one of a number of multi-unit housing forms) are less likely to know their neighbours or do small favours for them than residents of single-detached homes. (15) They also report a higher level of loneliness and have a harder time making new friends. These findings are echoed in international studies. (16)

The goal of this discussion paper is to present a case for addressing social connectedness as a matter of regional planning in *Metro 2050*, particularly important for residents of multi-unit housing, and especially those who rent. Further, it proposes that multi-unit buildings and surrounding neigh-

neighbourhoods can, in fact, become sites for addressing social inequity and building community resilience.

UNDERSTANDING SOCIAL CONNECTEDNESS

Social connectedness—at both the individual and the community level—is an integral component of healthy and complete communities.

WHAT IS SOCIAL CONNECTEDNESS?

Social connectedness is a broad term that encompasses the multiple ways individuals connect emotionally, cognitively, behaviourally, and physically. Social connectedness can operate in multiple spheres, including families, social networks, workplaces, neighbourhoods, and broader society.

Neighbourhood social connectedness considers the social relationships and dynamics within neighbourhoods and is closely related to the overlapping concepts of social cohesion, social capital, and social inclusion. These concepts tend to be used interchangeably in research and policy contexts, despite having distinct attributes. The inverse, social disconnection, is often experienced as loneliness and social isolation.

Social connectedness has received considerable and warranted attention when it comes to aging populations, as social isolation compounds other age-related vulnerabilities in significant ways. Much of the attention around social isolation has been focused on seniors, but more and more we see it can be a challenge for people across all age groups. For example, recent trends point to a rise in self-reported loneliness in millennial and generation Z adults. (17) A survey conducted by the Vancouver Foundation found that those aged 18 to 34 years reported higher rates of isolation and lower rates of community belonging. (18) Nationally, survey findings show that only 29% of those aged 25 to 34 are likely to know their neighbours and to offer and receive help and favours from them; this is lower than any other age group. (19)

SOCIAL CONNECTEDNESS IS A KEY DETERMINANT OF HEALTH

Social connectedness plays an important role in our physical and mental health. Weak social connections have been found to increase the incidence and severity of cardiovascular disease and are strongly linked to increased likelihood of mortality from cancer. (21) A lack of social connection has

COVID-19

During the height of COVID-19 restrictions in March and April of 2020, when federal and provincial/territorial borders were first closed to non-essential travel, and businesses, libraries, and schools were temporarily closed, two-thirds (68%) of Canadians aged 18 to 34 reported feelings of isolation and loneliness, compared to 40% of people older than 55. (20)

been correlated with increased stress levels and poor quality and quantity of sleep, which in turn suppress protective hormones and immunity. (22, 23) People with high levels of social connection are associated with a 50% reduced risk of early death. (21)

Low social connectedness has been linked to higher rates of crime, alcohol abuse, and suicide. (24) Mental illness, including depression and anxiety, is one of the leading causes of disability in Canada and is strongly correlated with social isolation and a lack of social support. (25) Strong social supports appear to mitigate cognitive declines in people with Alzheimer's and dementia and to promote healthy and resilient behaviours, such as resource sharing and offering neighbourly support during stressful times. (26, 27)

SOCIALLY CONNECTED COMMUNITIES WHERE PEOPLE KNOW AND TRUST THEIR NEIGHBOURS MAY BE MORE RESILIENT IN A CRISIS

Social connectedness is an important factor in the adaptation to climate change and other emergencies. (28) An earthquake and tsunami in Japan in 2011 forced 470,000 people to evacuate their homes and resulted in 18,500 deaths. A study of

COVID-19

The COVID-19 pandemic has sparked a nationwide dialogue on the importance of social connectedness for our health and well-being. In particular, it has highlighted significant inequalities when it comes to our ability to cope with large-scale economic disruptions and vulnerability to health threats. Social isolation combined with demographic factors such as race, income, and disability intersect, resulting in low-income, vulnerably housed, racialized, disabled, and Indigenous people experiencing the worst of the pandemic. (33–35)

over 130 cities, towns, and villages in the hardest hit regions of Japan found that those with higher levels of trust and cohesion had lower mortality rates, after controlling for other factors. (29) Similar findings were reached in a study of the aftermath of the Canterbury, New Zealand, earthquakes. (30)

Daniel Aldrich's popular study of post-Katrina New Orleans demonstrated a similar trend, (31) as did Eric Klinenberg's study of the 1995 Chicago heat wave. (32)

Emerging evidence for the importance of neighbourhood social connectedness and neighbourhood equity in the context of the COVID-19 pandemic suggests a reinforcement of these earlier findings while also raising new relationships and questions.

The Metro Vancouver region will not be spared from chronic stressors like climate change impacts, and, of course, earth-

quakes are an ever-present risk. Building neighbourhood social connectedness could be seen not just as a strategy to promote individual and community health, but as a component of climate resilience and emergency preparedness strategies.

SOCIALLY CONNECTED COMMUNITIES FOSTER A SENSE OF BELONGING AND CIVIC ENGAGEMENT

Social connectedness is linked to community belonging and democratic participation. National data show that residents aged 18 and over who have a strong sense of belonging to their local neighbourhood are more likely to feel as though their voice matters to elected officials (39% compared to 14% who have a very weak sense of belonging) (36), and this sense of belonging is an important factor in attitudinal and behavioral factors in voting. (37)

If we believe that civic engagement is critical to the health of our democracy, ensuring that residents feel they belong will foster their participation. Though a person's subjective feelings of belonging are complex, neighbourhood social connectedness is indivisible from a sense of community belonging.

SOCIAL CONNECTEDNESS IS HINDERED BY SOCIAL INEQUITY

Communities can't be truly healthy, complete, and socially connected in the face of deep-seated socio-economic inequities.

INCOME INEQUALITY CAN MAKE SOCIAL CONNECTION MORE DIFFICULT

Too many Metro Vancouver renter households are financially strained, leaving them with little time and financial capacity to build supportive relationships with neighbours. The typical measure of affordability is a household that spends less than 30% of its before-tax income on rent (or mortgage) plus utilities. (38) According to the BC Non-Profit Housing Association's *Rental Housing Index*, 43% of renter households in the region spend more than 30% of their income on housing, and for 22%, the cost of housing exceeds 50% of their income. (39) Low- and very low-income households represent 42% of Metro Vancouver renters. (40)

Material poverty can impact social connectedness. Findings from consultations on the Province of BC's 2019 poverty reduction strategy, *TogetherBC*, provide evidence of this. Those consulted spoke about "the harmful effects of social isolation, and how it had an impact on their mental health,"

and how they “feel cut off from their communities.” The strategy refers to belonging and social inclusion as key variables that influence the lived experience of poverty, which must be considered in the government’s response. (41)

Household food insecurity is a symptom of income insecurity. People who rent their homes in BC are 56% more likely to experience severe household food insecurity than those who own. (42) Aside from the obvious negative health impacts of food insecurity, the inability to gather over a meal robs people of one of the most powerful and joyful ways of building community and social connections and celebrating culture.

INSECURE TENURE WEAKENS SOCIAL CONNECTIONS AND BELONGING

Security of housing tenure is linked to social connectedness. For example, evidence from a survey of residents in Metro Vancouver suggests that a longer time living in a neighbourhood is related to a stronger sense of community belonging, for both renters and homeowners. (43) Renters, in particular, are less likely to know any neighbours well enough to call on them for help. (18) And renters in BC face greater insecurities than is the case elsewhere in Canada: Statistics Canada shows that BC has the highest rate of forced evictions in the country—almost 70% higher than the national rate. (44)

It’s not surprising that security of tenure is listed as a principle for boosting social well-being in multi-unit residential buildings in Happy City’s *Happy Homes* toolkit. (45) In addition to the evidence provided in this toolkit, we can intuit the relationship between security of housing tenure and social connectedness and belonging. Why bother getting to know your neighbours if you don’t feel like you’ll be able to stay put for long? It is a challenge for people to put down roots, feel a sense of community belonging, and get involved in civic affairs if they are scrambling to afford rent and the basic necessities of life, and if they are also worrying about having to relocate somewhere less expensive, which may also be further away from schools, jobs, friends, and cultural connections.

HOUSING FORM AFFECTS LEVELS OF SOCIAL CONNECTEDNESS

Though many factors influence a person’s degree of social connectedness, individuals living in high-rise buildings are more likely to experience diminished neighbourliness, lower levels of trust in their neighbours, increased isolation, and to report difficulty making new friends. (18)

The proportion of single-detached homes in Metro Vancouver’s housing stock has decreased from 50% to 29% in

the last 25 years, making other forms of housing, particularly multi-unit housing, an increasingly common housing experience. (49) High-, mid-, and low-rise multi-unit housing made up 42% of dwellings in Metro Vancouver region in 2016. (49) Given Metro Vancouver’s urban containment boundary and the *Metro 2040* emphasis on transit-oriented compact communities, the region’s growing population will increasingly live in multi-unit housing of some form. This trend should compel deeper research into the impact of various multi-unit housing forms on social connectedness.

SOCIAL CONNECTEDNESS CAN BE A CHALLENGE FOR MARGINALIZED GROUPS

A survey of Canadian adults conducted in 2019 found that visible minorities[sic],¹ Indigenous people, those with mobility challenges, and LGBTQ2 people are all more likely to experience social isolation and loneliness than the general population. (46) Statistics Canada reports indicate that Canadians who experience discrimination are more likely to report a weaker sense of belonging to the local community, and less likely to have trust in civic institutions. (47, 48) Many of these marginalized groups are overrepresented in Canada’s renter population. (39)

Though all levels of government—and society more generally—bear responsibility for reducing inequity and systemic discrimination, the opportunity and responsibility exists now at the level of regional policy to incorporate a robust consideration of the unintended impacts of growth strategies on marginalized groups.

¹ Canada has been advised by the Committee on the Elimination of Racial Discrimination since 2007 to rethink its use of the term “visible minorities” as a racist term. Nevertheless, the term remains in use in Canada. (64)



Happy City

HOW THE RECOMMENDATIONS WERE DEVELOPED

In February 2020, Metro Vancouver invited Hey Neighbour Collective to submit a discussion paper focused on strategy 4.2 of *Metro 2040* (“Develop healthy and complete communities with access to a range of services and amenities”; see Box 1), to be considered as one of a number of inputs into the review process for *Metro 2050*.

METHOD

Our recommendations flow from a number of different streams of analysis and input.

1. POLICY SCAN

We conducted a scan of policy initiatives at all levels of government. Within these plans and policy documents we looked at:

- whether social connectedness was mentioned
- specific terms used
- presence or absence of performance indicators and reporting requirements
- target populations and policy type
- whether the policy was accompanied by the allocation of resources
- equity-related considerations

The policy scan did not include initiatives related to parallel matters, such as affordable housing strategies, poverty reduction, infrastructure investments, and building codes and bylaws, unless these explicitly included social connectedness as a policy objective. For more information about the scan, see Appendix A through C.

2. INTERVIEWS WITH HNC-AFFILIATED PARTNERS

We conducted semi-structured interviews with numerous HNC-affiliated partners. These interviews sought to obtain:

- firsthand accounts from practitioners about motivations, practices, and outcomes for their work (in the domain of enhancing social connectedness in multi-unit housing)
- ideas for policy supports that might scale up the work of building social connectedness

For a list of interviewees and inputs, see Appendix D.

3. OTHER PARTNER INPUTS

The thinking behind this discussion paper was further informed by:

- emerging learnings and reflections from HNC Community of Practice sessions and yet-to-be-published stories about partners' specific approaches
- summer 2020 knowledge exchange events (Systems Change Circle conversation and HNC/BC Non-Profit Housing Association webinar)
- review of earlier drafts of this paper by select HNC partners, including Happy City, Vancouver Coastal Health, LandlordBC, and BC Non-Profit Housing Association

HNC RESPONSIBILITY

Though many people and organizations contributed to the ideas in this discussion paper, the authors and reviewers take responsibility for the recommendations in this draft. Our partners' involvement in the HNC does not indicate full endorsement.

WORKSHOPPING THE RECOMMENDATIONS

On November 23, 2020, HNC in partnership with SFU Urban Studies hosted an online workshop attended by 56 people. All HNC partners were represented, with the exception of the City of New Westminster. We also had representatives from Metro Vancouver Housing, CMHC, BC Centre for Disease Control, Fraser Health, Ministry of Municipal Affairs and Housing, and the cities of Burnaby, North Vancouver, Maple Ridge, and Pitt Meadows. Many of the participants were of the Regional Planning Advisory Committee's Social Issues and Housing Subcommittees.

The purpose was to ground-truth the recommendations in the draft version of this paper and to start a discussion about them. In this, the final version, select notes are included from the workshop in cases where they add nuance or important context. Full workshop notes are available separately.

BOX 1: METRO 2040 REGIONAL GROWTH STRATEGY EXCERPT

Goal 4: Develop Complete Communities

Metro Vancouver is a region of communities with a diverse range of housing choices suitable for residents at any stage of their lives. The distribution of employment and access to services and amenities builds complete communities throughout the region. Complete communities are designed to support walking, cycling and transit, and to foster healthy lifestyles.

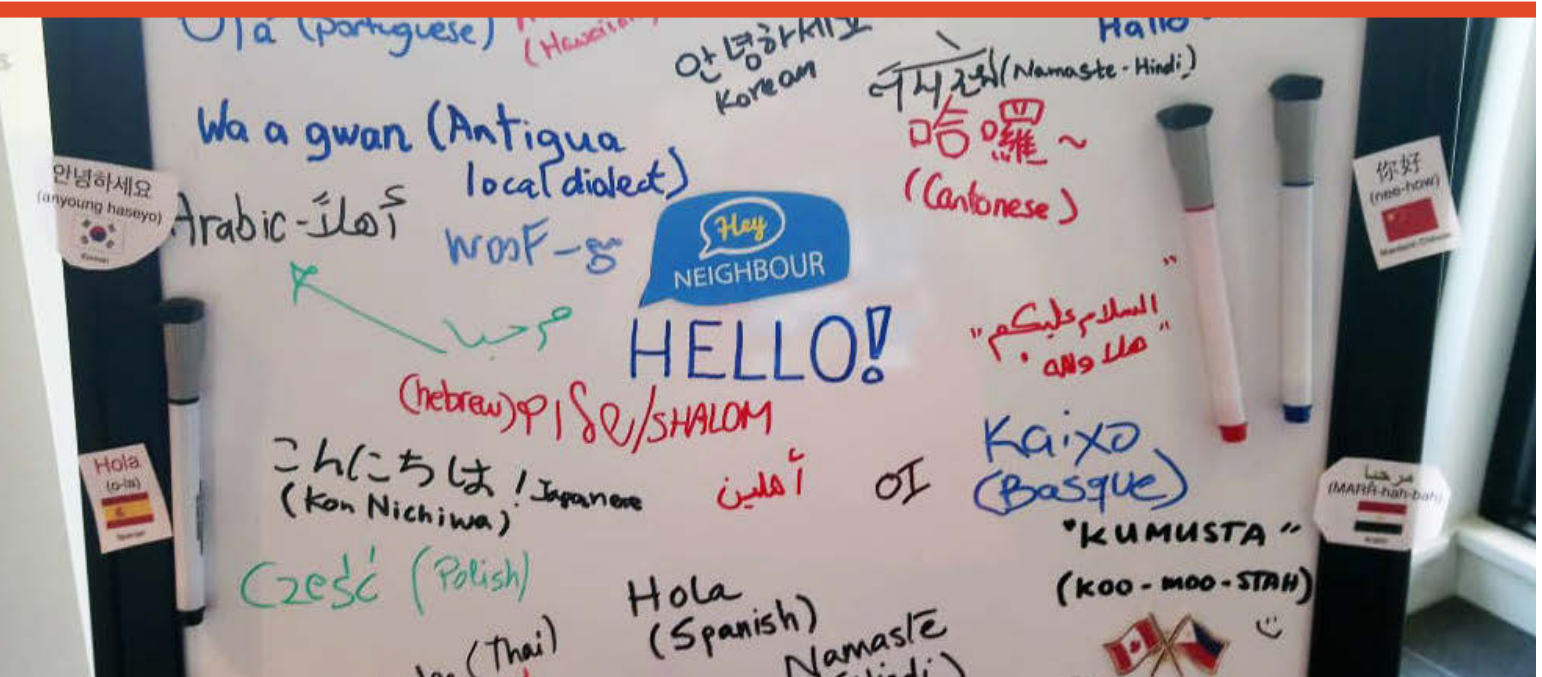
Strategy 4.2: Develop healthy and complete communities with access to a range of services and amenities.

Metro Vancouver's role is to:

4.2.1 Support municipalities in the development of healthy and complete communities through regional strategies on affordable housing, culture, food, and parks and recreation.

4.2.2 Provide technical advice and assistance on air quality aspects of land use and infrastructure decisions.

4.2.3 Collaborate with health authorities to advance measures to promote healthy living through land use policies.



Qualex Landmark / Luna Aixin (City of Vancouver)

RECOMMENDATIONS FOR METRO 2050

DEVELOPING COMPLETE, EQUITABLE, AND SOCIALLY CONNECTED COMMUNITIES

In an era of increasing inequalities, public health crises, and climate emergencies, our recommendations expand upon *Metro 2040*'s broad goal of "developing complete communities" and push towards a more explicit embrace of developing complete, equitable, and socially connected communities.

Inside a social equity approach to community development, social connections can be fostered with interventions focused on housing and neighbourhood. These are the sites of home and community, where we can do much to reduce social inequities.

HNC offers one overarching recommendation, applied to *Metro 2050* as a whole, and six recommendations specific to updating *Metro 2040*'s goal areas 4.1 and 4.2.

OVERARCHING RECOMMENDATION: EMBRACE THE PRINCIPLE OF SOCIAL EQUITY

Similar to how *Metro 2040* is underpinned by a Sustainability Framework that informs all goals and strategies and is at the "core of operating and planning philosophy," *Metro 2050*—in its entirety—should be grounded in the explicit principle of social equity.

Metro 2040 does not reference the terms *equity* or *social equity*. However, its vision statement does reference "cultural vitality, economic prosperity, social justice and compassion" and the aim to foster "a region of diverse communities where people in all their infinite variety live, work and play." (50) A number of municipalities' regional context statements falling under Goal 4 of *Metro 2040* reference notions of inclusion, social interaction, and measurable goals relating to decolonization (or work with local host First Nations), anti-racism, social equity, and local poverty reduction efforts. Some municipalities are already preparing equity, diversity and inclusion frameworks.

Having a shared definition of social equity across the region will help municipalities identify opportunities for action and move the region in a unified direction. The US-based think tank PolicyLink defines social equity as "just and fair inclusion into a society in which all can participate, prosper, and

reach their full potential,” (51) and we think this is a good start for a definition for our region, too.

Explicitly grounding *Metro 2050* in the principle of social equity would constitute a commitment to assess all land use policies, infrastructure decisions, and planning approaches through a social equity lens. This would strengthen and support municipalities to more fully align their own plans in a complementary direction.

We believe that the *Metro 2050* update should take advantage of this opportunity to update planning goals to align with the principle of social equity. Working towards greater neighbourhood-based social connectedness for our region without a grounding in social equity approaches would be fundamentally incomplete.

Further, a social equity lens would focus more attention on the priorities of renters, low-income residents, and Indigenous, racialized, and otherwise marginalized groups, including disabled and LGBTQ2I+ communities, and it would foster meaningful engagement with these groups, who are often dramatically under-represented in planning processes despite being key knowledge holders. Committing to collecting and disseminating disaggregated data to inform and support all areas of regional planning will be key to effectively moving towards racial and social equity in the region. This approach may also unveil new opportunities and issues related to understanding and enhancing social connectedness in our communities.

The pandemic has highlighted longstanding inequities that exist in our communities. In order to recover from the current pandemic, build resilience in advance of future potential public health crises, and prepare to adapt to climate change-related stressors and shocks, it is essential to address these inequities through multi-scale action involving all levels of government. By positioning social equity as a cornerstone of sustainable growth in the region, and considering the more explicit embrace of *complete, equitable, and socially connected communities*, Metro Vancouver can demonstrate leadership in addressing exclusion and marginalization while prioritizing the well-being of all its residents.

Working within a social equity approach for *Metro 2050*, HNC has specific recommendations that would serve to strengthen social connectedness in multi-unit rental housing. Our recommendations focus on social connections that occur because of where people live, using the opportunities found in multi-unit residential buildings and in neighbourhoods to foster equitable, connected communities.

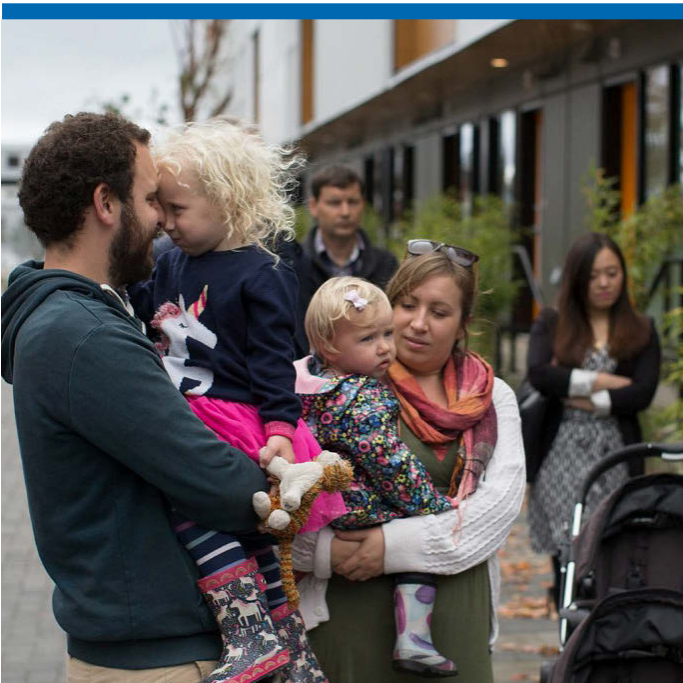
LOOK TO CLIMATE EQUITY FRAMEWORK

Metro Vancouver acknowledges that climate change mitigation and adaptation efforts must be undertaken with equity in mind. For example, *Climate 2050* states that “policies and programs to reduce greenhouse gas emissions and adapt to the changing climate must not exacerbate existing economic, social, or geographic disparities. . . . Fairness, equity, and affordability will be central considerations in the development of goals, strategies and actions for the *Climate 2050* strategy.” (52)

Climate 2050 is a voluntary strategic framework, however, and Metro Vancouver municipalities are not required by the *Local Government Act* to adopt regional context statements that reflect its recommendations or equity considerations as they are with a member-approved regional growth strategy. Social equity needs to be seen as an integral aspect of overall sustainability—one that member municipalities are required to address in policies and plans.

6 RECOMMENDATIONS FOR SOCIAL CONNECTEDNESS

Our six recommendations for supporting social connectedness for residents of multi-unit housing span different spheres, from recommendations that pertain to factors within multi-unit housing (recommendations 1–4), to those surrounding neighbourhoods (recommendation 5), and also the question of evaluation of efforts via shared terminology and targets (recommendation 6).



Catalyst / Adrian Lam (Times Colonist)

1 ENABLE RESIDENTS TO STAY IN THEIR COMMUNITIES

Unlike homeowners, renters are very often forced—due to evictions, renovictions, demovictions, and a lack of other suitable rental housing—to leave communities where they may have put down roots, formed social connections, fostered a sense of belonging, and been engaged in local civic life. This makes renters not only more vulnerable than owners to involuntary displacement but to a loss of social connection as well, which may contribute to health inequities between owners and renters.

Addressing the inequities between renters and owners, and supporting a range of housing alternatives to meet the needs of low- and moderate-income Canadians, are key elements of Canada's *National Housing Strategy*. Renter/homeowner inequities require us not only to ensure protections and supports for renters, but also to strengthen support for local non-profit and for-profit purpose-built rental housing operators, to make it easier for them to retain, maintain, redevelop, and build safe and sustainable rental housing accessible across a wide range of incomes and household needs.

To illustrate this recommendation, we introduce the idea of security of tenure *within a community* (rather than within a specific dwelling unit). This may be analogous to “aging in place” discussions, where diverse housing options exist within a neighbourhood that suit people as they move through life stages.

“

INTERVIEWEE

I think when you feel secure in your housing it frees you up to make relationships with other people. If you're not offering that security of tenure, then it's really hard to build community without that.

In the rental housing context, this means we need to reframe our thinking from protecting a particular building that a renter lives in to instead working—urgently and aggressively—towards a robust and flexible rental housing ecosystem. While we continue to focus on renter protections and supports and close the loopholes that continue to allow for unlawful evictions, renovictions, and demovictions, this reframed approach will create a region where people of all incomes and different family configurations can stay and thrive in their neighbourhoods of choice, maintaining and strengthening important social connections and social capital.

A number of municipalities within Metro Vancouver in the last 10 years have introduced policies to increase security of rental tenure. City of Vancouver's 2015 *Tenant Protection and Relocation Policy* cites the loss of one's home and community networks as a non-quantifiable cost of relocation, with outsized impacts for vulnerable tenants, (53) and which is made especially challenging in a city with very low vacancy rates. In 2020, the City of Burnaby enacted its *Tenant Assistance Policy*, (54) under which tenants are entitled to comprehensive supports and compensation if displaced from their homes when an owner renovates or rebuilds under a rezoning application. This includes rent top-up payments to bridge the gap between the previous unit and the new unit, help with moving expenses, and the right to return to the new development in an equivalent unit at the same rent (plus any *Residential Tenancy Act*-allowed rent increases).

In interviews, HNC practice partners understood security of tenure to be one of the primary drivers of social connectedness in the communities in which they work. They mentioned to us that building community is very difficult when residents don't feel securely connected to home or motivated to invest in relationships where they live.

Practitioners also reflected that security of tenure isn't just about policies that prevent unlawful renovations and demolitions, support renters through relocation, and control the rise of rents: it's also fundamentally about ongoing systemic efforts to maintain and expand diverse affordable rental stock.

OPPORTUNITIES TO EXPLORE

a) Retain and improve affordable rental housing stock and expand the community housing sector

Renovating and maintaining older rental units is often more cost effective than building new ones. Smaller private landlords with purpose-built rental buildings are struggling to maintain them in the face of rising taxes, expenses, and rent controls.

Currently, we are losing approximately three older and more-affordable rental units for every new purpose-built rental. The community housing sector has called on the provincial and federal governments to address this imbalance. (55)

Senior governments could rise to this challenge, working collaboratively to create a rapid-response acquisition fund that allows the non-profit community housing sector—which generally prioritizes affordability and security of tenure over profit—to buy the buildings and expand the amount of non-market rental housing in the system.

b) Protect publicly owned land for affordable housing

Continued commitment is needed to protect and leverage publicly owned land for affordable housing and other key public amenities. As has been documented by Metro Vancouver through its *Transit-Oriented Affordable Housing* study, building new affordable rental housing is virtually impossible in this region without free or heavily subsidized land.

Combining the use of publicly owned land with programs that fast-track development applications for affordable rental housing (such as City of Vancouver's Social Housing or Rental Tenure Program (SHORT) pilot) is promising and should be scaled up throughout the region.

c) Increase and accelerate affordable housing funding commitments

Non-profit housing interviewees emphasized the importance of provincial and federal funding that helps to subsidize the

full cost of the housing they provide, so that households with low and middle incomes can manage rents. New affordable rental housing must incorporate units geared towards the full range of households that need it. In particular, there is a tendency to focus on studio and one-bedroom units, with two, three and more bedrooms being scarce. A wide variety of rental housing typologies will ensure neighbourhoods promote social diversity and inclusion.

COVID-19

COVID-19 is showing how quickly all levels of governments can act when they need to, and how much financial support they can provide if they have public opinion behind them. We need to treat our affordable housing and homelessness crises with the urgency they deserve and elevate housing as a fundamental pillar of a healthy, equitable, safe society.

d) Modernize exclusionary zoning to allow for more “missing middle” forms and purpose-built rental

Exclusionary zoning is a challenge for the purpose-built rental sector, for both non-profits and for-profits. Though some strides have been made allowing small amounts of low-density infill and secondary (less secure) market rental in the forms of suites and laneway houses, many land-use zones in the region do not allow the development of purpose-built rental. Municipal development planning priorities have relegated zones for purpose-built rental to the margins along busier, noisier arterials where residents are more likely to experience poor air quality. Acknowledging that vulnerable populations and minorities in Canada are commonly located within the low-income bracket and are renters, this zoning policy exacerbates existing inequities.

SECURITY OF TENURE THROUGH REDEVELOPMENT

Redevelopments risk inconveniencing or displacing existing residents from their communities if other adequate housing options can't be found. One of HNC's partners acknowledged these potential unintended consequences. To address these concerns, the organization developed a resident relocation policy that exceeds the local municipal policy, with the objective of mitigating the impact of relocation on the lives of residents, supporting health outcomes before, during, and after a move, and ensuring residents are provided with adequate support to find safe and secure homes in the interim.

The policy ensures that tenants can remain a part of the housing-provider community if they so choose (by moving to suites in other buildings, for example). Collaboration with other housing providers helps to transition tenants to units that meet their needs and incomes.

e) Support the creation of co-ops and affordable ownership innovations in low-density neighbourhoods

"Missing middle" or gentle-density typologies, such as rowhouses, townhouses, and other low-rise and mid-rise buildings with a diverse number of bedrooms, are much-needed alternatives to the polarities of medium- or high-rise buildings and single-detached housing. These alternatives can support neighbourhood equity through opportunities for sociability, well-being, and affordability across all households. With more inclusionary zoning, they can also offer many different types of stable tenure housing: purpose-built rental, co-op, co-housing, affordable ownership models, and market ownership.

Including a full spectrum of more affordable types and tenures of housing means that some renter households can move into other types of housing in their chosen communities instead of leaving for commuter suburbs or smaller communities. Making it possible to remain in neighbourhoods, during all life stages and circumstances, via full-spectrum housing options may convey benefits in addition to an increased sense of belonging. Such benefits may include keeping people close to jobs, schools and other local hubs, better employee retention, freeing up rental housing, and lowered greenhouse gas emissions from less commuting.

WORKSHOP INSIGHTS FOR RECOMMENDATION 1

- This recommendation was generally seen as having the biggest potential for positive impact on the well-being and social connectedness of multi-unit housing residents, lower-income renters in particular. But it was also seen as the most challenging to implement.
- A housing operator participant referenced an unintended consequence of legal housing agreements with cities. In some cases, these agreements (created because new housing is built on city land to lower costs and increase affordability) mandate that when a resident's income gets too high (beyond the income limits that made them eligible for a unit in the first place), they will be evicted. This does not contribute to a sense of safety, security and belonging, especially when there can be a huge price gap when that person has to find new housing. The housing operator stated that it can be hard to engage people who feel like they might not be able to stay for long if they are "successful" in life.
- A municipal housing planner noted that some smaller municipalities may find it difficult to create and/or strengthen tenant protection and relocation policies when so much of the onus for residential rental law (like the *Residential Tenancy Act* and Residential Tenancy Branch) sits at the provincial level. Another strategy might be to advocate to the Province for assistance in streamlining tenant protection and relocation supports, leaving municipalities to focus on other efforts.
- The notion of "time poverty" was brought up by a regional planner as a missing issue in these recommendations: "Can we find ways as a region to spend less time commuting and more time in our communities?" A researcher commented that lack of time is often mentioned as a barrier to getting to know neighbours in surveys. It was agreed in their breakout group that this issue was connected to recommendation 1, the problem of people living far from where they work due to housing unaffordability, and the social equity issues that this raises, especially for people whose work cannot be done remotely (which constitutes a lot of lower-paid work).



Michelle Hoar

2 ENCOURAGE SOCIAL CONNECTEDNESS CO-BENEFITS IN HOUSING UPGRADE PROGRAMS

Older rental stock is often the most affordable rental option. Half of the rental buildings in Metro Vancouver were built before 2000, (40) and many were built without considering design elements that might foster social connectedness. Some of this older stock is approaching or at the end of its functional life and will be redeveloped to deliver a larger number of healthy and resilient (that is, energy efficient and seismically sound) units of rental housing. But some of this older stock can be upgraded for longer life.

We are not aware of any significant programs that fund upgrades to buildings or outdoor areas for the specific purpose of increasing potential for healthy recreation, safe social interaction, or community building between neighbours. Given the importance of social connectedness to personal and community well-being, there is an equity argument to be made for broadening our thinking around what retrofits to affordable rental housing could accomplish.

Most policy tools and funding programs for upgrading older rental stock focus on retrofits to conserve energy and reduce greenhouse gas emissions. For instance, the Social Housing Retrofit Support Program for Multi-Unit Residential Buildings is delivered in a partnership between BC Hydro and FortisBC.

(56) The program is intended to retrofit common areas. BC Housing and Reframed Initiative recently announced the launch of Reframed Lab, which will retrofit up to five multi-unit residential buildings to make homes safer, more energy efficient, and less polluting. (57) There are also periodic funding opportunities from the federal government, administered by CMHC.

While existing environmental sustainability retrofit programs are necessary, they tend not to tackle social sustainability. One of the interviewed HNC partners identified social sustainability as a necessary complement to their environmental sustainability strategy. In addition to committing to intentional programming led by a full-time social sustainability coordinator with involvement from resident “community connectors” in each building, they are interested in assessing opportunities for physical retrofits that could support social connectedness.

Some interviewees reported using grants slated for environmental sustainability to address both environmental and sociability concerns. This is a co-benefit approach, where one intervention can meet two or more goals at once. However, they flagged that sneaking social connectedness into retrofit programs focused on other outcomes may result in compromises being made in one area or the other.

COVID-19

The COVID-19 pandemic has very clearly highlighted the spatial inequities in different types of housing when it comes to having safe indoor space for self-isolating and outdoor space for safely gathering, recreating, and connecting with nature. Residents of multi-unit housing, particularly those without balconies or access to shared indoor and outdoor amenity spaces, are particularly reliant on parks and other public spaces, unlike people with access to private yards.

OPPORTUNITIES TO EXPLORE

a) Advocate for the explicit inclusion of social sustainability and social connectedness as important aspects of overall sustainability in existing climate-oriented retrofit programs.

Documenting creative ways of marrying climate change mitigation and adaptation with objectives around the creation or improvement of common spaces and shared amenities that improve individual and public health outcomes could help housing operators and funders see opportunities for co-benefits.

There may be opportunities for Metro Vancouver and other actors, such as BC Ministry of Health and local health authorities, to advocate for a co-benefits approach—sometimes called an integrated planning approach—with the leads of existing retrofit programs.

b) Advocate for new streams of funding for retrofits that support social sustainability and social connectedness in buildings and on their grounds.

New targeted funding would provide owners and operators of multi-unit rental housing with opportunities to optimize the social connectedness potential of their buildings and grounds. It would be ideal if such funding went beyond providing the initial capital required for retrofits to offer some amount of ongoing maintenance support. For example, underused lawns can be retrofitted to community gardens or spaces for casual social interactions, but such spaces must be maintained. Funding support for maintaining spaces would make it easier to find housing providers willing to undertake improvements; the financial and property management capacity of providers is often inadequate to fully cover ongoing costs, and funding is needed so that residents do not shoulder those costs through increased rents.

New programs could build upon highly successful initiatives like Vancouver Foundation’s Neighbourhood Small Grants. The program makes low-barrier \$500 grants available to residents of BC communities to undertake neighbourhood projects together; funded projects almost always have social connectedness benefits. New and larger grant programs could be targeted to rental housing operators, emphasizing the benefit of co-designing, co-creating, and co-managing improvements with residents.

“

INTERVIEWEE

The municipal grants we have received go straight to affordability and security of tenure. It’s magnificent, really, the contribution that makes to people’s lives. It’s way bigger than the dollar value.

WORKSHOP INSIGHTS FOR RECOMMENDATION 2

- A former municipal social planner suggested that certain ideas like energy efficiency and seismic safety have more political traction and funding support than social connectedness. There are retrofit programs focused in these areas happening now that could benefit from better cross-department collaboration (e.g., housing, social planning, green building, climate, etc.).
- An emergency planner recognized that this recommendation is tied into a trend in climate-focused mitigation and adaptation work that centres the importance of social equity.
- One researcher connected the idea of social retrofits to recommendation 3, and the importance of clear evidence-based standards to guide decisions. For example, Passive House and other energy-efficient building standards are clear, but we don’t yet have clarity and agreement on what elements should be included to boost social connectedness.



Happy City

3 FOSTER DESIGN EDUCATION AND DIALOGUE FOR SOCIAL CONNECTEDNESS IN MULTI-UNIT HOUSING

The field of sociable design for multi-unit housing is growing among specialized actors, but wider awareness and traction in policy and funding arenas has yet to follow suit. Metro Vancouver could strengthen opportunities to address social connectedness through multi-unit housing design by convening member municipalities and housing sector actors to engage in education and dialogue.

Best practices for designing multi-unit housing should balance environmental sustainability, affordability, and social sustainability outcomes. Achieving these outcomes at scale will not be easy; rather, it will require creativity, multi-stakeholder coordination, partnerships, and funding support. Relationships with BC Housing, BC Ministry of Health, health authorities, and others could be leveraged in these efforts.

There aren't many examples of municipal policies that touch on sociable housing design principles, but the City of Vancouver's guidelines for high-density housing for families takes an intersectional approach towards the needs of that particular type of household, and the City of North Vancouver's *Active Design Guidelines* serve as a guide for market and rental housing.

Despite the relative absence of best practices and design guidelines, some of our interviewees are already innovating in this space. For example, one housing provider interviewed was in the process of undertaking a redevelopment process that will combine the Passive House design standard (a voluntary standard for ultra-low energy buildings) with elements of design that encourage social interactions and connection. Another interviewee is building a set of tenant-informed design guidelines. By learning from the post-occupancy experiences of residents in new buildings, the practitioner is adapting designs for future affordable rental buildings. HNC partner Happy City is working on performance-oriented guidelines for the design of shared spaces in multi-unit housing that maximize social connectedness.

Some higher-end market rental and condominium developers may be savvy about design, common space, and shared amenity spaces that promote social connectedness, and they may be able to price it into rents and purchase costs. But rental housing geared towards low- and middle-income households may need more supports to ensure providers can incorporate best practices that foster social connectedness in affordable housing options. In order to work towards an equitable and flexible housing system that support social connectedness, best practices in design for multi-unit housing must be achievable across the spectrum of household incomes.

“

WORKSHOP PARTICIPANT

This is the most achievable, lowest-cost, lowest-hanging-fruit recommendation. Metro Vancouver can make sure practitioners in the field have the information and opportunity to design for this purpose. It can have a big impact with new multi-unit housing because we will be building more—and making sure best practices are out there is important.

OPPORTUNITIES TO EXPLORE

a) Support the creation of best practice case studies that can guide future policy at all levels of government.

Member municipalities' design policies and guidelines for multi-unit housing, healthy built environments, and active design can be studied to identify how such policies encourage social connectedness, whether implicitly or explicitly. Such study could include a further assessment of how such policies are implemented, in practice, and explore how differences in municipal approaches mitigate or exacerbate inequities between communities.

In addition to the work of municipalities, the work of public and private entities can also be studied. Entities like BC Housing, CMHC, universities, Happy City, and others are researching, designing, building, and operating sociable multi-unit housing.

Metro Vancouver can engage with all stakeholders to identify and create best practice case studies to guide future policy in the region and beyond.

b) Convene member municipalities to engage in dialogues.

Convening member municipalities—and other stakeholders such as multi-unit housing designers, developers, owners and operators as well as health authorities—in discussion about their experiences in this area and asking for their participation in identifying and supporting best practices is integral to achieving buy-in for new policies.

There are also groups, such as Urbanarium, that are interested in these issues and could play a complementary role in convening more public-facing conversation about best practices in multi-unit housing design. Groups like ours or other community-focused organizations could play a role in bringing the lived-experience perspectives of multi-unit housing residents into these conversations.

WORKSHOP INSIGHTS FOR RECOMMENDATION 3

- This recommendation was viewed as the second most impactful, and it was felt to be the most achievable by Metro Vancouver within a regional growth strategy.
- Housing operators, housing industry association representatives, and city planners saw this as a clear jurisdictional fit for Metro Vancouver in its role as convener, researcher, and educator. For both developers and planners, broadly understood best practices would be helpful. BC Non-Profit Housing Association, in particular, was eager to participate in this conversation and engage its members.
- A Fraser Health representative noted that in the past there was a team of community health specialists partnered with municipalities to work on healthy built environment projects. They suggested that perhaps these specialists might be able to contribute to education and help bring people together.



West End Seniors' Network

4 ADVOCATE FOR FUNDING AND SUPPORT OF SOCIAL CONNECTEDNESS PROGRAMMING

While we work collectively towards an optimal policy and funding environment to support social connectedness, we should recognize and support sustained and intentional programming in multi-unit housing that drives towards the same outcomes.

Even in a building that is optimally designed for organic social interactions between neighbours, thoughtful and intentional programming can catalyze, deepen, and help to maintain relationships between neighbours, broadening opportunities for resident-engaged or even resident-led initiatives that build community and resilience. This kind of creative intentional programming is even more important in multi-unit housing contexts where there is a lack of shared space in which to gather, socialize, and organize (most older buildings will fit in this category). Intentional programming that identifies the priorities and needs of vulnerable populations inhabiting a building can lead to social activations that address existing equity issues.

We hear from both the rental housing sector and the non-profit sector that the appetite exists to pilot social connectedness programming. We imagine that rental housing operators with the commitment and capacity to lead this type of programming within their buildings will still need and want to partner with community non-profits to more fully capital-

ize on opportunities to foster social connectedness, health and well-being, and community connections. Partnerships between housing operators and specialized non-profits will need reliable funding support. Over time, promising programs could expand to other multi-unit housing tenure types: strata condominiums, co-ops, and co-housing. Co-ops and co-housing currently offer much for the rental housing sector to learn from in terms of social connectedness.

A number of established programs show an understanding of the need for this type of programming, such as two programs delivered by BC Housing that address social connectedness and community resilience—Tenant Activity Grants and People, Plants and Homes—and Metro Vancouver Housing's tenant engagement programs. The existence of grant streams like those provided by Plan H (58), which support social connectedness activities by local and regional governments (funded by BC Ministry of Health through BC Healthy Communities), also recognize the need to fund emerging work in this field. Vancouver Foundation's Neighbourhood Small Grants, mentioned in an earlier recommendation, is an example of a smaller, resident-targeted funding stream.

Larger dedicated funding streams for social connectedness programming in multi-unit housing contexts could offer a significant opportunity to bolster community climate resilience, emergency preparedness, and pandemic response. Involving climate adaptation and emergency preparedness professionals in these discussions would be beneficial.

EXPERIMENTING WITH SOCIAL CONNECTEDNESS PROGRAMMING

The core of HNC is a community of practice made up of rental housing operators and non-profits doing just this: experimenting primarily with programming-based interventions. By the end of our project's third year, we estimate that our partners' activities will be taking place in about 40 buildings across Vancouver, Victoria, Penticton, and New Westminster. Each partner's program (some brand new, some a few years old) is responding to a different set of buildings and different resident populations with diverse incomes and needs; they take customized approaches. In collaboration with researchers at SFU and Happy City, HNC is building an evidence base around practice partners' emerging and promising practices with social programming, further exploring contexts in which these practices could be replicated and scaled.

Our partners reiterate that episodic funding is a challenge. Supports for multi-year/ongoing connectedness interventions would advance our partners' work.



WORKSHOP PARTICIPANT

[We rely] on our non-profit partners to reach vulnerable communities, to hold grants, implement programs and convene people. It is an important role that is done with very little funding and has filled gaps where social services have fallen short and government funding has been lost.

OPPORTUNITIES TO EXPLORE

a) Support the gathering of evidence from existing and future programs.

Metro Vancouver could advocate to health authorities, senior levels of government, and philanthropic organizations for more robust and reliable streams of funding for social connectedness programming in multi-unit housing, whether led by housing operators or by non-profit organizations in partnership with housing operators. A more diverse suite of interventions would build a more impactful evidence base to support promising emerging practices and supportive changes to regional and/or municipal policies.

b) Communicate findings and lessons learned from social connectedness interventions.

Metro Vancouver could provide support to communicate the findings from social programming pilots in multi-unit housing. Support could come in the form of a convening role, helping ensure that lessons learned are being shared with planners at member municipalities and others involved in relevant regional planning advisories. Metro Vancouver could also advocate to funders for the importance of knowledge transfer activities.

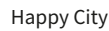
c) Open dialogue between multi-unit housing providers and those in other areas of practice who see the benefits of social programming for increasing community resilience.

If there were funds in place for social connectedness programming pilots, municipalities and health authorities could connect housing providers with internal staff champions

or strong community organizations that could advance their work. For example, social planners at the City of New Westminster (an HNC partner) are looking for a rental housing operator that might join HNC's Community of Practice and are offering to support them in myriad ways, including direct staff support and connections with community organizations that could assist with programming.

WORKSHOP INSIGHTS FOR RECOMMENDATION 4

- Two participants in different groups (an emergency planner and a housing provider) suggested that it is important to ensure any new programs targeting programmatic interventions for boosting social connectedness take into account that not all communities or organizations have equal capacity to apply for program funding. An approach aiming to redress inequities would be to offer funding to marginalized and/or more socially isolated communities and take proactive measures to connect them with opportunities (acknowledging and managing the burden of applications and reporting).
- A planner noted that with respect to budgets: "We're willing to talk in huge numbers when it comes to physical infrastructure, but when it comes to social programming immediately the numbers go way down. There is very little willingness at multiple levels of government to do big spends on social connectedness programs and services. Evidence tells us social connectedness makes a huge difference, but we need stronger voices in advocating for funding."
- Representatives from both Vancouver Coastal Health and Fraser Health recognized how important the non-profit community is to reaching and supporting underserved, marginalized communities, and that different levels of government have divested responsibility to the non-profit sector without adequate resources to support it.
- It was noted that this recommendation is related to recommendation 5, in that funding for programmatic interventions in multi-unit housing should be prioritized for underserved, marginalized communities.



Metro Vancouver, municipalities, non-profits, and the provincial government should take a social equity approach to map out geographic and socioeconomic access to the social infrastructure (parks, community gardens, public gathering spaces, libraries, community centres, neighbourhood houses, etc.) that can promote social connectedness, health, and well-being and also determine how well this infrastructure meets the needs of local residents. Further, Metro Vancouver could use this work to recommend the prioritization of investment in social infrastructure in underserved neighbourhoods, to guide member municipalities as they plan new communities and changes to existing ones, and to support municipalities in adopting a social equity approach to meet communities' needs for services and amenities.



WORKSHOP PARTICIPANT

This recommendation is the most important to me and it needs more digging and investigating. Market developments encroach [on] racialized communities. [We're] losing pre-existing cultural infrastructure including the walk-ups. Inclusionary policy doesn't look at gentrification and loss of culturally specific retail establishments. Look at how race and space intersect.

OPPORTUNITIES TO EXPLORE

a) Map access to social infrastructure that supports social connectedness in Metro Vancouver municipalities.

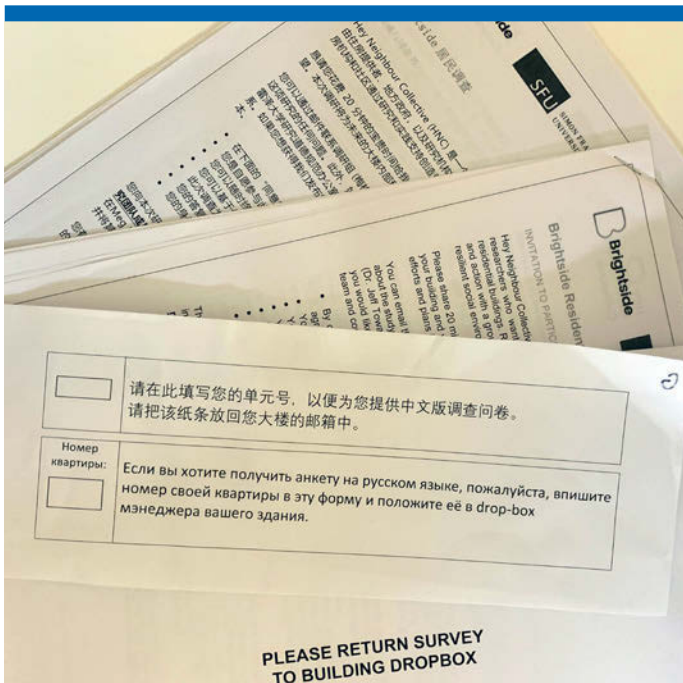
Metro Vancouver could play a research role in assessing equitable access to amenities that promote health and social connectedness, especially for residents of multi-unit housing with little or no access to private yards or gathering spaces. Identifying existing gaps and analyzing the populations that are most impacted by those gaps will bring light to what type of social infrastructure needs to be prioritized in the near future.

b) Emphasize cultural connectedness and cultural equity when planning for new or refurbished social infrastructure in underserved communities.

Explicitly valuing diverse cultures will require meaningful engagement and co-creation with residents who have lived experience of discrimination and exclusion. Metro Vancouver could help to promote strong examples of equitable engagement and co-creation between residents, cultural communities, and their municipality.

WORKSHOP INSIGHTS FOR RECOMMENDATION 5

- A planner commented that this recommendation was absolutely “do-able” and should be paired with the gathering of baseline data about social connectedness in general. Results could also inform targeted funding for social-connectedness retrofits (recommendation 2) and programming (recommendation 4).
- A health authority participant suggested that they might be able to help with data and advocacy for this recommendation.
- A BC Centre for Disease Control participant referenced their draft Social Environments Framework and their willingness to pull in community organizations and other players involved in advocating for or designing healthy social environments.
- It was discussed that this recommendation could help with future community-level planning to address inequities, but there was also caution about gentrification and the reality that discrimination, stereotypes, and stigmas can result in racialized people experiencing public spaces and housing with less safety and sense of belonging.



Ghazaleh Akbarnejad

“

WORKSHOP PARTICIPANT

[This] is a great recommendation: auditing current policy goals and progress is extremely difficult quantitatively because the indicators are so limited . . . [We] need to beef up metrics so we can measure whether or not we did a good job in 10 years, and if not, why?

minology and definitions, evaluating the impacts of regional efforts to increase social connectedness is not possible.

Additionally, the performance indicators under Goal 4 of *Metro 2040* (Box 2)—housing affordability, housing diversity, and walkability—don’t currently reflect a measure related to social connectedness or related outcomes.

6 TRACK AND REPORT ON SOCIAL CONNECTEDNESS

The interest in social connectedness is strong. Practice-based guides summarize the emerging evidence linking social connectedness and built form and provide suggestions for actions. For example, HNC partner Happy City has developed policy recommendations for sociable housing design, (45) and the Canadian Institute of Planners has developed a *Healthy Communities Practice Guide*. (60)

However, the mix of terms and definitions employed to describe social connectedness is frequently cited as a barrier to building an effective, evidence-based approach to addressing social isolation. (2,61–63) The lack of shared language, common understanding, and evidenced-based approaches to social connectedness pose challenges for data collection and comparison across jurisdictions, and it hinders the effectiveness of regional goals to foster healthy and connected complete communities.

To highlight this in the local context, in our policy scan we looked at the language used in *Metro 2040* regional context statements and municipal action plans falling under the domain of healthy city strategies. Of the 21 regional context statements referencing Goal 4: Develop Complete Communities, four used the term *social cohesion*, eight use the term *social connectedness*, and one uses *social capital* to describe goals around social connectedness. (Appendix C) Indicators for each of these would differ. Without shared ter-

BOX 2: METRO 2040 PERFORMANCE INDICATORS EXCERPT

Housing Affordability

As measured by:

- percentage of median household income spent on average housing and transportation costs

Medium-term measure.

Housing Diversity

As measured by:

- share of estimated regional rental housing demand achieved in new supply

Short-term measure.

Complete Communities and Health

As measured by:

- walkability

Short-term measure.

OPPORTUNITIES TO EXPLORE

a) Leverage partnerships to collect and distribute disaggregated baseline data on social connectedness for the region.

Clear performance measures that adequately capture social connectedness outcomes, and regular reporting on progress in this area, would signal a regional commitment to prioritize social connectedness in complete communities planning. This work should leverage partnerships with groups like the BC Centre for Disease Control, which is releasing a Healthy Social Environments Framework in December 2020, as well as health authorities and organizations like the Vancouver Foundation or the United Way of Lower Mainland that have social connectedness as a priority.

It will be important to commit to the collection and dissemination of disaggregated data to capture information about people that our society and systems make vulnerable: BIPOC, LGBTQ2I+, single mothers, recent immigrants and refugees, low-income households, people with disabilities, and those with mobility, developmental, mental health and addiction challenges. Social and racial equity must be a core principle of all current and future regional and municipal planning. Having a clear understanding of where we are starting from is fundamental to these efforts, and to aligning energy and resources accordingly.

b) Include at least one measure of social connectedness as a performance indicator in progress reports and public-facing *Metro 2050* materials.

Metro Vancouver could employ common indicators and metrics to demonstrate the focus on social connectedness, and track progress in this area. For example, Statistics Canada's *General Social Survey* has numerous questions on components of social connectedness, such as sense of belonging, social contacts, and trust. Also, certain questions have been used consistently across local surveys (for example, within the Vancouver Foundation's 2017 *Connect and Engage* report, or Vancouver Coastal Health and Fraser Health's 2013 survey, *My Health My Community*).

c) Work towards a regional social connectedness strategy with a clear set of metrics that can be tracked over time.

Metro Vancouver could anchor the development of a social connectedness strategy. This work could begin with a multi-stakeholder regional working group that includes regional planning staff, municipal planners, health authorities, rental housing associations (like BC Non-Profit Housing Association, Aboriginal Housing Management Association, and LandlordBC), and service organizations focused on building community and social connectedness among residents.

WORKSHOP INSIGHTS FOR RECOMMENDATION 6

- Support for this recommendation, and for Metro Vancouver to play a role in mobilizing knowledge about the importance of social connectedness more generally, was particularly strong with regional planners, health authority representatives, and municipal planners, a number of whom stated that consistency around terminology and a decision on terms to track would be helpful.
- Vancouver Coastal Health expressed interest in being involved with this recommendation, both in terms of helping decide on metrics and providing regional and municipal data. Fraser Health noted support as well, mentioning *My Health My Community* as data to leverage.
- There were a number of comments about the importance of this recommendation to other recommendations. For example, disaggregated baseline data on social connectedness in different neighbourhoods and municipalities would support recommendation 5 (prioritizing underserved communities) and could additionally inform recommendation 4 (support funding for programming). Knowing where—and between whom—social connectedness is suffering could help to direct energy and resources to prioritizing vulnerable residents. This would be helpful to planners, funders, and practitioners.
- Finally, there were a number of assertions that tracking metrics and progress was important for all of our recommendations, not just recommendation 6.



Concert Properties / Julianna Santos (City of Vancouver)

CONCLUSION

All six of our specific recommendations about social connectedness in multi-unit housing found some degree of favour with participants in the November 23, 2020, online workshop, as did the overarching recommendation that a social equity principle inform all goal areas for *Metro 2050*.

This discussion paper is very much a living document. We hope that these ideas find their way into *Metro 2050* and into the municipal plans that flow from it over time. But we don't intend for this paper to sit on a shelf gathering dust. We will continue to dig into these ideas and work with forward-thinking housing practitioners, non-profits, municipalities, health authorities, funders, and senior levels of government to test and support promising practices in this area, and to work towards systemic and cultural changes that could further foster the work.

We thank all who contributed insights, ideas, and inspiration for this work.

APPENDIX A: KEYWORDS

KEYWORDS FOR SEARCH OF POLICY DOCUMENTS

- Accessibility/Aging in Place
- Affordability
- Belonging
- Climate/Sustainability
- Complete Communities
- Connectedness
- Emergency Preparedness
- Friendly
- Healthy Communities/Community Wellness
- Isolation/Loneliness
- Multi-Unit Residential Building (MURB)
- Resilience
- Safety
- Social Capital
- Social Cohesion
- Social Inclusion
- Social Interaction
- Social Sustainability
- Tenure

APPENDIX B: POLICIES REVIEWED

List of policies reviewed in policy scan.

Federal

- Budget 2019: Investing in the Middle Class, Government of Canada, 2019
- National Housing Strategy Act, S.C. 2019, c. 29, s. 313
- National Housing Strategy, Canada Mortgage and Housing Corporation, 2017
 - Subsections:
 - o Rental Construction Financing Initiative, 2020
 - o Sector Transformation Fund - Local Projects
 - o Community Based Tenants Initiative
- Indigenous Homes Innovation Initiative Project Funding, Indigenous Services Canada

Provincial (BC)

- BC Building Code: Adaptable Housing Standards, 2009
- BC Healthy Families Communities Program
- BC Housing Construction Guide and Standards, BC Housing
- British Columbia Local Government Act, Part 15, Division 5 - Zoning Bylaws
- Plan H Community Connectedness Grants, Plan H in partnership with BC Healthy Communities
- Poverty Reduction Strategy Act, BC 2019
- Promote, Protect, Prevent: Our Health Begins Here, Guiding Framework for Public Health, 2013, BC Ministry of Health
- Social Housing Retrofit Support Program, BC Hydro in partnership with BC Housing
- TogetherBC: Poverty Reduction Strategy, Poverty Reduction Strategy Act, BC 2019

Regional

- Metro Vancouver Housing 10-Year Plan, 2019
- Regional Growth Strategy, Bylaw No.1136, 2010, Metro Vancouver 2040: Shaping our Future (Metro 2040)
- Tenant Association Constitution, Metro Vancouver Housing Corporation

Municipal

- A Healthy City for All, Healthy City Strategy – Four year action plan, 2015-2018, City of Vancouver
- Active Design Guidelines, City of North Vancouver
- Building Our Social Future: A Social Development Strategy for Richmond, 2013 - 2022, City of Richmond
- Burnaby Social Sustainability Strategy, City of Burnaby
- City of Vancouver Secured Market Rental Housing (SMRH) Policy
- City of Vancouver Secured Rental Policy Incentives
- City of Vancouver Social Housing or Rental Tenure (SHORT) Pilot program
- City of Vancouver Tenant Protection and Relocation Policy
- City of Victoria 2019-2022 Strategic Plan
- City of Victoria Inclusionary Housing and Community Amenity Policy
- City of Victoria Residential Rental Tenure Zoning
- Community Benefit Bonus Policy, City of Burnaby
- Community Wellness Strategy 2018-2023, City of Richmond
- Delta Social Action Plan
- Density Bonus Bylaw Zoning Bylaw, 2014, Amendment Bylaw No. 55, City of Abbotsford
- Density Bonus Phase 2 Policy, Bylaw No. 7697, 2014, City of New Westminster
- District of North Vancouver, 2015 - 2018 Corporate Plan

- District of West Vancouver Blueprint for Social Responsibility & Change
- DTES Community Plan
- Family Room: Housing Mix Policy for Rezoning Projects, City of Vancouver
- High Density Housing for Families with Children Guidelines, 1992, City of Vancouver
- Imagine White Rock, Official Community Plan, 2017, No. 2220
- Interim Bonus Density Policy, Policy O-54, City of Surrey
- Maple Ridge Social Sustainability Policy
- New Westminster Official Community Plan, Our City 2041
- North Vancouver Official Community Plan, Bylaw No. 8400
- Official Community Plan, City of Abbotsford
- Official Community Plan, OCP Bylaw No. 2955, City of Port Moody
- Vancouver Food Strategy, City of Vancouver
- Vancouver's Housing and Homelessness Strategy, City of Vancouver
- Vision 2020 Strategic Plan, City of Port Coquitlam

APPENDIX C: EXAMPLES OF TERMS RELATED TO SOCIAL CONNECTEDNESS IN REGIONAL CONTEXT STATEMENTS

TERMS USED TO DESCRIBE SOCIAL CONNECTEDNESS UNDER GOAL AREA 4.2: DEVELOP COMPLETE COMMUNITIES

	Social Interaction	Healthy Communities / Community Wellness / Well-being	Social Inclusion	Social Sustainability	Belonging	Friendly	Connect-edness	Social Cohesion
Anmore								
Belcarra								
Burnaby								
Coquitlam								
Delta								
City of Langley								
Maple Ridge								
New Westminster								
City of North Vancouver								
District of North Van.								
Port Coquitlam								
Port Moody								
Richmond								
Surrey								
Vancouver								
West Vancouver								

Regional context statements for White Rock, Township of Langley, Pitt Meadows, and Lion's Bay do not have language that refers to social connectedness.

APPENDIX D: INTERVIEWEES

Interviews were conducted with representatives from:

- Brightside Community Homes Foundation
- Catalyst Community Developments Society
- Concert Properties
- Connect & Prepare (Building Resilient Neighbourhoods and City of Victoria “Victoria Ready” emergency staff)
- Close to Home (West End Seniors’ Network)
- An ex-City of Vancouver Healthy City Strategy social planner and originator of the Hey Neighbour! Pilot
- Metro Vancouver Housing Corporation, Tenant Programs
- LandlordBC

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To: George Massey Crossing Task Force

From: Neal Carley, General Manager, Parks and Environment

Date: January 21, 2021 Meeting Date: February 5, 2021

Subject: **George Massey Crossing – Project Status**

RECOMMENDATION

That the George Massey Crossing Task Force receive for information the report titled “George Massey Crossing – Project Status” dated January 21, 2021.

EXECUTIVE SUMMARY

Over the past year, the Province completed a business case for the replacement of the George Massey Tunnel. The business case included two short-listed options: an eight-lane bridge and an eight-lane immersed tube tunnel. As the project is expected to enter a new phase with the completion of the business case, the Metro Vancouver George Massey Crossing Task Force has been reconvened.

PURPOSE

To provide the Task Force with a status update on the Province’s George Massey Crossing Project.

BACKGROUND

The Finance and Intergovernment Committee and MVRD Board received updates on the George Massey Crossing Project in February, March and April 2019. At the April meeting, the MVRD Board passed a resolution for general support of the principles and goals for the George Massey Crossing developed by the Ministry of Transportation and Infrastructure.

The George Massey Crossing Task Force, struck by Chair Dhaliwal earlier in 2019, held meetings on June 27, 2019, July 24, 2019, and October 2, 2019. At the October 2, 2019 meeting, the Task Force received a presentation by the provincial project team and subsequently supported a new eight-lane immersed-tube tunnel with multi-use pathway as the preferred option for the George Massey Crossing for the purposes of the Province’s public engagement.

At the October 16, 2019 meeting, the Finance and Intergovernment Committee supported an eight-lane immersed-tube tunnel with multi-use pathway as the preferred option for the George Massey Crossing.

At the November 1, 2019 meeting, the MVRD Board passed the following resolution:

That the MVRD Board:

- a) receive for information the report titled “George Massey Crossing Project – Results of Technical Evaluation on the Six Short Listed Options” dated September 24, 2019;*

- b) *based on the Province's technical analysis, endorse a new eight-lane immersed-tube tunnel with multi-use pathway, including two transit lanes, as the preferred option for the George Massey Crossing for the purposes of public engagement;*
- c) *Provincial Government's assessment of the immersed tube tunnel options takes into consideration:*
- *The project must address First Nation concerns regarding in-river works and fisheries impacts.*
 - *The project should not create additional potentially costly, lengthy or prohibitive environmental challenges or reviews.*
 - *The project should address the City of Richmond and Delta's concerns regarding local impacts at interchanges or access points, as well as minimize impacts on agricultural land.*
 - *To fully realize the benefit of this significant investment, the entire Highway 99 corridor should be evaluated for improvements as part of the crossing project including the existing congestion at the South Surrey interchanges.*
 - *The project should address the City of Richmond and Vancouver's concerns regarding excess capacity, the risk of increasing vehicle kilometres travelled, and the potential to worsen congestion at the Oak Street Bridge and along the Oak Street corridor.*
 - *The crossing should be designed to serve the needs of the region to at least 2100.*
 - *The crossing should include six lanes for regular traffic including goods movement and two lanes dedicated for rapid transit bus, with dedicated multi-use pathway and facilities for cyclists and pedestrians, and include immediate access to enhanced rapid transit capacity at opening. It should also have the potential for conversion to rail in the future, including consideration for potential high speed rail.*
 - *As it is now, all utility infrastructure, including BC Hydro power transmission lines, should be constructed underground in conjunction with the tunnel.*
 - *Any solution must address the matter in a timely manner, hopefully with construction completed by 2026-2027.*
 - *Any solution that addresses these issues should also be consistent with Metro Vancouver's Regional Growth Strategy (Metro 2040) and TransLink's Regional Transportation Strategy and Metro Vancouver's new climate change targets, which promote sustainable transportation choices. The Regional Transportation Strategy update is currently underway and can provide the opportunity to further integrate the crossing as regional priority, as well as consider transportation demand management strategies to address municipal concerns; and*
- d) *as an interim measure to address the immediate traffic congestion at the tunnel, request the Provincial government work with TransLink through Phase 3 of the Mayors' Council plan to provide additional funding for higher-frequency transit services to encourage people to leave their cars at home.*

GEORGE MASSEY CROSSING PROJECT

In 2018, the Province completed an independent technical review of the George Massey Tunnel replacement and the 10-lane bridge that had been approved at the time. The technical review was released in December 2018 and a provincial project team through the Ministry of Transportation and Infrastructure prepared the options for a new crossing. The provincial project team worked closely with Metro Vancouver, TransLink, member jurisdictions, and First Nations to develop and evaluate the crossing options.

Since November 2019, the provincial project team completed public engagement and completed a business case in late 2020.

George Massey Crossing Project Status

Over the past year, Metro Vancouver have been in contact with the provincial project team. The project team has recently completed the business case for the replacement of the George Massey Tunnel on Highway 99. The business case, which included two short-listed options (an eight-lane bridge and an eight-lane immersed tube tunnel) was received by the Minister of Transportation and Infrastructure in December 2020. The next step is for the Province to review the submission and make a final decision regarding the crossing.

ALTERNATIVES

This is an information report. No alternatives are presented.

FINANCIAL IMPLICATIONS

There are no financial implications associated with this information report. Any financial implications or other impacts for Metro Vancouver that arise due to the George Massey Crossing Project will be assessed and reported to the Task Force as the project is developed.

CONCLUSION

Metro Vancouver's George Massey Crossing Task Force has been reconvened as the Province completed a business case, which included two short-listed options (an eight-lane bridge and an eight-lane immersed tube tunnel), for the replacement of the George Massey Tunnel. The Province will review the business case and make a final decision regarding the crossing.

To: Regional Parks Committee

From: David Leavers, Division Manager, Regional Parks

Date: January 15, 2021

Meeting Date: February 10, 2021

Subject: **Regional Parks Permit Framework**

RECOMMENDATION

That the Regional Parks Committee receive for information the report dated January 15, 2021, titled "Regional Parks Permit Framework".

EXECUTIVE SUMMARY

The *Regional Parks Permit Framework* describes a permit system that provides individuals, groups and organizations with the required authorization to use a regional park for an activity that would otherwise be prohibited, or to acquire temporary exclusivity over a specific area of a park or a regional parks facility. The framework defines and describes the various types of permits used in the system and provides direction to staff involved in the permitting process. Permits described include: filming, special events/special use, commercial use, facility rentals, camping, and special access. The framework describes the process applicants must follow to obtain any of these types of permits.

PURPOSE

To provide for the Committee's information, the *Regional Parks Permit Framework*, a resource document that describes and provides direction to staff regarding Metro Vancouver Regional Parks' permit system.

BACKGROUND

Metro Vancouver Regional Parks has managed an evolving permit system for over 50 years. Changes have been made over the years to assist regional parks staff to manage many different kinds of activities, to establish conditions of use for permit holders, and help to ensure compliance with park rules and the Regional Parks Regulation Bylaw.

Permits provide a mechanism whereby park users can secure authorization to use a park for an activity that would otherwise be prohibited, or to acquire temporary exclusivity over a specific area of a park or a regional parks facility. Permits are used to convey information to the permit holder such as: specific conditions of use, hours, locations, and they can provide special instructions to make their experience safer and more enjoyable. Permits help protect natural assets by preventing the overuse of facilities, and can be used to manage park capacity and minimize conflict between users. Permits are used to administer fees and charges when applicable, collect information for park staff to aid in operations planning and management, and collect data. Permits can also be used to manage risk appropriately, including ensuring all indemnification and insurance requirements are met.

Information regarding the regional parks permit system has not existed in one resource document for staff or others, and the development of a framework document describing the current permit system was included as a 2020 work plan priority for staff and the Regional Parks Committee.

REGIONAL PARKS PERMIT SYSTEM

The *Regional Parks Permit Framework* describes a permit system that offers individuals, groups and organizations permitted opportunities for several types of activities. The framework provides staff with a number of considerations they should make before determining if a permit should be granted for any of these activities.

TYPES OF PERMITS

The framework defines and describes the various types of permits used in the system including:

- Filming Permit
- Special Event / Special Use Permit
- Commercial Use Permit
- Facility Rental Permit
- Camping Permit
- Burns Bog Ecological Conservancy Area Access Permit
- Scientific Research Permit

The framework describes the process applicants must use to obtain any of these types of permits.

ALTERNATIVES

This is an information report. No alternatives are presented.

FINANCIAL IMPLICATIONS

This report and framework has no financial implications to the MVRD. Staff will continue to work within the current Board approved fee schedule to charge the appropriate amount for the various permit types.

CONCLUSION

The completion of the *Regional Parks Permit Framework* accomplishes staff's and Committee's Work Plan commitment to doing so. The framework reflects the Board established priorities of the *Regional Parks Plan*. The framework is intended to be a living document that will be required to change over time to address shifting park use and an evolving regulatory environment.

Attachment

"Regional Parks Permit Framework", dated February 10, 2021

43319741



Regional Parks Permit Framework

REGIONAL PARKS PERMIT FRAMEWORK

EFFECTIVE: FEBRUARY 10, 2021

REPLACES: N/A

APPROVED BY: _____
Mike Redpath, Director Regional Parks

PURPOSE

The Regional Parks Permit Framework describes a permit system that offers individuals, groups and organizations permitted opportunities for several types of activities. The framework defines and describes the various types of permits used in the system and provides strategic direction to staff involved with the permitting process including permits for: filming, special events, special use, commercial use, facility rentals, camping, and special access. The framework describes the process applicants must use to obtain any of these types of permits.

APPLICATION

Applicable to all Regional Parks activities that require a permit.

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Introduction

Every year, millions of day use visitors use Metro Vancouver Regional Parks for many different activities without any specific authorization to be on these lands. However, as manager of these lands, Metro Vancouver has the right to control land use and the types of activities of our visitors. The rules and regulations for the use of the parks are enacted under the Regional Parks Regulation Bylaw. Many types of park use are fully authorized without a permit, e.g. hiking on a trail designed for this purpose during park hours. Some park use is always unauthorized, e.g. driving an ATV off trail for personal enjoyment. And for other kinds of uses, Metro Vancouver Regional Parks manages a permit system whereby an individual, group or organization may be permitted authorization to use a park to carry out a specific activity with specific conditions of use.

Why are permits required?

Permits are used to assist regional parks staff to manage many different kinds of activities in regional parks, to establish conditions of use for permit holders, and help to ensure compliance with the Regional Parks Regulation Bylaw. Permits provide a mechanism whereby park users can secure authorization to use the park for an activity that would otherwise be prohibited, or to acquire temporary exclusivity over a specific area of a park or a regional parks facility. Permits can convey information to the permit holder such as specific conditions of use, hours, locations, and they can provide other special instructions to make their experience safer and more enjoyable. Permits help protect natural areas by preventing the overuse of facilities, and can be used to manage park capacity and minimize conflict between users. Permits are used to administer fees and charges when applicable, collect information for park staff to aid in operations planning and management, and collect data regarding visitor use. Permits can also be used to manage risk appropriately, including ensuring all indemnification and insurance requirements are met.

What activities require a permit?

Commercial Activities: The Regional Parks Regulation Bylaw prohibits any person to carry on any business, trade, profession, commercial activity or occupation without a valid commercial use permit. If an individual, organization or business entity wishes to conduct any such business activity in a regional park, a permit is required. This includes providing commercial services such as dog walking, cultural and nature interpretation services, guided trail hikes and rides, fitness boot camps, for-profit events, nature photography lessons, equestrian trail rides and product sampling. Vending, food trucks and concession operations including any food, beverage, and merchandise sales require a permit, as do all buskers and entertainers.

Scientific Research:

All research activities including environmental monitoring, collecting and surveying, and social/citizen science requires a permit. This may include research involving drones in parks not in restricted air space. This may include research conducted by individuals, groups, non-profit organizations, educational institutions or for commercial purposes.

Special Events / Special Use: Public or private special events organized by individuals, groups or non-profit organizations (e.g. runs, sport competitions, cultural festivals, environmental events, agricultural events, corporate gatherings, celebrations of life, weddings and ceremonies) require a

permit. Activities requiring exclusive use of specific regional park spaces / locations (e.g. parking lots, fields) require a permit.

Under the Regional Parks Regulation Bylaw, a number of criteria are used to determine if a permit is required. Staff will access based on a set of criteria if an application meets the criteria of a Special Event Permit or a Special Use Permit.

Filming: All commercial filming activity requires a permit.

Camping: Camping at Edgewater Bar campsite in Derby Reach Regional Park or the reservation of any group campsite requires a camping permit.

Parking: A parking permit is required to park in designated pay parking lots, and could include a parking reservation if required.

Access to Burns Bog Ecological Conservancy Area: These permits are issued to all individuals entering the conservancy area to conduct work on approved projects.

Facility Rentals: Indoor facilities, such as Minnekhada Lodge, Cammidge House, Inverholme Schoolhouse or Camp Capilano, require a permit to reserve the facility, as do any purpose built outdoor facilities, such as picnic shelters.

Considerations when granting a permit:

There are several factors staff must consider before determining if a permit should be granted. First, one must ensure that Metro Vancouver has jurisdiction for the *location* where the activity will occur. Some locations, including some tidal areas or the airspace above a regional park are not within Metro Vancouver's jurisdiction. Next, one must ensure that Metro Vancouver has jurisdiction over the *activity*. For example, drone flight is regulated by the federal government. Fishing is regulated by the provincial government. Finally, can the requested *date/time* for the activity be accommodated amongst other operational needs of the park? Activities that significantly increase visitation would be less appropriate to permit on peak summer weekends in parks that already have capacity challenges.

Other considerations include the operational impacts on the park, impacts on general park users, natural resource impacts on the park's natural areas, and potential impacts on adjacent property owners. With these considerations in mind, field staff must ascertain if the activity is suitable for the location.

Before granting the permit, staff might consider additional questions such as:

- Does the activity contribute to the *Regional Parks Plan* goals to protect Metro Vancouver's natural areas and connect people to them?
- Does the activity contribute to the *Metro Vancouver Board Strategic Plan*?
- Is the activity consistent with the Regional Parks brand and values?
- Will the activity generate revenues that will reduce the overall tax burden on residents of the region?
- In the absence of a facility allocation policy, is there a fair and equitable process for managing limited supply with demand for permit requests for specific locations or specific activities or specific dates/times? (e.g. commercial dog walking at Pacific Spirit Regional Park)

- Will the activity create potential conflict or negative media interest given the nature of the activity?
- Has legal precedent provided some direction regarding unauthorized use? (e.g. homeless encampments)
- Is a Regional Parks permit the most appropriate mechanism to permit use? (rather than another form of agreement i.e. lease agreement)

Visitor Services staff will consult with area staff regarding most permit applications. After determining that the location and activity are appropriate and that the date/time is available for permitted use, and staff have considered the answers to the additional questions listed above, the most appropriate staff person(s) will determine if a permit will be granted.

What types of permits are there?

Filming Permit

Metro Vancouver recognizes the importance of the film industry as a significant contributor to the regional economy. The motion picture industry leverages many existing regional strengths, including a workforce skilled in the creative and technology sectors and the region's diverse natural scenery. Metro Vancouver will consider requests to use MVRD property for filming activities where such activities are compatible with operational requirements. Requests to film on Metro Vancouver property will be subject to [Filming Regulations](#) and any further conditions of use as outlined in the permit.



All filming activities will ensure protection of MVRD assets, avoid disruption of operations and maintenance activities, and will ensure that potential liability and adverse impacts on natural resources are minimized. Film productions are required to remediate any damage to properties or the environment.

Film productions must ensure compliance with other municipal, provincial and federal legislation and permitting requirements. Filming crews are encouraged to review and abide by Creative BC's [Code of Conduct](#).

Entities seeking permission to film on MVRD property are required to apply for a permit from Metro Vancouver.

Metro Vancouver will charge fees for filming on MVRD property to recover costs and partially offset operating and maintenance costs of the properties.

All filming fees charged for the use of MVRD property are approved by bylaw and are currently laid out in Schedule A of the Metro Vancouver Regional District Regional Parks Regulation Bylaw. The Bylaw is amended regularly to ensure that fees are appropriate and based on current market conditions.

Special Event / Special Use Permit

Special Events are activities that require approval and possibly site supervision. Generally, a Special Event Permit is required if there is a need for the activity to require exclusive use of a regional park facility or location that is not reservable (e.g. if 20 people were to go to the park and set up lawn chairs without an expectation of keeping the area private for only their group, this would be considered non-exclusive use and would not require a Special Event Permit. However, if 20 people were to go to the park and set up 20 chairs in rows with an aisle down the middle for a wedding party to walk through, that would assume exclusive use is expected or required, and a Special Event Permit would be required). Since each occurrence requires approval, these permits are not meant for ongoing activities.



Under the Regional Parks Regulation Bylaw, a number of criteria are used to determine if a permit is needed. If any one of the following criteria is met, a Special Event Permit is required:

- If the event is to involve more than 50 people requiring exclusive use
- If the event requires the set up/take down of temporary equipment such as tents, stages, tables and chairs
- If the event is to include the licensed serving or consumption of alcohol

To obtain a Special Event Permit, one must fill out the [Special Event Application Form](#) and applicants may be required to supply the following documents:

- Signed rental contract including indemnification agreement
- Liability Insurance naming Metro Vancouver as additionally insured
- Payment of fees as shown on rental contract
- Local health authority authorization for food service plan, food safe certificate
- Site layout and route map for walks and runs
- Copy of event brochure or advertising material, and event website address

Special Event Permit fees are charged for the use of MVRD property and are approved by bylaw as currently laid out in Schedule A of the Metro Vancouver Regional District Regional Parks Regulation Bylaw. The bylaw is amended regularly to ensure that fees are appropriate and based on current market conditions.

Special Use Permit

Some Special Event Permit applications may not fully meet the required criteria of this permit type. Some activities may require Metro Vancouver Regional Parks advance notice and/or the ability to control activities that may cause a disturbance to general park visitors. Generally, Special Use Permits can be issued for a park use that is non-exclusive. Since each occurrence requires approval they are not meant for ongoing activities. Special Use Permits are issued free of charge* in these cases.

Special Use Permits may be issued if the activity:

- Is for more than 50 people but does not require exclusive use

- Is for education or research purposes only
- Occurs after park hours
- Requires special access to the park
- Requires the use of a generator or amplification/PA systems

There are a number of factors that would result in a permit being issued as a Special Use Permit as opposed to a Special Event Permit. Special Use Permits do not grant the permit holder exclusive use. They are intended to ensure that activities follow an approval process and that a record of the activity is created.

Examples would be activities that: require bollard removals, occur outside park hours, require power generators. These activities are often add-ons to an existing permitted activity and do not require additional fees.

*While there is no permit fee, applicants may be charged for staff time or other recoverable direct costs.

Special Use Permits can also be used to authorize activities by park partners that provide benefits to the park, such as stewardship activities.

Liquor at Special Events:

Liquor *may* be permitted in regional parks by first obtaining a Special Event Permit. Specific liquor requests require the additional approval of the Park Operator, Parks Operations Supervisor, and Parks Management Group. Liquor is allowed at only the following three facilities without a requirement for special approval: Minnekhada Lodge, Inverholme Schoolhouse, and Cammidge House.

The serving and consumption of liquor in a regional park requires a Province of British Columbia issued permit. The permit is obtained online at <https://specialevents.bcldb.com> or by phone at 866-209-2111.

All municipal requirements must be met (e.g. a noise variance permit must be obtained for outdoor events with liquor within Bowen Island Municipality).

An additional liquor administration fee is applied to the Special Event Permit by Metro Vancouver.

Conditions of use one might expect to be associated with a Special Event Permit:

- Safety plan / first aid attendant onsite
- Security plan / security personnel onsite
- Traffic and parking control plan
- Portable toilet provision
- Food safe certificate
- Serving It Right certificate
- Local health authority requirements met
- Fire safety plan
- Natural Resource Management plan, may include approvals from other jurisdictions (e.g. Boundary Bay Regional Park activities on or near the Wildlife Management Area involve staff from the Ministry of Forests, Lands, Natural Resources Operations and Rural Development)
- Risk management plan
- Waste management plan
- Liquor permit

- Vending plan, may restrict certain kinds of vendors (e.g. tobacco or cannabis products)
- Noise limitations (loud music etc.)
- No bottled water to be distributed or sold
- Certifications if required (e.g. drone certification)

There is an online handout, [Green Best Practices for Hosting Special Events](#) that offers tools for organizations to make their event more environmentally sustainable.

Commercial Use Permit



All commercial activities in regional parks are required to obtain authorization from Metro Vancouver. This may be in the form of a Commercial Use Permit, a license agreement, or a contract.

The Regional Parks Regulation Bylaw currently states: A person who carries on a business, trade, profession, commercial activity or occupation, within a regional

park or on regional park property must apply to the park manager for a commercial use park permit.

Metro Vancouver provides opportunities for commercially run businesses to operate in its regional parks via commercial permitting.

A commercial use permit typically meets the following criteria:

- Non-exclusive use of park land
- Ongoing use of regional park spaces
- General [Regional Park Guidelines](#) apply
- Permit may be suspended during High or Extreme Fire Danger conditions, or other dangerous weather conditions
- Other site specific conditions of use apply (regional park and commercial activity specific)

Proof of permit must be carried at all times by commercial use permit holders. The permit holder is typically required to report back monthly on dates, times, location, attendance of visits and any other data specified in the conditions of use.

Commercial use permits last for one year, and run the calendar year, January 1st to December 31st. Annual permit fees are not pro-rated.

Examples of commercial activities that are currently permitted in regional parks include:

- Filming (see Filming Permit)
- Photography
- Concession Operations (Belcarra / Boundary Bay) – contracted operation procured appropriately and defined in a lease agreement
- Canoe/Kayak rentals (Belcarra) – contracted operation procured appropriately and defined in an agreement

- Dog Walking (Pacific Spirit) – contracted operation require a Commercial Dog Walking Permit, currently different than standard Commercial Use Permit
- Vending (Pacific Spirit / Wreck Beach) – subject to Vending Permit – currently different than standard Commercial Use Permit
- Outdoor Nature Schools (Pacific Spirit – utilizes standard Commercial Use Permit)
- Paid Parking (Belcarra, Capilano River, Lynn Headwaters, Pacific Spirit) - contracted operation procured appropriately and defined by contractual agreement
- Equestrian Trail Rides (Campbell Valley Regional Park, Aldergrove Regional Park)
- Fort Camping (Brae Island) – contracted operation procured appropriately and defined by contractual agreement

Commercial Use Permit fees are charged for the use of MVRD property and are approved by bylaw as currently laid out in Schedule A of the Metro Vancouver Regional District Regional Parks Regulation Bylaw. Commercial Use Permits for the same activity (e.g. dog walking) should be applied consistently across the regional park system.

There is currently no permit staff can use for one-off (not ongoing) commercial use of our parks. These types of requests would generally fall under the special event category.

Commercial Use permits follow the Regional Park [Commercial Use Park Permit Policy](#).

Facility Rental Permit

Metro Vancouver has locations suitable for group picnicking, weddings and ceremonies, equestrian activities, special events, education, meetings and workshops.

Rentable facilities are listed in the Regional Parks Regulation Bylaw and [Metro Vancouver website](#).

Information such as pricing, capacity etc. are primarily communicated on the website in the “Book a Facility” section. Inquiries are also received by phone.

All facility bookings must be completed by phone/email via Visitor Services staff at Head Office.

Generally, facilities can be rented up to one year in advance.

Facility Rental Payment

Payment is typically via a credit card which the customer provides over the phone only (not by email) or if the customer wishes to pay by cheque an invoice is emailed to the customer. When a payment is due often differs depending on which facility is being booked.

For all buildings and outdoor group camps an information package is emailed to the customer upon booking. For indoor facilities, a registration form or rental agreement is emailed to the client upon booking.



Camp Capilano, Capilano River Regional Park

For Camp Capilano the registration form includes catering and pool use requests. These items are added to the permit upon receipt of the registration form.

For all indoor facilities insurance is due 30 days before the rental if not purchased through Metro Vancouver.

All invoices and approved permits list the [Regional Park Guidelines](#).

Individual conditions of use are set by the park staff and automatically printed on contracts and approved permits.

Camping Permit

Derby Reach has 38 unserviced sites available for camping between March 1st and October 31st. There is a limit of two licensed vehicles per pad, and there is a maximum ten-night consecutive stay, and thirty days total from July 1st to September 30th. Day use is permitted in vacant campsites November – February. For campground details and to reserve a campsite, see [Edgewater Bar Camping](#). Campsites can be reserved through an online reservation system.

Regional Parks also manages three purpose built group campsites at Campbell Valley Regional Park, Deas Island Regional Park and Tynehead Regional Park. All group campsite bookings must be completed by phone/email via Visitor Services staff at Head Office. Generally, group campsites can be rented up to one year in advance. (see info under Facility Rental Permit)



Edgewater Bar Campground,
Derby Reach Regional Park

Access to Burns Bog Ecological Conservancy Area Permit



Burns Bog Ecological Conservancy Area

Burns Bog Ecological Conservancy Area (BBECA) is a large raised bog ecosystem in the Fraser River delta between the south arm of the Fraser River and Boundary Bay. Metro Vancouver Regional Parks is responsible for overall management of BBECA. The priority for the ecological conservation areas is ecological protection, not public use. The BBECA is closed to the public and is home to sensitive and rare plants and animal species, making it a very fragile ecosystem. All efforts will be made to protect this sensitive ecosystem and maintain its ecological integrity.

Access to BBECA may only be granted for specific purposes relating to operational requirements, bog research or for emergency preparedness and response. All project and access permits are renewed yearly. Project leads must both complete and / or coordinate the following forms:

- [Project Approval Application](#) (one per project)
- [Access Permit Application](#) (one required for each person)

Metro Vancouver Regional Parks staff will review the submitted information, project requests and inform the applicant of the status of their application. This process takes two weeks. Staff may request additional project information before a permit is issued.

All activities in BBECA are subject to applicable municipal, regional, provincial, and federal acts, regulations, bylaws and agreements. These may include, but are not limited to, the following:

1. Burns Bog Conservation Covenant
2. MVRD Regional Parks Regulation Bylaw
3. City of Delta Bylaws

The permit may be cancelled at any time if:

- the permit holder fails to observe, perform or keep his/her agreements under the permit;
- the permit holder has willfully misrepresented information in the application process which led to the granting of the permit;
- The permit holder damages or destroys any bog features.

Scientific Research Permit



Conducting research at Pacific Spirit Regional Park

All research activities including environmental monitoring, collecting and surveying, and social/citizen science requires a permit. This includes any research conducted by individuals, non-profit organizations, educational institutions or for research conducted for commercial purposes.

A Scientific Research Permit provides an opportunity for staff to review, influence and track research projects taking place in regional parks. The permit typically provides Metro Vancouver with access to the research findings.

The [Natural Resource Management Framework](#) (2020) describes the strategy and process for groups requiring scientific research permits. (See Strategy 3.3: Enhance understanding of regional parks through research).

When are scientific research permits utilized?

Scientific Research Permits are used whenever a scientific research project is proposed to take place in a regional park. It is different than a Special Use Permit, in that it involves work that may be off trail or in remote areas and may temporarily impact the regional parks' ecology, but will result in an increased understanding of the regional parks natural resources and therefore may provide an opportunity to better manage the land base. It also enables the public to have a greater depth of knowledge and connection to the regional park, while in service to its overall needs. Scientific Research Permits are

typically used with students/faculty of academic institutions, consultants conducting environmental investigations, and partner groups engaging in citizen science initiatives.

Who authorizes the permit?

Typically, the Natural Resource Management Specialist signs off on the permit after consulting with other regional parks staff. The Park Operations Supervisor and Park Operator are provided with a copy of the completed permit via email so that they are aware of the locations and timing of activities taking place in the parks. Authorization may be denied if, in the opinion of Metro Vancouver staff, the proposed research is too invasive, impactful, unsafe, is not compatible with the goals and objectives for the park or does not contribute significantly enough to the body of knowledge that will help guide park management decisions.

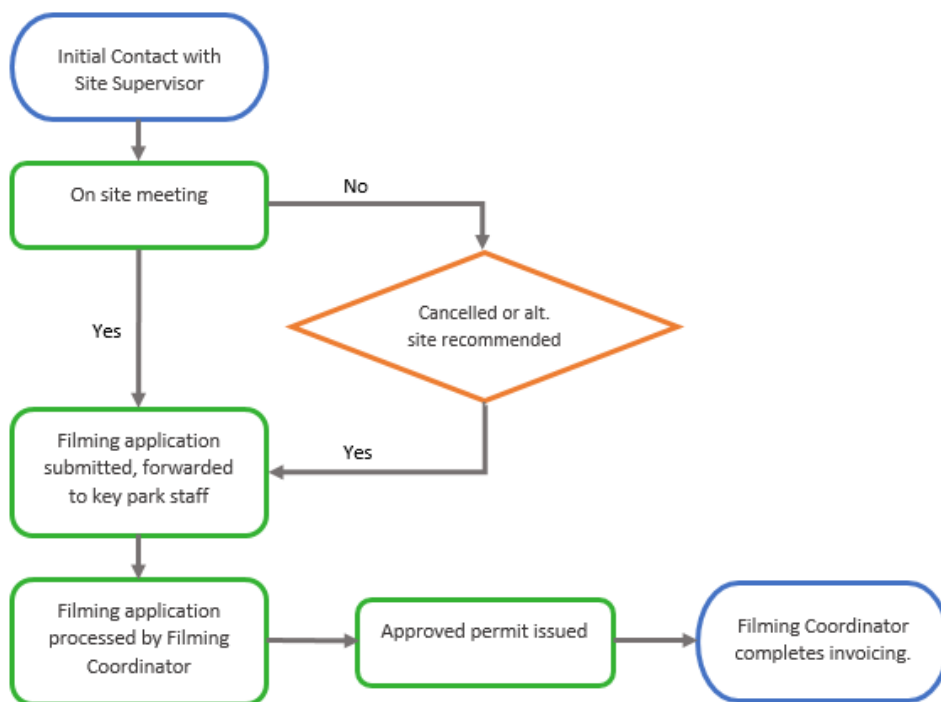
Conditions of use one might expect to be associated with a Scientific Research Permit:

- Researchers must comply with park rules and the Regional Park Regulation Bylaw, Provincial/Federal Acts and Regulations as well as Worksafe BC Guidelines
- Research must be conducted during park hours, unless specified under special conditions
- All flagging tape or markings must be inconspicuous, kept to a minimum and removed when the research is complete - if flagging tape must be used, it should be dated, initialed and have permit number noted to ensure that it remains in place for the duration of the research
- While conducting research, applicants should respond to inquiries from park visitors in a friendly and courteous manner so as to inform park visitors of the importance of the work and to ensure that the visitors understand that the impacts on the park are minimal
- No fungi, vegetation, wildlife or important habitat elements will be removed from the park unless specified
- Researchers should wear a high-visibility vest while conducting research in the park
- Researchers will carry a signed copy of the research permit which may be inspected by staff and the public at any time
- Applicants will be a resource for Metro Vancouver Regional Parks in the development of educational/interpretive programs that highlight the findings of the research
- A report summarizing the research and its findings will be submitted to Metro Vancouver Regional Parks

Process to obtain permits/How does one apply for a permit?

To obtain a **Filming Permit** the first step is to contact Metro Vancouver's contracted filming site supervisor who will set up a site visit at the proposed filming location. The film company's Location Manager and the Parks Operations Supervisor (or designate) will participate in the site visit with the contracted filming site supervisor to review specific details of the film shoot and decide if the shoot can be accommodated. Next, the Location Manager will be asked to fill out the [Filming Application](#) which is sent to the Metro Vancouver Filming Coordinator to process and ensure all required paperwork is in place. The Filming Coordinator will send the application to appropriate staff to seek concurrence that the film shoot can be approved. Filming permits will only be granted if filming activities follow the [Metro Vancouver Filming Policy](#).

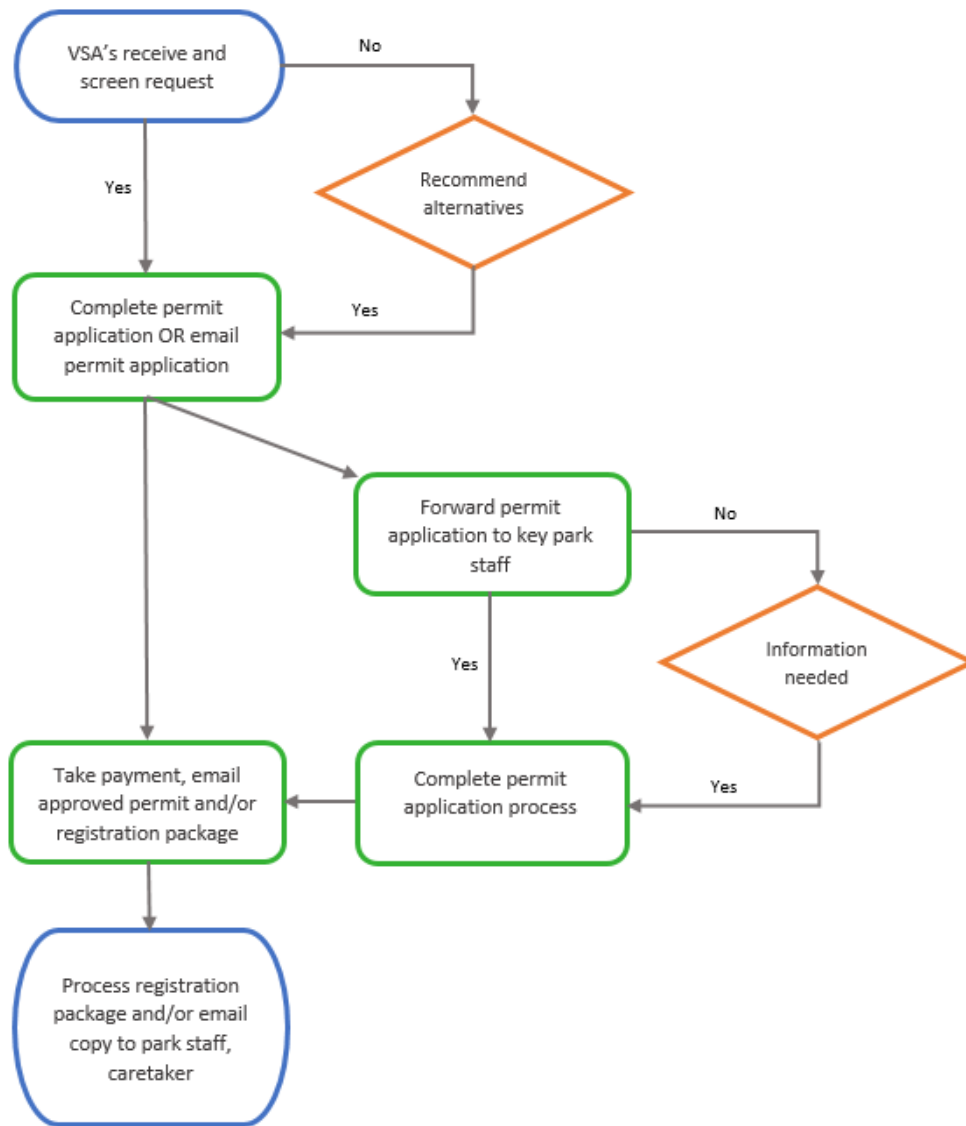
Filming Permit Process



If a member of the public wants to obtain a **Special Event, Facility Rental, Commercial Use, or Special Use** permit, the first step is to contact the Visitor Services Assistant (VSA) office. The VSA will relay all relevant information, screen the request and send out an application form if the use is determined appropriate. Once the form is returned it will then be sent to key staff for decision.

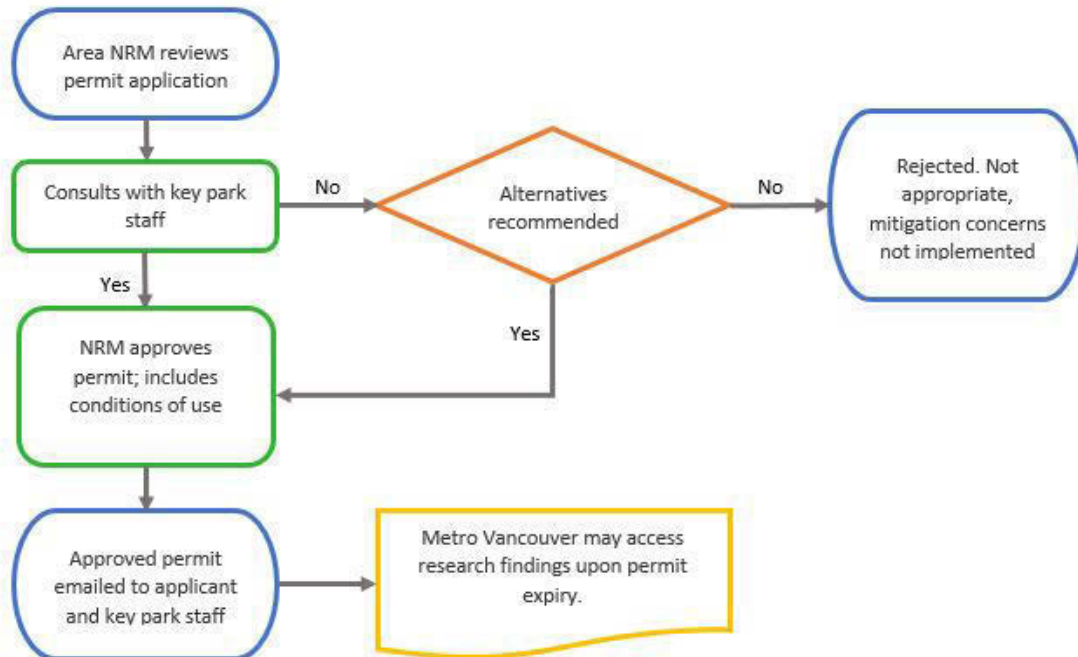
If required, a site visit may be arranged. If approved, and after insurance and payment are received, an approved permit will be issued.

Special Event, Facility Rental, Commercial Use, or Special Use Permit Process



For **Scientific Research Permits**, the first step is to contact one of the Natural Resource Management Specialists (NRMS). When a scientific research permit is requested, the area NRMS whose regional park(s) are implicated may consult with other staff to determine the need for the research, the conditions of use that may apply, and to identify any potential conflicts with park operations or other researchers. If necessary, staff may suggest appropriate sites, alterations to the research methodology, and alternatives that may be possible which the researcher may not have considered. The NRMS will strive to provide consistency and communication about research projects across all areas by communicating with each other on novel projects.

Scientific Research Permit Process



Who approves the permit?

Depending on the type of permit, different staff are consulted before approval is given.

Type of Permit	Staff consulted for approvals	Final Approval
Special Event	Park Operator, Park Assistant, Park Operations Supervisor, Park Interpreter (Leader & Specialist), Area Visitor Services Specialist, Community Development Coordinator (if applicable)	Park Operator
Special Use	Park Operator, Park Assistant, Park Operations Supervisor, Park Interpreter (Leader & Specialist), Natural Resource Management Specialist	Park Operator
Commercial Use	Park Operator, Park Operations Supervisor	Park Operator
Scientific Research	Natural Resource Management Specialist, Park Operator, Park Assistant, Park Operations Supervisor	Natural Resource Management Specialist
Filming	Park Operator, Park Operations Supervisor, Park Interpreters, Natural Resource Management	Park Operator

	Specialist (if applicable), Area Visitor Services Specialist	
Burns Bog Ecological Conservancy Area Access	Natural Resource Management Specialist, Park Operator, Park Assistant, Park Operations Supervisor	Natural Resource Management Specialists
Camping	Park Operator, Park Assistant, Park Assistant II	Visitor Services Assistant
Facility Rental	Visitor Services Assistant	Visitor Services Assistant

Permit fees

Permit fees are considered annually by staff in the Visitor and Operations Services division and staff recommendations are reviewed and approved by the Regional Parks Committee / Metro Vancouver Board as part of Schedule A in the Regional Parks Regulation Bylaw: [Regional Parks Regulation Bylaw](#).

A security deposit may be required for some permits such as filming and indoor facility rentals. Member municipalities are exempt from payment of permit fees for events/rentals.

All schools are exempt from payment of special event permit fees, but not from paying facility rental fees.

Exempting permit fees

If fees are a financial barrier for an applicant, permit fees *may* be exempted at the discretion of the Director, Regional Parks. Considerations include:

- Is someone being paid to organize the event? (If yes, will not be considered for a fee exemption)
- Is the organization not-for-profit? Charitable?
- Is the organization raising funds for a not-for-profit that resides in Canada?
- Does the requesting organization offer a benefit in return for waiving the fees?
- Does the mandate of the organization align with Metro Vancouver Regional Parks' mandate?
- How will Metro Vancouver be recognized for exemption?
- Is there a cost to Metro Vancouver associated with this request? For example, if the group rents Cammidge House, a caretaker is required to clean up after the group.

Currently, groups that have Parks Manager (Director, Regional Parks) authorized fee waivers/exemptions for Special Event Permits and Facility Rentals include:

- 7 Park Associations
- All member jurisdictions

The Parks Manager (Director, Regional Parks) *may consider* fee waivers/exemptions for:

- Schools
- Registered Charities (unless they have a paid event organizer)

There are several groups that have had fees exempted for either special events, facility rentals or both in the past and could be considered 'grandfathered'. Many of these groups have an agreement in place with Metro Vancouver that provides the group with access at no cost.

Some of these groups are:

- **Campbell Valley Equestrian Society** – has a lease agreement with East Area Office. In their lease agreement, there is mention of a certain number of special events that they are allowed to host each year without the need for a Special Event Permit or fee.
- **Delta Rowing Club** – currently has a lease agreement with Central Area Office for buildings within Deas Island Regional Park. Recently they have requested to use the Inverholme School House for meetings free of charge, and this group was granted that. This is stipulated in their License Agreement for the area on the island.
- **Sasamat Outdoor Centre** – uses Widgeon Marsh Regional Park for camping for free.
- **Tsawwassen Lions Club** – is not required to pay rental fees for Cammidge House in perpetuity due to agreement with Metro Vancouver Regional Parks. The Lions donated the Cammidge House to Metro Vancouver.
- **Port Moody Power Squadron** – has fees waived for Special Event Permit at Belcarra Regional Park for Remembrance Day activities. (this has followed the procedure of a written request to Director, Regional Parks).
- **Metro Vancouver internal use (External Relations Department)** – Approximately 4-5 times each year, the Community and Education Coordinator, External Relations, utilizes Regional Parks facilities for the Youth-4-Action team, including Camp Capilano, Inverholme Schoolhouse, Muskrat Meadows Group Camp, and Widgeon Marsh Regional Park for camping.
- **Catching the Spirit Youth Society (CTS)** – each year, CTS utilizes several regional parks for their camping weekends. Currently, these include areas of Burnaby Lake Regional Park, Pacific Spirit Regional Park, Capilano River Regional Park and Tynehead Regional Park.

Website Communications

Visitor Services staff work with communications staff and the MV Webmaster to ensure that information is provided online for members of the public seeking information about the permitting of regional parks.

Information about filming is found on the [Metro Vancouver Filming Website](#).

How to cancel a permit?

Cancellations can be made by phone or by email to the VSA office at 604-432-6359. Refunds are subject to Metro Vancouver's cancellation policy. The cancellation policy is found in Schedule A of the [Regional Parks Regulation Bylaw](#).

Insurance requirements

Why Liability Insurance?

Because of a permit holder's operations or actions, clients are open for possible suit from third parties. The permit holder may not be liable but will need to be defended in court. A Liability policy pays for this

defense as well as any costs found against the permit holder. Legal fees can be very expensive and this can be an affordable way to have them covered.

Metro Vancouver is able to provide a policy that covers legal liability for bodily injury to or damage to property of others such as spectators, passers-by, property owners and others resulting from the activity. The insurance must list Metro Vancouver as an additional insured. The program is designed principally for facility renters and event organizers. In addition, legal liability for injury to participants is covered in most cases (a few sports disciplines may not be eligible). Loss Prevention Advice is available on a nation-wide basis including video presentations and seminars. Claims Service is available on a national basis from specialists who have a wide range of services at their disposal.

Who is Insured?

Any group using Metro Vancouver facilities or property who does not have access to other insurance is able to purchase liability insurance through Metro Vancouver.

Activities Covered

Consist of rentals and events sanctioned or authorized by the permit holder and Metro Vancouver.

Who is Covered?

All members collectively including Executives, Managers, Leaders, Officials, Event Organizers and Volunteers while acting within the scope of their duties on behalf of the permit holder.

Activity requiring a permit	Risk	Insurance required
Special event permit	Medium	Yes – \$2,000,000
Special use permit	Medium	Sometimes, depending on risk level
Picnic shelter rental	Low	No
Facility rental	Medium	Yes – \$2,000,000
Outdoor ceremony	Low	Yes – \$2,000,000
Indoor group camp	Med	Yes – \$2,000,000
Equestrian Event	High	Yes – \$5,000,000
Outdoor group camp or camping at Edgewater Bar	Low	No
Scientific Research	Low	No
Filming	High	Yes – \$5,000,000

Conclusion

The completion of the *Regional Parks Permit Framework* accomplishes staff's and the Regional Park Committee's Work Plan commitment to doing so. The framework reflects the Board established priorities of the *Regional Parks Plan*. The framework is intended to be a living document that will be required to change over time to address shifting park use and an evolving regulatory environment.

To: Climate Action Committee

From: Nicole Chan, Project Engineer, Parks and Environment Department

Date: January 20, 2021 Meeting Date: February 12, 2021

Subject: ***Climate 2050 Discussion Paper on Energy***

RECOMMENDATION

That the Climate Action Committee receive for information the report dated January 20, 2021, titled "*Climate 2050 Discussion Paper on Energy*".

EXECUTIVE SUMMARY

In October 2019, the MVRD Board directed staff to begin an engagement process for a series of issue area discussion papers to support developing the *Climate 2050 Roadmaps*. Staff have developed a draft discussion paper on climate change issues related to energy, including ways to reduce greenhouse gas emissions and adapt to a changing climate. This discussion paper will support public, stakeholder and government engagement for *Climate 2050* and the upcoming updates to the *Drinking Water Management Plan*, *Solid Waste Management Plan* and the *Liquid Waste Management Plan*. The draft *Climate 2050 Discussion Paper on Energy* is being presented to the Climate Action Committee for information, and feedback provided will be incorporated into the final paper and associated engagement process.

PURPOSE

To provide the Climate Action Committee with information about the *Climate 2050 Discussion Paper on Energy* to support development of the *Climate 2050 Roadmaps*.

BACKGROUND

Climate 2050 is an overarching long-term strategy that will guide our region's policies and collective actions to transition to a carbon neutral and resilient region over the next 30 years. Metro Vancouver is implementing *Climate 2050* through ten issue area Roadmaps, which will describe long-term goals, targets, strategies and actions to reduce regional greenhouse gases and ensure that this region is resilient to climate change impacts. Implementation of the Roadmaps will be driven by Metro Vancouver's management plans and other policies, including the upcoming updates to the *Drinking Water Management Plan*, *Solid Waste Management Plan* and the *Liquid Waste Management Plan*.

On October 4, 2019, the MVRD Board directed staff to begin an engagement process for a series of issue area discussion papers to support developing the *Climate 2050 Roadmaps*. Discussion papers for buildings, industry, transportation, agriculture, nature and ecosystems, waste management, and water and wastewater infrastructure were presented to the Climate Action Committee and MVRD Board in 2019 and 2020.

This report presents the draft *Climate 2050 Discussion Paper on Energy* (see Attachment), which will support engagement on greenhouse gas reduction and climate adaptation.

ENERGY DISCUSSION PAPER

The *Climate 2050* Discussion Paper on Energy includes long-term goals (i.e., with expected achievement by 2050) for clean, renewable energy and climate change adaptation, as shown below.

- 100% of the energy used in the Metro Vancouver region is derived from clean, renewable sources.
- All regional energy infrastructure is resilient to the impacts of climate change expected during their life cycle, including higher temperatures, severe weather, floods and wildfire impacts.

The discussion paper includes example metrics, targets, actions and big ideas, to support discussions to identify targets and actions for this region. The paper also outlines expected climate hazards for the region's energy system. Feedback provided by the Committee will be incorporated to finalize the discussion paper, which will be used as the basis for seeking public input.

ENERGY ENGAGEMENT ACTIVITIES

A technical working group involving representatives from key external organizations was convened in 2020 in support of the development of the Energy Roadmap, with members providing expert technical advice. Organizations represented on the technical working group include the BC Government, BC Hydro, FortisBC, Vancouver Fraser Port Authority, Pembina Institute and the Pacific Institute for Climate Solutions. The discussion paper seeks to incorporate the range of input from the technical working group, but does not necessarily represent the views of each organization represented, nor does it constitute an endorsement or approval from these organizations.

Metro Vancouver is planning activities to engage the public, stakeholders, and other governments, about climate action in the energy issue area, based on the ideas in the discussion paper, including but not limited to:

- present to the Regional Engineers Advisory Committee and its sub-committees;
- seek public and stakeholder input through a questionnaire and webinar; and
- communicate feedback opportunities on the Metro Vancouver website and promote on social media.

Engagement is intended to provide sufficient opportunity to interested parties to learn about the *Climate 2050 Roadmaps* and to provide feedback. Details on engagement will be available on the *Climate 2050* website (see Reference) and will be promoted using social media, newsletters, professional associations and similar.

FINANCIAL IMPLICATIONS

The overall resources required to develop and engage on *Climate 2050 Roadmaps* have been approved in program budgets for 2020 and 2021, including staff time, to support the engagement process and evaluation of the climate and air quality impacts of proposed actions. Alignment of engagement activities and deliverables with the development of the *Climate 2050 Roadmaps* and other management plans is intended to make the best use of resources available, as well as minimize time commitments for interested parties providing feedback.

ALTERNATIVES

This is an information report. No alternatives are presented.

CONCLUSION

Metro Vancouver is implementing *Climate 2050*, a long-term strategy to achieve a carbon neutral and resilient region over the next 30 years. A series of issue area discussion papers is being developed to provide an engagement tool to support developing the *Climate 2050 Roadmaps*.

The draft discussion paper presented here on the energy issue area identifies goals, hazards, and example targets and actions for transitioning to clean, renewable energy sources and climate change adaptation. Feedback from the public, stakeholders, and other governments will support the development of the *Climate 2050 Roadmaps*.

Attachment

Climate 2050 Discussion Paper on Energy, draft dated January 2021 (39888912)

Reference

www.metrovancouver.org/climate2050

42962919

DRAFT

Energy

Discussion Paper to support *Climate 2050*

Reducing emissions and increasing climate
resilience for energy in the Metro Vancouver region
over the next 10 to 30 years

February 2020

Your feedback is valued.

This paper is introduced here for public, stakeholder and government comment during the COVID-19 pandemic response. Metro Vancouver assesses work plans on a case by case basis to determine if the COVID-19 pandemic response requires an adjustment to any work plans. For air quality and climate change programs and initiatives, this means continuing with work plans that protect human health and the environment, but adjusting how we approach engagement. Regional goals and targets in Metro Vancouver's climate-related plans are science-based and remain a priority. The interim target of a 45% reduction in greenhouse gas emissions below 2010 levels by 2030 has a time horizon of less than ten years. Pursuing a carbon neutral region by 2050 requires taking bold action now. Across the globe, the response to the pandemic has necessitated an unprecedented level of cooperation between key stakeholders in society. This provides a glimpse of what is possible and what we can achieve with coordinated efforts and common goals. Public feedback is valued and the Metro Vancouver Climate 2050 project team continues to seek input, create online feedback opportunities and ensure feedback is reflected as policy development moves forward. Documents, feedback forms and direct email links to the project team are all posted to the Metro Vancouver website, metrovancover.org/climate2050.

Overview

Energy is critical to our daily lives – energy heats and cools our homes, fuels our vehicles and powers our society. However, the majority of the energy we use today is derived from fossil fuels, a major source of greenhouse gases and other air contaminant emissions. As we transition to clean, renewable energy, we need to transform the way we generate, distribute and use energy.

Energy systems are vulnerable to the impacts of climate change. Extreme weather can affect energy infrastructure and lead to higher frequency of power outages. As the region responds to a changing climate, we need to maintain and strengthen our energy system to ensure that the region has access to reliable energy, now and into the future.

We are creating a roadmap to help us reach a carbon neutral, resilient future. By 2050, we can reduce total energy use by using less energy and investing in energy efficient technologies. We can transition from fossil fuels to clean, renewable energy through a fair and equitable transition for residents, businesses and industries.

Please provide us with your feedback on these ideas by April 30, 2021.


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Introduction

Underlined words are key concepts and are defined in the Glossary on [page 22](#).

Planning for the Future

Key questions for feedback are shown in boxes marked 

Climate 2050 is an overarching long-term strategy that will guide our region's policies and collective actions to transition to a carbon neutral and resilient region over the next 30 years. Metro Vancouver is implementing *Climate 2050* through 10 issue area *Roadmaps* (see Figure 1), which will describe how the region can reduce greenhouse gas emissions and adapt to climate change impacts. Implementation of the *Roadmaps* will be driven by Metro Vancouver's management plans and other policies, as well as Metro Vancouver's forthcoming Resilient Region Strategic Framework that will integrate the principles of resiliency and social equity across all Corporate functions.

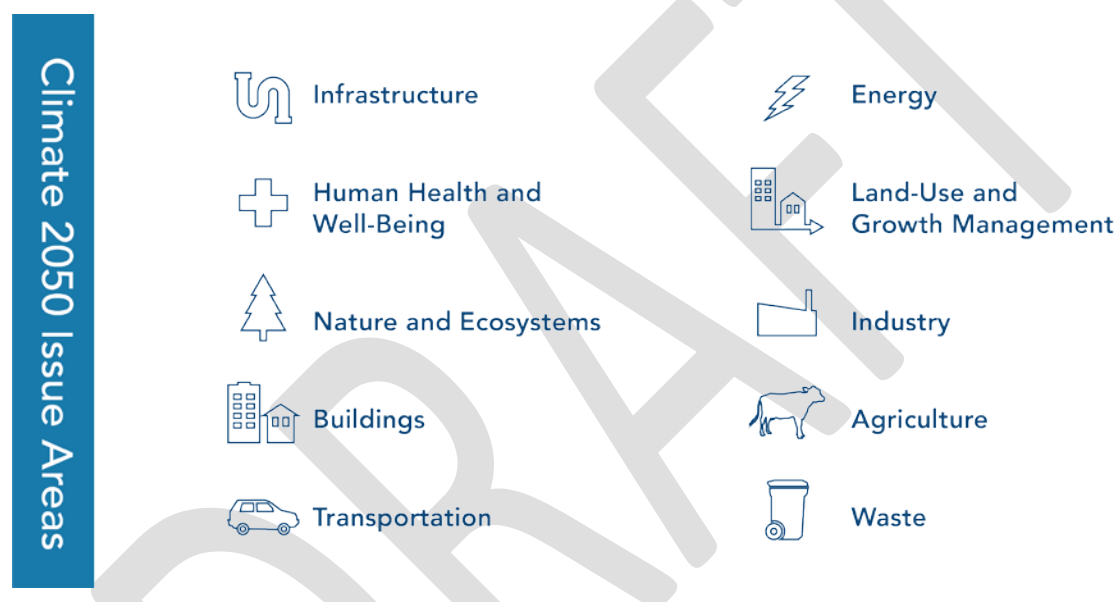


Figure 1: Issue areas for *Climate 2050*

This discussion paper is about the energy issue area, and is intended to promote discussion and enable feedback that will be used in the *Climate 2050 Energy Roadmap*. The feedback will also inform other Metro Vancouver planning documents such as *Metro 2050* (the update to the regional growth strategy), the *Clean Air Plan* and upcoming updates to the Metro Vancouver *Integrated Solid Waste and Resource Management Plan*, *Integrated Liquid Waste and Resource Management Plan*, and *Drinking Water Management Plan*.

Meeting Long-term Targets for the Region

Metro Vancouver, together with its member jurisdictions, has been taking climate action for many years. But actions must be accelerated to reduce our impacts on global climate change, and to adapt to the anticipated impacts from a changing climate. Actions to transition regional energy systems from using fossil fuels to clean, renewable energy are fundamental to meeting long-term climate change targets.

Climate Change Targets

Climate change is directly associated with greenhouse gas emissions, primarily carbon dioxide. While emissions are global, we all have a shared responsibility to take local action. The major sources of greenhouse gas emissions in the Metro Vancouver region are from combustion of fossil fuels within the sectors of transportation, buildings and industry, with smaller contributions from waste management and agriculture. Climate projections for this region by the year 2050 include longer, hotter and drier summers, warmer and wetter fall and winter seasons with decreased snowpack, and more extreme weather.

Metro Vancouver has adopted the following regional climate action targets:

1. reduce regional greenhouse gas emissions by 45% from 2010 levels by 2030;
2. become a carbon neutral region by 2050; and
3. ensure our infrastructure, ecosystems and communities are resilient to the impacts of climate change.

Although the region has made progress over the past 15 to 20 years, we need to accelerate our climate actions to meet these targets and avoid the dangerous impacts of climate change. More information on climate change in our region is available on the [Climate 2050 website](#).

We need to accelerate our climate actions to meet these targets and avoid the dangerous impacts of climate change.

Fossil Fuels and Air Quality

Combustion of fossil fuels, such as gasoline, diesel and fossil natural gas, produces common air contaminants, such as fine particulate matter and nitrogen dioxide. Health researchers from Canada and around the world have indicated that there are no known safe levels for some common air contaminants, including fine particulate matter, ground-level ozone and nitrogen dioxide. Health Canada estimates that at least 1,600 British Columbians die prematurely every year due to common air contaminants and many more live with the associated health effects. Since there is significant overlap between the sources of greenhouse gas emissions and common air contaminants, actions that address emissions reductions to protect public health can often (but not always) reduce greenhouse gas emissions, and vice versa. When feasible, Metro Vancouver prioritizes policies and programs that reduce both greenhouse gases and common air contaminants.

More information regarding the linkages between air contaminants and energy can be found in Metro Vancouver's *Clean Air Plan*, currently under development.

We Need Your Feedback

The purpose of this energy discussion paper is to seek input on key climate change issues related to clean, renewable energy, and on ways to reduce emissions and adapt to a changing climate. This discussion paper is intended for the public, stakeholders, and other governments, including First Nations.

The goals, targets and actions identified in this discussion paper are considered potential opportunities for the region's use of energy. We must take action now to continue to reduce emissions by transitioning to clean, renewable energy and ensure that energy infrastructure is resilient to a changing climate. We need your help to figure out the best path forward.

Some neighbourhoods, households and individuals will be better able to make the transition to clean, renewable energy and prepare for or protect themselves from climate change. A priority of *Climate 2050* is to incorporate the voices and needs of a full range of communities into program and policy design to ensure that fairness and equity are reflected in the actions that Metro Vancouver implements or advocates for. Policies and programs that encourage use of clean, renewable energy should support an equitable distribution of benefits and costs as well as support for increased economic opportunities in a carbon neutral economy, affordable housing and more diverse transportation options. Issues of intergenerational equity will also be considered.

Specific opportunities to provide feedback are described under *Feedback and Engagement Process*, on page 21.

Linkages to Other Issue Areas

There are many linkages between energy and other *Climate 2050* issue areas. Metro Vancouver is considering these linkages when developing policies and actions. Strategies to reduce energy demand through energy conservation, energy efficiency, and end-user fuel switching are addressed in related issue areas including:

- **Buildings** – use less energy, install more efficient equipment and switch to heating and cooling systems that use clean, renewable energy;
- **Transportation** – use active modes of transport and public transit, improve efficiency of engines, mode-switch to more efficient transportation methods, switch to zero emission vehicles and increase zero emission refueling infrastructure;
- **Industry** – increase energy efficiency of industrial processes and explore equipment that can use clean, renewable energy;
- **Infrastructure** – improve process efficiencies to reduce energy use, utilize water and wastewater infrastructure to generate clean, renewable energy;
- **Waste** – reduce energy use and emissions associated with waste collection and disposal, consider circular economy principles within energy generation, including how waste can be used to generate clean, renewable energy; and
- **Agriculture** – increase energy efficiency of agricultural processes and explore equipment that can use clean, renewable energy.

These issue areas have been explored with greater detail in discussion papers of their own. They are currently available on the [Metro Vancouver website](#).

Transitioning to Clean, Renewable Energy

Achieving significant emission reductions will mean switching from fossil fuels to clean, renewable energy. In British Columbia, clean, renewable energy will be primarily electricity from renewable sources such as hydro, wind or solar power. Using electricity also has the critical co-benefit of not producing emissions of common air contaminants, which will improve regional air quality and the health of residents within our region.

Other forms of renewable energy, such as wood waste, biofuels, and renewable natural gas, have a lower carbon footprint than comparable fossil fuels and are also expected to support a transition to a carbon neutral region. However, they still produce emissions of common air contaminants, which have potential negative impacts for public health and the environment and require emission controls.

Regional Greenhouse Gas Emissions and Energy

Energy Use

Energy plays a vital role in powering the region's economy and our daily lives. Energy is fundamentally derived from primary energy sources, such as oil or wind. Secondary energy sources, such as electricity, are sources derived from primary energy sources. Clean, renewable energy is energy derived from sources with low or zero emissions, and is replenished over days and years. In Metro Vancouver, 28% of the energy we use is clean, renewable energy (Figure 2). The major energy sources used within each sector are as follows:

- Buildings – fossil natural gas and electricity are used to heat and cool our homes as well as power our devices and appliances;
- Transportation – diesel and gasoline fuel the movement of people, goods and services – whether by car, truck, train, plane or boat; electricity powers a small but increasing part of this sector
- Non-road engines – diesel and gasoline fuel non-road equipment such as backhoes and excavators
- Industry – many different sources of energy are used in industrial processes including fossil natural gas, electricity, coal and coke
- Agriculture – fossil natural gas provides most of the energy for greenhouses

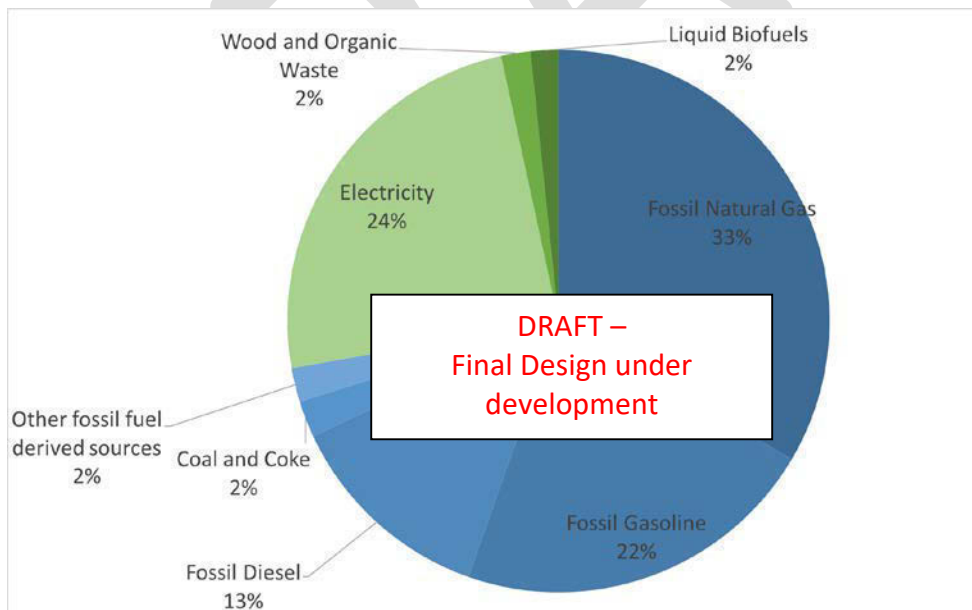


Figure 2: Sources of energy within Metro Vancouver (2015)

Fossil fuels are responsible for 90% of the region's greenhouse gas emissions (Figure 3)¹. Non-energy emissions are primarily related to greenhouse gases produced during natural and industrial chemical processes. Reducing the use of fossil fuels and increasing the use of clean, renewable energy is a key emissions reduction opportunity.

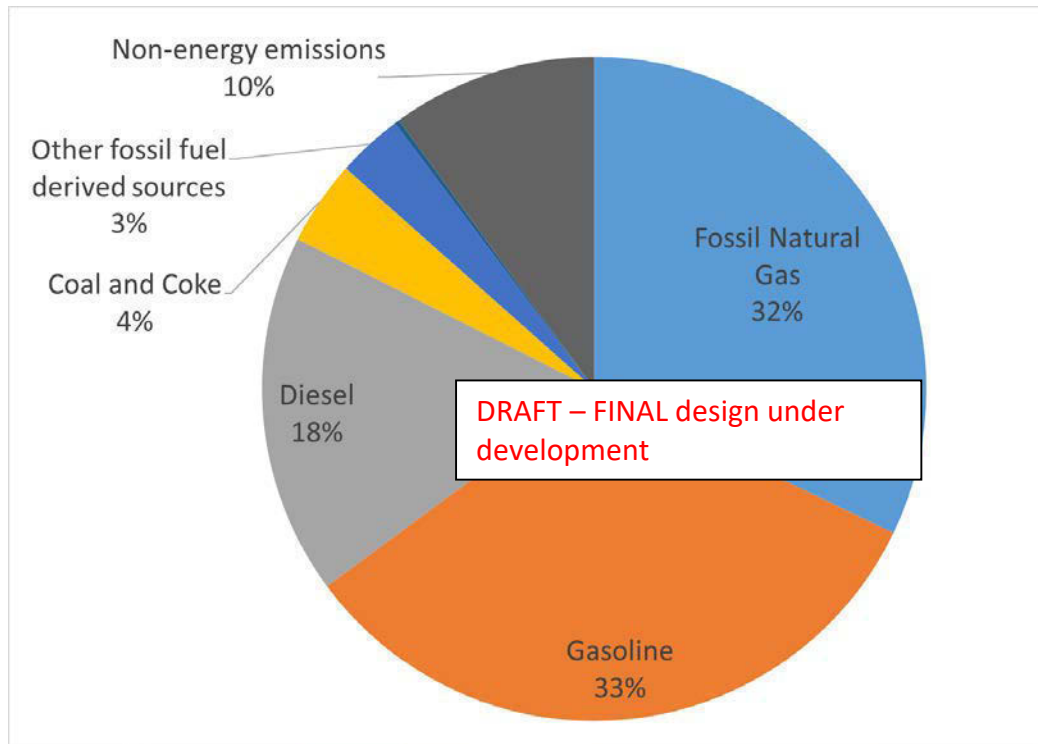


Figure 3: Contribution of different energy sources to total greenhouse gas emissions within Metro Vancouver

Current Actions to Increase Use of Clean, Renewable Energy

Metro Vancouver, its member jurisdictions and other regional partners, are already taking action to increase use of clean, renewable energy. Some significant current initiatives in our region are outlined below.

(Additional information on the actions is listed in the web links shown.)

Electrification

1. **Zero Emission Vehicle Act** requires that automakers sell an escalating annual percentage of new zero emission cars and trucks each year, reaching 100% of sales by 2040 ([BC Government](#)).
2. **Port of Vancouver Electrification Roadmap 2030** will help guide equipment upgrades at port operations ([Vancouver Fraser Port Authority](#)).

¹ Electricity does not produce emissions within our region. As BC's electricity is primarily produced from clean, renewable sources, a small amount of emissions is produced, which occurs outside of our region.

3. **Low Carbon Fleet Strategy** will help achieve TransLink's environmental sustainability target of utilizing 100% renewable energy in all operations by 2050 ([TransLink](#)).
4. **Solar energy cooperative** allow interested members of the public to own a share of the utility's solar garden ([New Westminster](#)).

Increasing Clean, Renewable Energy Supply

5. A biofuel facility **converts organic waste into renewable natural gas** ([Surrey](#)).
6. **Waste heat recovered** from sewage pipes is used in district energy systems to heat buildings ([Vancouver](#)).
7. **Biogas produced during wastewater treatment** is captured to provide energy for use within wastewater treatment plants ([Metro Vancouver](#)).
8. A pilot **hydrothermal liquefaction facility is being developed to generate bio-crude**, which can be used to create liquid biofuels ([Metro Vancouver](#), [Parkland Fuel Corporation](#), [BC Government](#)).
9. **BC Low Carbon Fuel Standard** will require a 20% improvement in the carbon intensity of transportation fuels by 2030 ([BC Government](#)).
10. For making natural gas consumption cleaner, there will be a **minimum requirement of 15% to come from renewable gas** in residential and industrial applications ([BC Government](#)).

Limiting Fossil Fuel Expansion

11. Some governments are endorsing the Fossil Fuel Non-Proliferation Treaty, an initiative to **prevent further proliferation of coal, oil and natural gas** by advocating for an end to all new exploration and production ([Vancouver](#), [Borough of Amber Valley](#)).
12. Some governments cooperated to **oppose the Trans Mountain Pipeline Expansion project** ([Metro Vancouver](#) and various regional partners).
13. The carbon tax is proposed to **increase to \$170/tonne** by 2030 ([Canadian Government](#)).

Equity

14. The Climate Action Tax Credit **offsets carbon taxes paid based on household income** ([BC Government](#)).
15. **Non-payment disconnections are postponed** for residential customers during winter months ([BC Hydro](#)).
16. Income-qualifying programs **help lower-income customers save energy and money** ([BC Hydro](#), [FortisBC](#)).
17. A **climate and equity working group** was created to inform the Climate Emergency Action Plan and ensure that equity was embedded into the plan ([Vancouver](#)).

18. The 20/20 Catalysts Program **supports Indigenous communities** embarking on clean energy projects ([Indigenous Clean Energy](#)).

Roles and Responsibilities in Energy

Metro Vancouver is responsible for managing and regulating air quality and greenhouse gas emissions in the region, under authority delegated by the BC Government in the *Environmental Management Act*. Metro Vancouver is also responsible for developing, implementing and stewarding *Metro Vancouver 2040: Shaping our Future (Metro 2040)*, the regional growth strategy. *Metro 2040* contains Metro Vancouver's regional greenhouse gas emissions reduction targets, and includes a strategy to encourage land use and transportation infrastructure that reduce energy consumption.

Air quality management and climate action require close coordination among all levels of government, as well as businesses, utilities, institutions and residents. The roles of key partners in transitioning to clean, renewable energy are outlined below.

- **BC Ministry of Energy, Mines and Low Carbon Innovation** is responsible for British Columbia's electricity, alternative energy, mining and petroleum resource sectors and supporting work to meet BC's greenhouse gas reduction targets.
- **BC Utilities Commission** regulates public utilities, such as electricity, natural gas and heat distribution utilities.
- **BC Oil and Gas Commission** regulates oil and gas activities and pipelines in British Columbia.
- **Energy utilities (e.g., FortisBC, BC Hydro)** provide safe and reliable energy, install and operate energy infrastructure and provide rebates to customers.
- **Local governments** have authority over local land use, which can impact energy use in different sectors. Local governments are also involved in installing energy infrastructure, such as electric vehicle charging stations.
- **Government of Canada** is responsible for the management of energy resources on federal and frontier lands and it regulates the international and interprovincial movement of energy and energy goods.
- **Local businesses and residents** support emission reductions by reducing the amount of energy they use in their businesses, homes, and vehicles and making decisions about the energy sources they choose to use.

Our Clean, Renewable Energy Opportunity

Transitioning to clean, renewable energy is crucial to achieving emissions reductions. Energy is complex as multiple sectors use different sources of energy. At the community scale, residents and businesses need to change the technologies that they use to heat and cool their buildings, fuel their transportation

and power their businesses. At the system scale, we need to ensure there is sufficient clean, renewable energy to meet our emission reduction targets.

In British Columbia, electricity is derived from clean and renewable sources. Switching from fossil fuels to electricity is an essential strategy to reducing emissions. Transitioning to electricity will also improve regional air quality and the health of residents. Many electrification technologies, such as electric vehicles and heat pumps for home heating are already commercially available.

In sectors that are not yet suitable for electrification such as some industrial processes and heavy-duty vehicles, an emerging opportunity is to use renewable natural gas and biofuels. While the current supply of these cleaner energy sources is currently insufficient to enable a full transition to 100% clean, renewable energy without electrification, they will be an essential part of the strategy to reach carbon neutrality by 2050.

Transitioning our energy system to clean, renewable energy is also an opportunity to address inequity. We need to ensure that lower income and disproportionately impacted households have equitable access to clean, renewable and affordable energy and that actions and efforts to decarbonize our energy system do not increase inequity. Ultimately, the transition to clean, renewable energy needs to be designed to ensure that it reduces our emissions, improves the health of our residents, and supports a fairer and more equitable region.

Discussion:

Reducing Emissions from Energy Sources

The following sections outline proposed goals, example targets, example actions, and potential Big Ideas to facilitate transition to clean, renewable energy sources in the region.

Proposed Long-Term Goal for Clean, Renewable Energy

This long-term goal describes a desired future state for low emission and carbon neutrality, with expected achievement in 2050 and beyond. Long-term goals will help identify and prioritize new actions to achieve the emissions reduction required in the energy sector.



Please consider the following the long-term goal proposed for the Climate 2050 Energy Roadmap. Will this goal help us reach our desired future state?

1. 100% of the energy used in the Metro Vancouver region is derived from clean, renewable sources

Example Energy Targets

Near-term targets are milestones to support achievement of the long-term goals and will be included in the *Climate 2050 Energy Roadmap*.



Please consider the following near-term targets from other jurisdictions. Are any of these the right milestones to help us reach our long-term goal? What should our near-term targets look like?

(Additional information on the targets is listed in the web links shown.)

By 2025:

1. Reach 30% renewable energy use in buildings ([Vermont](#)).

By 2030:

1. Renewable energy will account for at least 55% of total energy use ([Denmark](#)).
2. Energy used in road and rail transport must be 14% renewable. Of the 14%, 3.5% must come from biogas or advanced biofuels ([European Union](#)).

By 2050:

1. 100% of the energy used is derived from renewable sources by 2050 ([Vancouver, Victoria, Saanich](#)).

Example Energy Emission Reduction Actions

Actions are the policies and programs, including regulations, incentives and educational outreach campaigns, which will lead to emission reductions. Actions will be included in the *Climate 2050 Energy Roadmap*. They will also be considered in the *Clean Air Plan* as well as the upcoming updates to the *Solid Waste, Liquid Waste and Drinking Water Management Plans*. In addition to existing actions (see page 7), we need new actions to address the many opportunities we have to further reduce emissions and meet our near- and long-term targets.



Please consider the following actions from other leading jurisdictions, which show a range of actions that could be implemented to reduce emissions. Could any of these help us further reduce emissions to reach our goals? What should new, additional actions look like?

(Additional information on the actions is listed in the web links shown.)

Electrification

1. **All-electric building codes** require that all new buildings only use electricity ([San Francisco](#)).
2. **Large batteries** can be used with power generation to increase use of renewable energy and reduce dependency on fossil natural gas ([Australia](#)).
3. **Vehicle to grid projects** will allow electric vehicles to store electricity in their batteries and sell renewable energy back to the grid when energy is not available ([United Kingdom](#)).
4. **Time-of-use rates** for using electricity in homes and vehicles help encourage uptake of electricity ([San Diego](#)).

Increasing Clean, Renewable Energy Supply

5. Power-to-gas projects will convert **excess electricity from renewables into green hydrogen**, to help decarbonize the fossil natural gas system ([Markham, Ontario](#)).
6. Biofuels are **exempt from energy taxes** ([Sweden](#)).
7. **Co-digestion of sewage sludge with food waste, agricultural waste or other organics**, such as food fats, oils and grease, enhance the production of biogas at wastewater treatment plants ([Oakland, California](#)).

Energy Utility Planning

8. Energy utilities are required to incorporate the **cost of carbon dioxide emissions in resource planning**, starting at \$46/tonne in 2020 ([Colorado](#)).
9. A roadmap was created to **update and clarify energy utility commission objectives to address climate change and equity**, and to develop modern regulatory tools, market structures and processes to achieve those objectives ([Oregon](#)).
10. A review was ordered by a utilities commission, aimed at **reducing or eliminating the need for investment in gas infrastructure** ([New York](#)).

Limiting Fossil Fuel Expansion

11. More than 30+ cities have **prohibited new natural gas infrastructure in new buildings** ([California](#)).
12. A key water permit was **denied for a proposed coal-export facility** along the Columbia River ([Washington](#)).
13. **Local ordinances ban new and expansion of storage tank capacity** at existing bulk fossil fuel terminals ([Portland, Oregon](#)).
14. Governments and investors around the world are **divesting from fossil fuel companies** (various agencies).

Fair and Equitable Transition

15. A 100% clean energy law stipulates that electric utilities must make **funding available for low-income bill assistance** ([Washington](#)).
16. **Low-income weatherization programs** help deliver whole building energy efficiency retrofits for affordable housing owners as well as provide investment in community solar projects ([California](#)).
17. Implementing programs to **retrain oil industry workers** to work in renewable energy trades, such as the solar industry ([Alberta](#)).

Potential Big Ideas for Transitioning to Clean, Renewable Energy

To achieve a cleaner, healthier, more equitable future, we need to think big and act quickly. Metro Vancouver has identified several potential **Big Ideas** to accelerate use of clean, renewable energy in the region. The Big Ideas were selected for different reasons, including potential for accelerating the use of clean, renewable energy, ease of implementation or their foundational nature (i.e., they are needed to support other actions).



Please consider the following Big Ideas. Could any of these help us significantly accelerate the use of clean, renewable energy to reach our goals? What other Big Ideas should Metro Vancouver consider?

Big Idea 1: Accelerate electrification

Electrification is a key decarbonization strategy to meeting emission reduction targets. Technologies that use electricity have critical co-benefits such as reduced emissions, improved air quality, cooling in homes and increased energy efficiency – making it a priority pathway for achieving significant greenhouse gas reductions. While electricity is currently abundant, as large parts of the region electrify, there may be capacity constraints for electrical supply that need to be resolved.

To meet emission reduction targets, electrification should be prioritized for all passenger cars and trucks, most buildings, and some industrial and commercial activities, with a focus on affordable and equitable outcomes. Where electrification is not technically feasible or too costly, other types of renewable energy (e.g., renewable natural gas, biofuels) can be utilized to achieve climate change targets.

Some examples of jurisdictions implementing policies to accelerate electrification are outlined below:

- California is actively considering requiring **all-electric new construction** for some building types statewide as part of its 2022 building code update ([California](#)).
- The California Air Resources Board has adopted a first-in-the-world rule, which requires that by 2045, **every heavy-duty vehicle sold will be zero-emission** ([California](#)).

To achieve the significant level of electrification required to meet climate targets, Metro Vancouver will need to coordinate with other levels of government, member jurisdictions, energy utilities and energy regulators to accelerate electrification. Some examples from leading jurisdictions of ways that local governments can enable electrification are:

- Engage with energy utilities to coordinate programs and actions. The City of Vancouver has had a **Memorandum of Understanding with BC Hydro** since 2009. As part of this partnership, BC Hydro and the City of Vancouver are completing a grid constraints study, which will analyze the impact of electrification policies on the local electrical grid (City of Vancouver, BC Hydro).

- Collaborate with other local governments to ensure that **accelerated electrification is considered within utility regulatory processes**. The California Local Government Sustainable Energy Coalition is engaging in energy utility regulatory proceedings as an official intervenor on behalf of a coalition of local governments ([California Local Government Sustainable Energy Coalition](#)).
- Engage with energy regulators to ensure that **utilities are planning for accelerated electrification**. Oregon's Public Utility Commission has developed a dynamic strategy to adapt to a changing electric sector, including addressing the electric sector's role in greenhouse gas mitigation ([Oregon](#)).

Metro Vancouver will study these initiatives further as it examines ways to accelerate electrification.

Big Idea 2: *Increase regional supply of renewable gas*

Renewable gas (i.e., renewable natural gas, hydrogen) is an emerging source of renewable energy that can help decarbonize hard-to-electrify sectors, such as process heating for industrial processes, and will play an important role in reaching 100% clean, renewable energy by 2050. However, there is currently limited supply in the region and thus, a need to increase production of renewable gas. Renewable natural gas can be a direct substitute for fossil natural gas, enabling it to be directly injected into the gas distribution system. This helps decarbonize the gas system and has the added benefit of repurposing fossil gas infrastructure for distribution of clean, renewable energy.

Many local organizations are already producing renewable natural gas, or planning to develop new supply, including:

- The City of Vancouver and FortisBC are collaborating to install a system at Vancouver Landfill to **upgrade captured, landfill gas to renewable natural gas** ([City of Vancouver](#), [FortisBC](#)).
- Seabreeze Farms **generates renewable natural gas from dairy manure and off-farm organics**. Co-products such as farm bedding and phosphorous rich mulch are also generated for beneficial farm use as part of this process ([Seabreeze Farms](#)).

Metro Vancouver is currently pursuing a **Memorandum of Understanding with FortisBC**, in which a priority is to collaborate on projects that expand renewable gas production from Metro Vancouver's assets. Metro Vancouver is also looking at ways to expand its role in provision of clean, renewable energy (see Big Idea 4) and support other organizations looking at increasing supply of renewable gas.

Big Idea 3: *Expand Metro Vancouver's role in providing clean, renewable energy*

Metro Vancouver currently generates renewable energy for use in its own facilities and provides it to other users in the region, such as generation of renewable natural gas from its wastewater treatment plants. Metro Vancouver is also piloting a number of projects, such as increasing biogas production and hydrothermal processing of wastewater residuals to create low-carbon biofuels. To support reaching regional greenhouse gas reduction targets, Metro Vancouver could expand its role in providing clean,

renewable energy. An expanded role could involve establishing a clear mandate to provide clean, renewable energy, such as Metro Vancouver's mandate to supply clean drinking water; creating a dedicated clean energy service for members, such as a service focused on energy and heat recovery from waste streams; or accelerating investment in clean, renewable energy projects. Local governments, including member jurisdictions, are already expanding their role in providing clean, renewable energy, including those outlined below:

- Metro Vancouver's North Shore Wastewater Treatment Plant is planning on **capturing waste heat from sewage and supplying low-carbon energy** to the Lonsdale Energy Corporation, a nearby district energy system that supplies heating to buildings ([City of North Vancouver, Metro Vancouver](#)).
- The City of Richmond established the Alexandra District Energy Utility to **use low carbon, renewable geo-exchange technology to heat and cool buildings** ([City of Richmond](#)).
- The City of Toronto has **mandated the installation of renewable energy systems** on all City buildings, where feasible, by 2020 ([City of Toronto](#)).

Metro Vancouver will study these leading initiatives further as it looks to expand its role as a clean, renewable energy provider.

Big Idea 4: *Limit expansion of fossil fuel supply infrastructure*

In addition to accelerating the transition to clean, renewable energy, we also need to simultaneously limit expansion of fossil fuel supply infrastructure. As per the United Nations Environment Programme's *Production Gap Report 2020*, current projections are that countries will collectively produce 120% more fossil fuels by 2030 than would be consistent with limiting global warming to 1.5°C. While fossil fuel production primarily occurs outside of our region, distribution infrastructure, such as pipelines, tank farms and distribution terminals can be located within our region. Several local governments have already taken steps to limit expansion of fossil fuel supply infrastructure, such as adopting greenhouse gas targets for new residential buildings, which will limit the use of fossil natural gas in new homes ([District of North Vancouver](#)). Metro Vancouver and a number of its member jurisdictions have also worked together to oppose expansion of large fossil fuel supply infrastructure including the Trans Mountain Pipeline Expansion Project and thermal coal exports at Fraser Surrey Docks.

Some examples of leading jurisdictions around the world that are using their local authorities to limit expansion of fossil fuel supply infrastructure are outlined below:

- The City of Portland has established **zoning amendments** that prohibit new, and expansion of, bulk fossil fuel storage terminals ([City of Portland](#)).
- King County has established **strict regulations against fossil fuel projects** including limits on development and operation of fossil fuel facilities ([King County](#)).

Metro Vancouver and its member jurisdictions will study these leading initiatives further in order to better coordinate local policy and regulatory requirements for fossil fuel supply infrastructure and advocacy related to large fossil fuel infrastructure expansion projects within the region.

DRAFT

Regional Energy Adaptation to Climate Change

The energy system that serves the Metro Vancouver region has been designed to meet the region's energy needs in a safe and reliable manner. Energy is critical to everyone in the region and is necessary to heat and cool our homes, fuel our vehicles and power our society. Energy infrastructure includes underground natural gas and electricity pipes, overhead power lines, electrical substations and transmission lines.

Energy infrastructure lasts for decades and has not always been designed to accommodate the anticipated impacts of climate change. Climate change adaptation needs to be considered during design and critical maintenance and repairs need to be completed to preserve the life of existing energy infrastructure.

Our regional energy system may be impacted by the following climate hazards, which could cause impacts to the region's energy system in numerous ways, including those outlined below.

- **Severe weather**, such as more intense rainfall, storms and high winds, could cause disruptions to the energy system resulting in extended durations and frequency of power outages. This is especially a high risk to service continuity of essential services, such as respite areas, hospitals and community centers.
- **Sea level rise combined with storm surges** threaten the low-elevation parts of the energy network with flooding, including critical infrastructure such as electrical substations or district energy systems.
- **Seasonal water shortages** are expected to increase in frequency due to rising temperatures and changes in precipitation and snowfall, which may have an impact on hydroelectric generation and electricity supply to the region.
- Other hazards include increasingly **severe wildfire seasons**, which could damage energy infrastructure.

Current Actions to Adapt Energy to Climate Change

Metro Vancouver and its member jurisdictions have been taking action to prepare for climate change impacts for well over a decade. Some key current actions for energy adaptation are outlined below.

(Additional information on the actions is listed in the web links shown.)

1. **Improving system resiliency to intense storm events with backup power** for essential processes in water and wastewater systems, such as treatment facilities and pump stations. Metro Vancouver and its members continue to implement and prioritize backup power at key water and wastewater facilities (Metro Vancouver and member jurisdictions).
2. **Adapting to future sea level rise and storm surges** through identifying flood prone areas, community planning to avoid future development in susceptible locations and identifying critical community

services requiring back up energy generation ([District of West Vancouver](#), [District of North Vancouver](#), [City of North Vancouver](#), [City of Richmond](#), [City of Surrey](#), [City of Vancouver](#))

3. **Accounting for climate vulnerabilities and risks in capital planning and asset management** to ensure all new and retrofitted infrastructure is adapted to future climate conditions to the end of its expected lifespan ([Metro Vancouver](#) and member jurisdictions).
4. **Expand district energy systems** in order to advance energy self-sufficiency within the community to increase resilience to climate events ([City of Surrey](#), [Richmond](#), [Burnaby](#), [City of North Vancouver](#)).
5. **Support the development of the Lower Mainland Flood Management Strategy** led by the Fraser Basin Council ([various local municipalities](#)).
6. **Maintaining current climate projections and analyzing up-to-date data** will support long-range planning efforts and enable sustainable decision making for future energy infrastructure needs ([Metro Vancouver](#)).

Roles and Responsibilities in Energy Adaptation to Climate Change

Across the region, many different organizations are taking early action to understand and act upon different areas of vulnerability, but everyone has a role to play in preparing for a changing climate. Regional adaptation initiatives will require the cooperation and support of all levels of government. As the regional government, Metro Vancouver can act as a regional forum in facilitating collaboration with local governments and others to create efficiencies and improve alignment of adaptation strategies and actions.

Our Adaptation Opportunity

By proactively adapting our energy system to climate change and incorporating climate projections into land use planning, we can significantly reduce risk to health and safety as well as reduce severe financial loss. For example, ensuring that for critical energy supply infrastructure has redundant back-ups would ensure the energy system can continue to provide energy even if one corridor is damaged by a climate hazard (e.g., if a major storm causes damages to key power lines).

Climate resilience must be integrated into all energy infrastructure, throughout its lifecycle. This requires a continuous and iterative process that incorporates emerging best practices supported by current climate science.

Some of the key opportunities for climate resilience in our energy systems will include identifying vulnerable and critical infrastructure at risk of failure during climate hazards such as storms and flooding events and implementing adaptive measures to mitigate the impacts. This will require cross-stakeholder collaboration with member local governments and utilities to identify work that has already been completed and to understand where the gaps for adaptation still exist.

Discussion:

Energy Adaptation

The following sections outline proposed goals, example metrics, example actions, and a potential Big Idea to adapt to climate change impacts.

Proposed Long-Term Goal for Energy Adaptation

Long-term goals describe a desired future state for a climate resilient energy system, with expected achievement in 2050 and beyond. Long-term goals will help identify and prioritize new actions to achieve the adaptations required from the energy sector. Adaptation goals for the energy sector in this region are the responsibility of multiple organizations.

To achieve a climate resilient region over the long term—the next 30 years—more stringent transportation adaptation goals may need to be adopted by the relevant agencies.



Please consider the following long-term adaptation goal proposed for our region's energy sector. Will this goal help us ensure the region is resilient to climate change?

- 1. All regional energy infrastructure is resilient to the impacts of climate change expected during their life cycle, including higher temperatures, severe weather, floods and wildfire impacts.**

Example Energy Adaptation Indicators

To support achievement of the long-term adaptation goal, it is important to measure progress towards a climate resilient energy system. How climate resiliency is measured is an emerging field of research and our region will be learning alongside other local jurisdictions. Adaptation indicators will be included in the *Climate 2050 Energy Roadmap*.



Please consider the following proposed, planned or in-use adaptation indicators from other leading jurisdictions. Could any of these help us measure progress toward reaching our long-term goal? What should adaptation indicators look like for our region?

(Additional information on the indicators is listed in the web links shown.)

1. Minimize disruptions to electrical supply caused by flooding of electrical equipment ([Durham](#))
2. Prevent electrical outages due to trees falling on electrical lines and equipment ([Durham](#)).
3. Underground critical sections of the overhead electrical distribution system to ensure resilience by 2080 ([Con Edison](#)).
4. Fortify electric substations to withstand increased incidence of heavy rain events by 2080 ([Con Edison](#)).

5. Continue to invest in grid modernization to increase resilience to climate change ([Con Edison](#)).
6. Ensure that all City critical infrastructure has backup power ([City of Calgary](#)).
7. Update all relevant design standards to account for the effects of climate change ([City of Calgary](#)).

Example Energy Adaptation Actions

Actions are the policies and programs, including requirements, incentives and educational outreach campaigns, which will lead to a more climate resilient energy system. Actions will be included in the *Climate 2050 Energy Roadmap*. In addition to existing actions (see [page 17](#)), we need new actions to address the many opportunities we have to increase resilience and meet our long-term goals.



Please consider the following proposed, planned or underway actions from other leading jurisdictions. Could any of these help us increase resilience to reach our goal? What should new, additional actions look like?

(Additional information on the actions is listed in the web links shown.)

1. Climate-ADAPT is a “one-stop” shop for adaptation information in Europe ([European Union](#)).
2. Develop a **Climate Change Vulnerability Assessment and Adaptation Plan** ([Seattle](#)).
3. Electric distribution companies should **improve preparedness and responses to major storms** ([New Jersey](#)).
4. **Prioritize vulnerability and risk assessments of critical infrastructure** based on climate change impacts and setting priorities for adaptation strategies ([Baltimore](#), [Portland](#), [San Francisco](#), [Palo Alto](#)).
5. **Invest capital into strengthening electric and gas systems** to better withstand storms, improve reliability and enhance resiliency, including initiatives such as raising flood-prone substations ([New Jersey](#)).
6. **Create a municipal micro-grid** to provide electricity for critical services such as police, fire and emergency communications ([Fairfield](#)).
7. **Determine backup power requirements for City systems and infrastructure** in preparation for cascading power losses in the event of multiple extreme weather events ([Calgary](#)).
8. **Conduct sea level rise vulnerability assessments** on critical infrastructure and develop multi-year sea level rise implementation plans ([Palo Alto](#)).
9. **Update design standards** to ensure that new energy assets are built to withstand the impact of climate change hazards ([New York](#)).

Potential Big Idea for Energy Adaptation

To respond to the accelerating impacts of climate change, we need to think big and act quickly. Metro Vancouver has identified a potential **Big Idea** to improve regional resilience. The Big Idea was selected for different reasons, including potential to significantly advance climate resilience of the energy network, ease of implementation or their foundational nature (i.e., they are needed to support other actions).



Please consider the following Big Idea. Could this help us to significantly advance climate resilience for the energy system? What other Big Ideas should Metro Vancouver consider?

Big Idea 1: Conduct a vulnerability assessment on the region's energy system

A coordinated regional approach to resiliency requires a better understanding of the vulnerability of the region's systems. Metro Vancouver and other public organizations have completed vulnerability assessments of specific infrastructure in the region, with varying limitations and emphasis on specific climate hazards. The fragmented nature of local information means that critical interdependencies may not have been considered. A comprehensive climate risk and vulnerability assessment for the region's energy systems integrated with a comprehensive regional vulnerability assessment would support the development of a more coordinated approach to climate adaptation in the region.

Although it is the primary responsibility of the energy utilities to ensure energy infrastructure is resilient to a variety of hazards, Metro Vancouver could play a key role in coordinating a vulnerability assessment across the region's infrastructure, ecosystems, and communities. The assessment could map out key hazards to critical infrastructure, ecosystems, and communities and identify the interdependencies that require inter-jurisdictional and interagency coordination.

Other leading metropolitan regions are already taking a more coordinated approach to climate adaptation for energy. For example, a climate change vulnerability assessment of Ontario's electrical transmission sector was jointly completed by various organizations including Toronto Region Conservation Authority, Ontario Climate Consortium, Independent Electrical System Operator (Ontario), Risk Sciences International and Nodelcorp Consulting Inc. ([Ontario](#)).

Feedback and Engagement Process

Metro Vancouver invites feedback from diverse viewpoints to help shape *Climate 2050*. Metro Vancouver will carefully consider all input. Feedback is welcome by email at Climate2050@metrovancover.org, or by telephone at 604-432-6200.

To ensure your comments are considered please provide feedback by April 30, 2021.

To ensure efficiency and cross-project considerations, feedback on this discussion paper will also be shared with the Metro Vancouver project teams for additional projects including the upcoming updates to the regional drinking water and liquid waste management plans and Clean Air Plan.

To ensure your comments are considered please provide feedback
by April 30, 2021.

How Feedback Will Be Used

With revisions, content from this discussion paper will form the basis of the *Climate 2050 Energy Roadmap*, which will be available for feedback before it is finalized.

Comments and suggestions will be compiled into a summary report for consideration by the Metro Vancouver Board and will be made publicly available.

Metro Vancouver staff will treat personal information with confidentiality; please note that comments you submit may be provided to a third party if a freedom of information request is made under the *Freedom of Information and Protection of Privacy Act*. If you have any questions or comments regarding the consultation process, please call 604-432-6200.

Thank you for taking the time to provide your valuable feedback.

For more information, visit www.metrovancover.org/climate2050,
or call 604-432-6200.

Glossary

Carbon neutral region is a region that has achieved the deepest greenhouse gas emissions reductions possible across all economic sectors and removes or captures sufficient carbon dioxide to balance any remaining regional greenhouse gas emissions.

Clean energy is energy derived from sources with low or zero emissions.

Climate change adaptation means anticipating, planning for and responding to the adverse effects of climate change and taking appropriate action to prevent or minimize the damage it can cause, or taking advantage of opportunities that may arise. It has been shown that well-planned, early adaptation action saves money and lives later.

Climate resilience describes the capacity of ecosystems, economies, infrastructure, and communities to absorb the impacts of climate change while maintaining essential services and functions needed to support health and well-being. In some cases, climate resilience involves changing services and functions so they are more sustainable.

Combustion refers to the process of burning a fuel to make energy.

Common air contaminants are air contaminants that can harm public health and reduce residents' quality of life and life expectancy by causing heart and lung diseases, cancer, asthma, and other impacts. Common air contaminants include fine and coarse particulate matter, ground-level ozone, nitrogen dioxide, and sulphur dioxide.

Fine particulate matter (PM_{2.5}) is made up of tiny solid or liquid particles that float in the air and can penetrate deep into the lungs and even into the bloodstream. Fine particulate matter can damage people's health by aggravating existing lung and heart diseases, increasing the risk of cancer and reducing life expectancy.

Greenhouse gases are air contaminants that trap heat and are the cause of climate change. Greenhouse gases include carbon dioxide and nitrous oxide as well as short-lived climate forcers such as methane, halocarbons, black carbon and ozone. Limiting or preventing greenhouse gas emissions and removing these gases from the atmosphere is critical to avoiding catastrophic climate change (sometimes referred to as climate change mitigation).

Ground-level ozone (O₃) can have harmful impacts on everyone, especially children, seniors, and people with lung and heart conditions. It is primarily formed when nitrogen oxides and volatile organic compounds react in the air on hot and sunny days.

Hazard refers to a dangerous phenomenon, substance, human activity, or condition. In this context, hazards are caused or made worse by climate change. Examples include rainstorms, extreme weather, wildfires, storm surges, landslides and floods.

Impacts refers to the consequences of realized risks on ecosystems, economies, infrastructure and communities. Impacts may be referred to as consequences or outcomes, and can be adverse or beneficial.

Nitrogen dioxide (NO₂) can damage people's health by aggravating existing lung diseases like asthma and bronchitis and reducing immunity to lung infections. It is formed during high-temperature fuel combustion.

Primary energy sources are directly derived from natural resources, before transformation. For example, wind and solar are primary energy sources.

Renewable energy is energy derived from sources that can be replenished over days or years.

Secondary energy sources are generated from primary energy sources. For example, electricity generated from wind energy is a secondary energy source.

Social cost of carbon is a monetary benefit/cost value for the consequences of reducing/increasing greenhouse gas emissions in terms of measuring the impacts of climate change.

Vulnerability is the degree to which ecosystems, economies, infrastructure and communities are susceptible to, or unable to cope with, the adverse effects of climate change. Vulnerability varies based on exposure, sensitivity and adaptive capacity. Geographic location, socio-economic conditions, and other factors can impact susceptibility to harm and adaptive capacity.

Vulnerability assessments identify areas or populations most likely to be impacted by projected changes in climate and build an understanding of why these areas are vulnerable, including the interaction between climate change, non-climatic stressors and cumulative impacts. Assessments evaluate the effectiveness of previous coping strategies and target potential adaptation measures.

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. Its core services are drinking water, wastewater treatment and solid waste management. Metro Vancouver also regulates air quality, plans for urban growth, manages a regional parks system and provides affordable housing. The regional district is governed by a Board of Directors of elected officials from each local authority.

Member jurisdictions of Metro Vancouver include:

- Village of Anmore
- Village of Belcarra
- Bowen Island Municipality
- City of Burnaby
- City of Coquitlam
- City of Delta
- Electoral Area A
- City of Langley
- Township of Langley
- Village of Lions Bay
- City of Maple Ridge
- City of New Westminster
- City of North Vancouver
- District of North Vancouver
- City of Pitt Meadows
- City of Port Coquitlam
- City of Port Moody
- City of Richmond
- City of Surrey
- Tsawwassen First Nation
- City of Vancouver
- District of West Vancouver
- City of White Rock