

**METRO VANCOUVER REGIONAL DISTRICT
REGIONAL PLANNING COMMITTEE**

REGULAR MEETING

Friday, October 11, 2019

9:00 a.m.

28th Floor Committee Room, 4730 Kingsway, Burnaby, British Columbia

A G E N D A¹

1. ADOPTION OF THE AGENDA

1.1 October 11, 2019 Regular Meeting Agenda

That the Regional Planning Committee adopt the agenda for its regular meeting scheduled for October 11, 2019 as circulated.

2. ADOPTION OF THE MINUTES

2.1 September 13, 2019 Regular Meeting Minutes

That the Regional Planning Committee adopt the minutes of its regular meeting held September 13, 2019 as circulated.

3. DELEGATIONS

4. INVITED PRESENTATIONS

4.1 Steve Litke, Senior Program Manager, Watersheds and Water Resources & Sustainability Indicators, Fraser Basin Council

Subject: Lower Mainland Flood Management Strategy

5. REPORTS FROM COMMITTEE OR STAFF

5.1 2020 - 2024 Financial Plan – Regional Planning

Designated Speaker:

Heather McNell, Director of Regional Planning and Electoral Area Services

That the Regional Planning Committee endorse the 2020 - 2024 Financial Plan for Regional Planning as presented in the report titled “2020 - 2024 Financial Plan – Regional Planning” dated October 4, 2019 and forward it to the Metro Vancouver Regional District Board Budget Workshop on October 23, 2019 for consideration.

¹ Note: Recommendation is shown under each item, where applicable.

5.2 Amending *Metro Vancouver 2040: Shaping our Future* to Align with the IPCC Special Report on Global Warming of 1.5°C

Designated Speaker:

James Stiver, Division Manager, Growth Management and Transportation

That the MVRD Board:

- a) initiate a Type 3 minor amendment to *Metro Vancouver 2040: Shaping our Future* to reflect a commitment to a carbon neutral region by 2050, and an interim target of reducing greenhouse gas emissions by 45% from 2010 levels by 2030;
- b) give first, second, and third readings to “Metro Vancouver Regional District Regional Growth Strategy Amendment Bylaw No. 1285, 2019”; and
- c) direct staff to notify affected local governments and agencies as per Section 6.4.2 of *Metro Vancouver 2040: Shaping our Future*.

5.3 Ecological Health – Tree Canopy Cover and Impervious Surfaces

Designated Speaker: Josephine Clark, Environmental Planner, Regional Planning

That the Regional Planning Committee receive for information the report dated September 21, 2019, titled “Ecological Health – Tree Canopy Cover and Impervious Surfaces”.

5.4 Study on Applications to the Agricultural Land Commission

Designated Speaker: Theresa Duynstee, Senior Planner, Regional Planning

That the Regional Planning Committee receive for information the report dated September 13, 2019, titled “Study on Applications to the Agricultural Land Commission”.

5.5 *Metro Vancouver 2040: Shaping our Future* – 2018 Procedural Report

Designated Speaker: Heidi Lam, Senior Policy & Planning Analyst, Regional Planning

That the MVRD Board receive for information the report dated September 22, 2019, titled “*Metro Vancouver 2040: Shaping our Future* – 2018 Procedural Report”

5.6 Manager’s Report

Designated Speaker: Heather McNell, Director of Regional Planning and Electoral Area Services, Planning and Environment

That the Regional Planning Committee receive for information the report dated September 25, 2019, titled “Manager’s Report.”

6. INFORMATION ITEMS

7. OTHER BUSINESS

8. BUSINESS ARISING FROM DELEGATIONS

9. RESOLUTION TO CLOSE MEETING

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

10. ADJOURNMENT/CONCLUSION

That the Regional Planning Committee adjourn/conclude its regular meeting of October 11, 2019.

Membership:

Coté, Jonathan (C) - New Westminster
Froese, Jack (VC) - Langley Township
Copeland, Dan - Delta
Dueck, Judy - Maple Ridge
Gamboli, Nora - West Vancouver

Guerra, Laurie - Surrey
Hurley, Mike - Burnaby
Kirby-Yung, Sarah - Vancouver
McEwen, John - Anmore

Pollock, Glenn - Port Coquitlam
Steves, Harold - Richmond
Stewart, Richard - Coquitlam
Vagramov, Rob - Port Moody

**METRO VANCOUVER REGIONAL DISTRICT
REGIONAL PLANNING COMMITTEE**

Minutes of the Regular Meeting of the Metro Vancouver Regional District (MVRD) Regional Planning Committee held at 9:04 a.m. on Friday, September 13, 2019 in the 28th Floor Committee Room, 4730 Kingsway, Burnaby, British Columbia.

MEMBERS PRESENT:

Chair, Mayor Jonathan Coté, New Westminster
 Vice Chair, Mayor Jack Froese, Langley Township
 Councillor Dan Copeland, Delta
 Councillor Judy Dueck, Maple Ridge
 Councillor Nora Gambioli, West Vancouver
 Councillor Laurie Guerra, Surrey
 Mayor Mike Hurley, Burnaby
 Councillor Sarah Kirby-Yung, Vancouver (arrived at 9:16 a.m.)
 Mayor John McEwen, Anmore
 Councillor Glenn Pollock, Port Coquitlam
 Councillor Harold Steves, Richmond
 Mayor Richard Stewart, Coquitlam (arrived at 9:07 a.m.)
 Mayor Rob Vagramov, Port Moody (arrived at 9:11 a.m.)

MEMBERS ABSENT:

None.

STAFF PRESENT:

Heather McNell, Director, Regional Planning and Electoral Area Services, Planning and Environment
 Carol Mason, Chief Administrative Officer
 Genevieve Lanz, Legislative Services Coordinator, Board and Information Services

1. ADOPTION OF THE AGENDA

1.1 September 13, 2019 Regular Meeting Agenda

It was MOVED and SECONDED

That the Regional Planning Committee adopt the agenda for its regular meeting scheduled for September 13, 2019 as circulated.

CARRIED

2. ADOPTION OF THE MINUTES

2.1 July 5, 2019 Regular Meeting Minutes

It was MOVED and SECONDED

That the Regional Planning Committee adopt the minutes of its regular meeting held July 5, 2019 as circulated.

CARRIED

3. DELEGATIONS

3.1 Roderick V. Louis

Roderick Louis spoke to the *Metro 2050* engagement plan, highlighting concerns related to economic development, transit accessibility, and affordable housing availability in the south of the Fraser River region, and requested that the MVRD Board pass a motion requiring a Regional Public Hearing be held at three locations, with one being in the south of the Fraser region.

9:07 a.m. Mayor Stewart arrived at the meeting.

4. INVITED PRESENTATIONS

9:11 a.m. Mayor Vagramov arrived at the meeting.

4.1 Kim Needham, Director of Planning and Development Services, Squamish Lillooet Regional District

Kim Needham, Director of Planning and Development Services, Squamish Lillooet Regional District, spoke to members regarding the Squamish Lillooet Regional District Regional Growth Strategy Update, highlighting geographic context, population growth, regional growth strategy goals, summary of proposed amendments, and next steps.

9:16 a.m. Councillor Kirby-Yung arrived at the meeting.

Presentation material titled “Regional Growth Strategy Summary – Squamish-Lillooet Regional District Regional Growth Strategy Bylaw No. 1062, 2008, Amendment Bylaw No. 1562-2018” is retained with the September 13, 2019 Regional Planning Committee agenda.

Agenda Order Varied

The order of the agenda was varied to consider Item 5.1 at this point.

5.1 Squamish-Lillooet Regional District Regional Growth Strategy Amendment Bylaw No. 1562-2018

Report dated August 13, 2019 from Erin Rennie, Senior Planner, Regional Planning, Planning and Environment, seeking MVRD Board acceptance of

Squamish-Lillooet Regional District Regional Growth Strategy Amendment Bylaw No. 1562-2018.

It was MOVED and SECONDED

That the MVRD Board accept Squamish-Lillooet Regional District Regional Growth Strategy Amendment Bylaw No. 1562-2018 and notify the Squamish-Lillooet Regional District Board of its acceptance.

CARRIED

Agenda Order Resumed

The order of the agenda order resumed with Item 4.2 before the Committee at this point.

4.2 Vincent Gonsalves, Acting Senior Manager Government and Public Affairs, TransLink

Vincent Gonsalves, Acting Senior Manager Government and Public Affairs, TransLink, spoke to members regarding the results of the Vision and Values Survey on the Future of the Region, highlighting collaboration with Metro Vancouver as input into both *Transport 2050* and *Metro 2050*, vision and values survey questions and results, stakeholder engagement, interactive feedback opportunities, and report release.

Presentation material titled “Vision and Values Survey on the Future of the Region” is retained with the September 13, 2019 Regional Planning Committee agenda.

5. REPORTS FROM COMMITTEE OR STAFF

5.1 Squamish-Lillooet Regional District Regional Growth Strategy Amendment Bylaw No. 1562-2018

This item was previously considered.

5.2 Metro 2050 Engagement Plan

Report dated August 15, 2019 from Sean Tynan, Acting Senior Regional Planner, Regional Planning, Planning and Environment, and Lucy Duso, Policy Coordinator, External Relations, seeking MVRD Board approval of the updated *Metro 2050* engagement plan, direction on the inclusion of a regional public hearing, and providing information related to the *Local Government Act* requirement to notify affected local governments of the update to *Metro 2040*.

Members were provided with a presentation on updates to the *Metro 2050* Engagement Plan, highlighting project phases and timeline, engagement approach and plan, and signatories, non-signatory stakeholders, First Nations groups, and public engagement opportunities.

Presentation material titled “Metro 2050 – Engagement Plan” is retained with the September 13, 2019 Regional Planning Committee agenda.

It was MOVED and SECONDED

That the MVRD Board:

- a) approve the updated *Metro 2050* Engagement Plan as outlined in the report dated August 15, 2019, titled “*Metro 2050* Engagement Plan”;
- b) in alignment with the requirements of Subsection 434(3) of the *Local Government Act*, direct staff to include a Regional Public Hearing as part of the engagement process for *Metro 2050*;
- c) as per Subsection 433(4) of the *Local Government Act*, notify affected local governments and the Minister of Municipal Affairs and Housing of the initiated update to *Metro 2040*; and
- d) direct staff to offer each member jurisdiction the opportunity to co-host a public information meeting on *Metro 2050* aligned with respective Council presentations.

CARRIED

5.3 Metro 2050 Scope and Status Update

Report dated August 15, 2019 from Sean Tynan, Acting Senior Regional Planner, Regional Planning, Planning and Environment, providing members with an update on the development of *Metro 2050*.

It was MOVED and SECONDED

That the MVRD Board receive for information the report titled “*Metro 2050* Scope and Status Update” dated August 15, 2019.

CARRIED

Councillor Steves absent at the vote.

5.4 Establishment of an Intergovernmental Advisory Committee for the Update to the Regional Growth Strategy

Report dated August 19, 2019 from James Stiver, Division Manager of Growth Management and Transportation, Regional Planning, Planning and Environment, seeking MVRD Board direction on the establishment and membership of an Intergovernmental Advisory Committee on the update to *Metro 2050* regional growth strategy update.

It was MOVED and SECONDED

That the MVRD Board:

- a) establish an Intergovernmental Advisory Committee to advise on the development and implementation of the update of the regional growth strategy, as required by Section 867 of the *Local Government Act*;
- b) appoint the Director of Regional Planning and Electoral Area Services and the Division Manager of Growth Management and Transportation of Metro Vancouver to the Intergovernmental Advisory Committee;
- c) invite the following authorities and organizations to make appointments to the Intergovernmental Advisory Committee:
 - i) Metro Vancouver member jurisdictions;
 - ii) South Coast British Columbia Transportation Authority;

- iii) Provincial Government;
- iv) Fraser Valley Regional District and the Squamish-Lillooet Regional District;
- v) Port of Vancouver;
- vi) Vancouver Airport Authority;
- vii) Agricultural Land Commission;
- viii) Fraser Health and Vancouver Coastal Health; and
- ix) the University of British Columbia.

CARRIED

Councillor Steves absent at the vote.

5.5 Metro 2040 Urban Centre and Frequent Transit Development Area Policy Review – Policy Directions For Consideration

Report dated August 19, 2019 from Erin Rennie, Senior Planner, Regional Planning, Planning and Environment, seeking feedback on the *Metro 2040* Urban Centre and Frequent Transit Development Area Policy Review.

Members were provided with a presentation on the Urban Centre and Frequent Transit Development Area policy review, highlighting current *Metro 2040* policy and *Metro 2050* proposed directions, regional challenges, growth target analytics, and next steps.

Presentation material titled “Urban Centre and FTDA Policy Review – Policy Directions” is retained with the September 13, 2019 Regional Planning Committee agenda.

It was MOVED and SECONDED

That the Regional Planning Committee receive for information the report dated August 19, 2019, titled “*Metro 2040* Urban Centre and Frequent Transit Development Area Policy Review – Policy Directions for Consideration.”

CARRIED

5.6 Update on Metro 2040 Environment Policy Review – Forum Results and Policies from Other Jurisdictions

Report dated August 12, 2019 from Laurie Bates-Frymel, Senior Planner, Regional Planning, Planning and Environment, providing members with an overview of the Environmental Land Use Policy Forum and review of environmental land use policies from other jurisdictions.

It was MOVED and SECONDED

That the Regional Planning Committee receive for information the report dated August 12, 2019, titled “Update on *Metro 2040* Environment Policy Review – Forum Results and Policies from Other Jurisdictions”.

CARRIED

5.7 Metro 2040 and Protecting Ecologically Important Areas

Report dated July 31, 2019 from Josephine Clark, Environmental Planner, Regional Planning, Planning and Environment, providing members with an analysis of the Sensitive Ecosystem Inventory in relation to the updated environmental objectives and policies in *Metro 2040*.

Members were provided with a presentation on the Sensitive Ecosystem Inventory, highlighting integration within the regional growth strategy, consistent criteria for Conservation and Recreation land use designations, and suitability of developing a regional natural asset inventory.

Presentation material titled “Metro 2040 and Protecting Ecologically Important Areas – Metro 2040 Environment Policy Review” is retained with the September 13, 2019 Regional Planning Committee agenda.

It was MOVED and SECONDED

That the Regional Planning Committee receive for information the report dated July 31, 2019, titled “*Metro 2040* and Protecting Ecologically Important Areas”.

CARRIED

5.8 Regional Context Statements – Update on the Required 5 Year Review for Member Jurisdictions

Report dated August 16, 2019 from James Stiver, Manager, Growth Management and Transportation, Regional Planning, Planning and Environment, providing members with an update on the status of required Regional Context Statements.

It was MOVED and SECONDED

That the Regional Planning Committee receive for information the report dated August 16, 2019, titled “Regional Context Statements – Updated on the Required 5-Year Review for Member Jurisdictions”.

CARRIED

5.9 City of Vancouver’s Regional Context Statement – 5 Year Review

Report dated August 14, 2019 from Sean Tynan, Acting Senior Planner, Regional Planning, Planning and Environment, seeking MVRD Board acceptance of the City of Vancouver’s Regional Context Statement.

It was MOVED and SECONDED

That the MVRD Board accept the City of Vancouver’s Regional Context Statement as submitted to Metro Vancouver on July 26, 2019.

CARRIED

5.10 Manager’s Report

Report dated August 20, 2019 from Heather McNell, Director of Regional Planning and Electoral Area Services, Planning and Environment, updating members on the 2019 Regional Planning Work Plan, and progress on the Land Value Capture Study.

It was MOVED and SECONDED

That the Regional Planning Committee receive for information the report dated August 20, 2019, titled "Manager's Report".

CARRIED

6. INFORMATION ITEMS

No items presented.

7. OTHER BUSINESS

No items presented.

8. BUSINESS ARISING FROM DELEGATIONS

No items presented.

9. RESOLUTION TO CLOSE MEETING

No items presented.

10. ADJOURNMENT/CONCLUSION

It was MOVED and SECONDED

That the Regional Planning Committee conclude its regular meeting of September 13, 2019.

CARRIED

(Time: 10:26 a.m.)

Genevieve Lanz,
Legislative Services Coordinator

Jonathan Côté, Chair

To: Regional Planning Committee

From: Heather McNell, Director of Regional Planning and Electoral Area Services

Date: October 4, 2019

Meeting Date: October 11, 2019

Subject: **2020 - 2024 Financial Plan – Regional Planning**

RECOMMENDATION

That the Regional Planning Committee endorse the 2020 - 2024 Financial Plan for Regional Planning as presented in the report titled “2020 - 2024 Financial Plan – Regional Planning” dated October 4, 2019 and forward it to the Metro Vancouver Regional District Board Budget Workshop on October 23, 2019 for consideration.

PURPOSE

To present the 2020-2024 Financial Plan for Regional Planning for consideration by the Committee.

BACKGROUND

Metro Vancouver’s annual budget process includes the development of detailed annual budgets and the updating of five year financial plans for each of the four Metro Vancouver legal entities (Metro Vancouver Regional District, Metro Vancouver Housing Corporation, Greater Vancouver Water District and Greater Vancouver Sewerage and Drainage District) and related functions.

This report focuses on the Regional Planning function and presents the 2020 annual budget and the updated five year plan for the years 2020 to 2024 for committee consideration.

REGIONAL PLANNING SERVICE

Regional Planning services within the Metro Vancouver Regional District (MVRD) represent functions that include 22 members and provides policy research, development, implementation and monitoring in support of a prosperous, resilient and livable region. The primary responsibility is to develop, administer, implement and monitor *Metro Vancouver 2040: Shaping our Future* (Metro 2040), the regional growth strategy. There are three programs within the Regional Planning Division: Growth Management and Transportation, Planning Analytics and Environment.

The Regional Planning initiatives planned over the next five years are guided by direction provided in the *Board Strategic Plan*, specifically:

- Undertake a comprehensive update to *Metro 2040* to prioritize climate change, align with the update to the Regional Transportation Strategy and extend the timeframe to 2050.
- Continue to develop and implement effective and adaptive tools and processes for achieving the goals in Metro 2040, the regional growth strategy;
- Continue to support the efforts of members in developing complete, livable and healthy communities;

- Guide the development of policies, plans, tools and creative solutions for managing competing demands on land in the region; and
- Strengthen awareness and engagement with the public, members, other orders of government, and key stakeholders on a range of initiatives regarding the role and value of land use planning at the regional scale and the objectives of the regional growth strategy.

2020 BUDGET AND 2020 - 2024 FINANCIAL PLAN

The five year financial plans for this cycle have been updated to address five central themes identified by the Metro Vancouver Board in its Strategic Plan to guide the development of plans and budgets. The five themes are as follows:

- Regional Growth
- Environmental Sustainability
- Financial Sustainability
- System Stewardship
- Regulatory and Legislative Environment

Regional Planning is also guided by direction provided in *Metro 2040*, specifically to support the goals, strategies and policy actions in the plan to:

- Goal 1 - Create a compact urban area
- Goal 2 - Support a sustainable economy
- Goal 3 - Protect the environment and respond to climate change impacts
- Goal 4 - Develop complete communities
- Goal 5 - Support sustainable transportation choices

Each Metro Vancouver function has an Annual Work Plan that includes strategic directions, performance indicators and key actions to guide the work for the coming year. Each function also has a “What’s Happening” summary that highlights the program highlights for the next five years.

The 2020-2024 Regional Planning Financial Plan is included as Attachment 1. The 2020 Annual Work Plan for Regional Planning presented in this report is included in Attachment 2 and the “What’s Happening” highlights for the years 2020 – 2024 are included in Attachment 3.

Operating Budget Highlights

The Regional Planning 2020 operating budget is proposed to increase by \$106,706 for a total budget of \$3,763,393 (Attachment 1). This increase is primarily due to the addition of one full time permanent staff member in the Environment program to act as a liaison between Metro Vancouver staff and external agency staff at various levels on external projects that impact Metro Vancouver assets, operations, interests, and legislated responsibilities. There is a partially offsetting decrease relating to Sustainability Innovation Fund projects that were only budgeted for in 2019.

The 2020 operating budget includes the following key actions:

- Update *Metro 2040* – Phase I Completion - Policy reviews and draft policy actions
- Complete the Urban Centres and FTDAs, Industrial and Mixed Employment, Agricultural, Environment, Transportation, Housing, and Climate Change Policy Review
- Regional Industrial Land Strategy
- 2020 Regional Industrial Land Inventory
- New Land Use Model – Phase I
- Equity in Regional Growth Management Study – Phase 2
- Frequent Transit Corridor Study
- Where Matters Phase 2: Performance Based Land Use for Health and Economic Benefits
- Access to Homeownership Opportunities and development of Housing Agreement Templates
- Climate Change Land Use Research
- Transit Oriented Affordable Housing Study – Phase 3
- Advance a Transit Oriented Affordable Housing Fund; update the Housing and Transportation Cost Burden analysis
- Ecosystem Services from Agricultural Land
- Regional Connectivity and Protecting Urban Ecological Areas
- Climate Change Impacts on Invasive Species
- Urban Forestry – Best Practices

As noted above, there is one new full-time staff position proposed for 2020, a Policy Coordinator in the Environment Program intended to coordinate Metro Vancouver comments, and ensure a consistent approach when addressing external agency projects that have impacts on Metro Vancouver assets, operation, interests and legislated responsibilities (external agencies such as Translink, Port of Vancouver, Ministry of Transportation and Infrastructure).

Over the next five years, expenditures are increasing by a total of \$250,525, or an average of 1.4% per year. In addition to those noted above, key projects through 2024 include:

- Develop a New Land Use Model – Phase 2 Demographics Module to support updated population, dwelling unit, employment and land use projections (2021)
- Performance monitoring on *Metro 2040* (2021-2024)
- Update the Regional Parking Study (2021)
- Completion of five year updates to 3 regional land use inventories including:
 - Sensitive Ecosystem Inventory (2021)
 - Agricultural Land Use Inventory (2021)
 - Office in Centres Inventory (2022)
- Complete series of Census Bulletins as data becomes available (2022)
- Complete comprehensive update to the Regional Growth Strategy (2022)
- Complete a Regional Land Use Assessment (2022-2023).

Communications Program

The 2020 Regional Planning Communications Program of \$80,000 is framed around the following initiatives:

- Multimedia support for the development of Metro 2050, Transit Oriented Affordable Housing Study, and implementation of the Regional Industrial Lands Strategy
- Stakeholder engagement activities regarding, Regional Industrial Lands Strategy, Metro 2050, and other forums including venues, catering, speakers, etc.
- Engagement and/or public opinion support/media for Metro 2050 communications and regional planning initiatives.

Reserve Funds

The financial plan for Regional Planning includes the utilization of reserves to annually fund one-time initiatives. This is consistent with the *Operating, Statutory and Discretionary Reserves Policy*.

The 2020 – 2024 Projected Reserves for Regional Planning are included in Attachment 4.

WORK PLAN PERFORMANCE INDICATORS

High level performance indicators have been developed across the organization to evaluate trends, determine key actions for the coming year, and to assist in long-term planning. The 2020 Work Plan for Regional Planning is presented in this report. Within the Regional Planning Work Plan, five performance indicators have been developed and are being tracked. These include:

- Percentage of residential growth occurring within the Urban Containment Boundary (UCB);
- Percentage of new dwelling units located within Urban Centres;
- Number of hectares of land with a *Metro 2040* Agricultural Designation;
- Number of hectares of land with a *Metro 2040* Industrial Designation; and
- Number of hectares of land with a *Metro 2040* Mixed Employment Designation.

The trend in these performance measures suggests that the region is on target with regards to meeting the goals laid out in the regional growth strategy. *Metro 2040* sets a target to contain 98% of growth within the Urban Containment Boundary. Since the strategy's adoption in 2011, this target has been met. *Metro 2040* also strives to direct 40% of dwelling unit growth and 50% of employment growth to a network of 26 Urban Centres. Between the strategy's adoption and 2016, 39% of dwelling unit growth occurred in Urban Centres.

CONSISTENCY WITH THE 2019-2023 FINANCIAL PLAN

The updated five year financial plan has been developed to be consistent with the 2019-2023 financial plan. The MVRD Requisition for Regional Planning is projected to be \$3,348,393 for 2020, which is 5.3% higher than that projected for 2020 in the last planning cycle and is primarily due to the additional position which was not contemplated in the 2019 – 2023 financial Plan. The household impact of the Regional Planning function remains consistent with the prior year at just under \$3.

APPROVAL PROCESS

The proposed 2020-2024 Financial Plan and Annual Work Plan is presented for consideration and endorsement before being forwarded to the Board for consideration.

The next steps of the process are:

- The 2020 – 2024 Financial Plan and Annual Work Plan will be presented for consideration at the Board Budget Workshop on October 23, 2019.

- The Board will consider adoption of the 2020 Budget and endorsement of the 2020 - 2024 Financial Plan on November 1, 2019.

ALTERNATIVES

1. That the Regional Planning Committee endorse the 2020 - 2024 Financial Plan for the Regional Planning as presented in the report “2020 - 2024 Financial Plan – Regional Planning” dated October 2, 2019 and forward it to the Metro Vancouver Regional District Board Budget Workshop on October 23, 2019 for consideration.
2. That the Regional Planning Committee make recommendations and endorse an amended 2020 - 2024 Financial Plan for Regional Planning and forward the amended Financial Plan to the Finance and Intergovernment Committee on October 16, 2019 and to the Metro Vancouver Regional District Board Budget Workshop on October 23, 2019 for consideration.

FINANCIAL IMPLICATIONS

If the MVRD Board endorses the 2020 – 2024 Financial Plan for Regional Planning, as presented under Alternative 1, in 2020 the Regional Planning requisition will increase by \$240,661 (7.7%) for a total requisition of \$3,348,393.

Over the term of the five year plan, the annual Regional Planning requisition is projected to increase by an average of \$143,896 per year (4.3%) to provide the required revenue to offset projected expenditures. It is anticipated that the cost to the average regional household over the next five years for the Regional Planning function will rise from just under \$3 in 2019 to slightly over \$3 in 2024.

Under Alternative 2, the Committee may wish to consider recommending amendments to the 2020 Budget and Five Year Financial Plan for consideration at the Board Budget Workshop. Any changes to the plan may have an impact on the MVRD Financial Plan.

SUMMARY / CONCLUSION

The Regional Planning 2020 Budget and Five Year Financial Plan has been prepared to respond to direction provided in the *Board Strategic Plan*. It is presented to Committee and Board members to provide overview information on activities and financial impacts for the years 2020 to 2024 for Regional Planning.

The presentation of this year’s five year financial plan for Regional Planning provides the opportunity for Metro Vancouver to share with its member jurisdictions the proposed service related initiatives over the next five years. It is intended to be used as a guiding document for member jurisdictions in the development of their five year financial plans and includes projections on household impact to demonstrate how the plan will remain affordable for residents while keeping pace with our critical requirements.

Staff recommends endorsing the 2020 - 2024 Financial Plan and Annual Work Plan for Regional Planning as presented under alternative one.

Attachments:

1. 2020 – 2024 Financial Plan (Doc. 32935931)
2. 2020 Work Plan (Doc. 31667791)
3. 2020 – 2024 “What’s Happening”
4. 2020 – 2024 Projected Reserves – Regional Planning
5. Organizational Chart

32994879

METRO VANCOUVER REGIONAL DISTRICT
REGIONAL PLANNING
2020 BUDGET REVIEW
2020-2024 FINANCIAL PLAN

	2017 ACTUAL	2018 ACTUAL	2019 BUDGET	2020 BUDGET	% CHANGE	2021 FORECAST	% CHANGE	2022 FORECAST	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE
REVENUES													
Metro Vancouver Regional District Requisitions	\$ 2,944,465	\$ 2,842,450	\$ 3,107,732	\$ 3,348,393	7.7%	\$ 3,528,867	5.4%	\$ 3,742,497	6.1%	\$ 3,815,795	2.0%	\$ 3,827,212	0.3%
Transfer from Sustainability Innovation Fund Reserve	83,187	71,045	128,955	-		-		-		-		-	
Transfer from Reserves	89,137	206,472	420,000	415,000		423,000		100,000		80,000		80,000	
TOTAL REVENUES	\$ 3,116,789	\$ 3,119,967	\$ 3,656,687	\$ 3,763,393	2.9%	\$ 3,951,867	5.0%	\$ 3,842,497	(2.8%)	\$ 3,895,795	1.4%	\$ 3,907,212	0.3%
EXPENDITURES													
Operating Programs:													
Environment	\$ 466,667	\$ 483,735	\$ 775,070	\$ 931,329		\$ 1,064,194		\$ 951,274		\$ 966,681		\$ 982,417	
Growth Management and Transportation	961,044	1,173,488	1,360,783	1,197,824		1,226,548		1,251,643		1,301,050		1,292,870	
Planning Analytics	429,294	483,213	538,966	713,799		719,946		702,271		714,863		717,722	
Regional Sustainability Initiatives	83,187	71,045	128,955	-		-		-		-		-	
Administration and Department Support	473,163	376,084	511,277	555,254		566,473		577,877		589,529		601,438	
	2,413,355	2,587,565	3,315,051	3,398,206	2.5%	3,577,161	5.3%	3,483,065	(2.6%)	3,572,123	2.6%	3,594,447	0.6%
Communications Program	53,645	59,341	80,000	80,000	0.0%	80,000	0.0%	70,000	(12.5%)	70,000	0.0%	70,000	0.0%
Allocation of Centralized Support Costs	236,612	286,416	261,636	285,187	9.0%	294,706	3.3%	289,432	(1.8%)	253,672	(12.4%)	242,765	(4.3%)
TOTAL EXPENDITURES	\$ 2,703,612	\$ 2,933,322	\$ 3,656,687	\$ 3,763,393	2.9%	\$ 3,951,867	5.0%	\$ 3,842,497	(2.8%)	\$ 3,895,795	1.4%	\$ 3,907,212	0.3%

REGIONAL PLANNING

Description of services

Regional Planning is a Metro Vancouver Regional District function established to provide data, policy research, convene on issues of common concern, advocacy, and planning support towards a prosperous, resilient and livable region. The primary responsibility is to develop, administer, implement and monitor *Metro Vancouver 2040: Shaping our Future (Metro 2040)*, the regional growth strategy. There are three programs within the Regional Planning Division: Growth Management and Transportation; Planning Analytics and Environment.

Growth Management and Transportation

Growth Management is primarily responsible for developing, administering, and implementing Metro 2040. There are a number of portfolios within this group including: shaping growth, complete communities; industrial and employment lands; housing affordability and diversity, and integrated land use and transportation planning.

Planning Analytics

Planning Analytics collects and analyzes data for Regional Planning as well as other regional functions including utilities and transportation planning. Primary roles include the provision of population, dwelling unit and employment projections, *Metro 2040* performance monitoring, and the completion of numerous regional inventories.

Environment

This activity supports Metro 2040 environment and climate change policies as well as broader ecological health and environment issues. The group also addresses the agriculture and food systems portfolio.

Strategic directions and high level goals supported

Board Strategic Plan

- Continue to develop and implement effective and adaptive tools and processes for achieving the goals in *Metro 2040*;
- Continue to support the efforts of members in developing complete, livable and resilient communities;
- Guide the development of policies, plans, tools and creative solutions for managing competing demands on land in the region; and
- Strengthen awareness and engagement with the public, members, other orders of government, and key stakeholders on a range of initiatives regarding the role and value of land use planning at the regional scale and the objectives of the regional growth strategy.

Metro Vancouver 2040: Shaping our Future

- Goal 1 - Create a compact urban area
- Goal 2 - Support a sustainable economy
- Goal 3 - Protect the environment and respond to climate change impacts

- Goal 4 - Develop complete communities
- Goal 5 - Support sustainable transportation choices

Performance indicators

Indicator	Historical and/or industry	Current Performance	2020 Performance Objective
Percentage of residential growth occurring within the Urban Containment Boundary (UCB)	Baseline: 97% 2016 review: 98%	98%	98%
Percentage of new dwelling units located within Urban Centres	Target 40% of growth to Urban Centres Baseline: 26% of units located in Urban Centres	39% of growth to Centres 28% of units located in Centres	40%
Number of hectares of land with a Metro 2040 Agricultural Designation	Baseline: 55,313	2018: 55,210	No net loss
Number of hectares of land with a Metro 2040 Industrial Designation	Baseline: 10,195	2018: 10,140	No net loss
Number of hectares of land with a Metro 2040 Mixed Employment Designation	Baseline: 3,415	2018: 3,370	No net loss

2020 key actions

Guidance – Provide a summary of key activities or initiatives for the year. Avoid listing regular ongoing activities e.g. Complete Year-end Financial Statements, that would already be part of the description of services noted above.

Growth Management and Transportation

- Undertake a comprehensive update to Metro 2040 – Phase I Completion - Policy Reviews and beginning to draft policy actions for Metro 2050
- Complete 7 Metro 2040 Policy Reviews: Urban Centres and FTDA's, Industrial and Mixed Employment, Agricultural, Environment, Transportation, and Housing
- Adopt the Regional Industrial Land Strategy
- Regional Industrial Land Strategy Implementation – Exploring Intensification and Defining Trade Enabling Lands
- Complete the 2020 Regional Industrial Land Inventory
- Complete the Equity in Regional Growth Management Study – Phase 2
- Complete the third Frequent Transit Corridor Study – Location TBD
- Participate in Where Matters Phase 2: Performance Based Land Use for Health and Economic Benefits
- Undertake Priority Housing Research including: Access to Homeownership Opportunities, and Housing Agreement Templates
- Metro 2040 Climate Resiliency – Identifying adaptation risks and best practices
- Complete the Transit Oriented Affordable Housing Study – Phase 3
- Update the Housing and Transportation Cost Burden Study

Environment

- Explore Invasive Species' Response to Climate Change
- Complete Urban Forest Best Practices for Tree Replacement, Canopy Cover Targets, Tree Bylaws and Ecosystem Services Assessments
- Explore Regional Connectivity and the Protection of Urban Ecological Areas
- Explore Ecosystem Services on Agricultural Land

Planning Analytics

- Develop a New Land Use Model – Phase I Land Use Component to support updated population, dwelling unit, employment and land use projections
- Update Regional Population, Dwelling Unit, Employment and Land Use Projections for Metro 2050
- Land Utilization Monitoring and Modeling
- Data acquisition and analysis

2020 to 2024 – WHAT'S HAPPENING

Below is a summary of the significant initiatives to be undertaken by Regional Planning over the next 5 years.

Initiative	Description	Theme
2020		
Comprehensive update to Metro 2040	Update <i>Metro 2040</i> , building on its strengths. Being undertaken to consider significant drivers of change, integrate with the update to the Regional Transportation Strategy, and implement policy improvements. Phase I Completion - Policy Reviews and beginning to draft policy actions and update mapping.	Regional Growth
Complete the Regional Industrial Land Strategy	Work led by the Industrial Land Strategy Task Force to develop a strategy to ensure sufficient industrial land to meet the needs of a growing and evolving economy to 2050.	Regional Growth
Develop a New Land Use Model	Phase I - Land Use Component. Being developed to improve population, dwelling unit, employment and land use projections, provide more accurate municipal distribution, and improve the ability to model land use implications of significant infrastructure investments and policy portfolios. Will provide an improved platform for integration with the Regional Travel and Utility modelling.	Regional Growth and Financial Sustainability
Transit Oriented Affordable Housing Study – Phase 3	Intended to assemble the research findings from Phases 1 and 2 and communicate them to practitioners and decision makers via an integrated TOAH calculator, workshops and summit.	Regional Growth
2021		
Develop a New Land Use Model	Phase 2 – Integrate the Demographics Component to support updated population, dwelling unit, employment and land use projections.	Regional Growth and Financial Sustainability
Draft Metro 2050	Have draft of the update to the regional growth strategy completed for comment in Q1 and then for adoption in Q3-4	Regional Growth
Sensitive Ecosystem Inventory	Complete five year update to this critical regional resource.	Environmental Sustainability
2022		
Metro 2050	Complete the update to the regional growth strategy through Board and affected local government adoption.	Regional Growth
Regional Land Use Assessment	Complete a Regional Land Use Assessment as part of the implementation of the regional growth strategy.	Regional Growth
2023		

Update Census data purchases of custom geographies and prepare Bulletin Series	Metro Vancouver is a trusted data and analytics resource for member jurisdictions and provides updated data and reports as available post Census.	Regional Growth
2024		
Policy Research	Continued policy research to support decision makers and practitioners in Regional Planning portfolios including: shaping growth, housing, transportation, complete communities, industrial and employment lands, agriculture, environment, and climate change. Areas of research respond to identified Committee and Board priorities.	Regional Growth Environmental Sustainability

METRO VANCOUVER DISTRICTS
2020-2024 PROJECTED RESERVES - REGIONAL PLANNING

OPERATING RESERVES

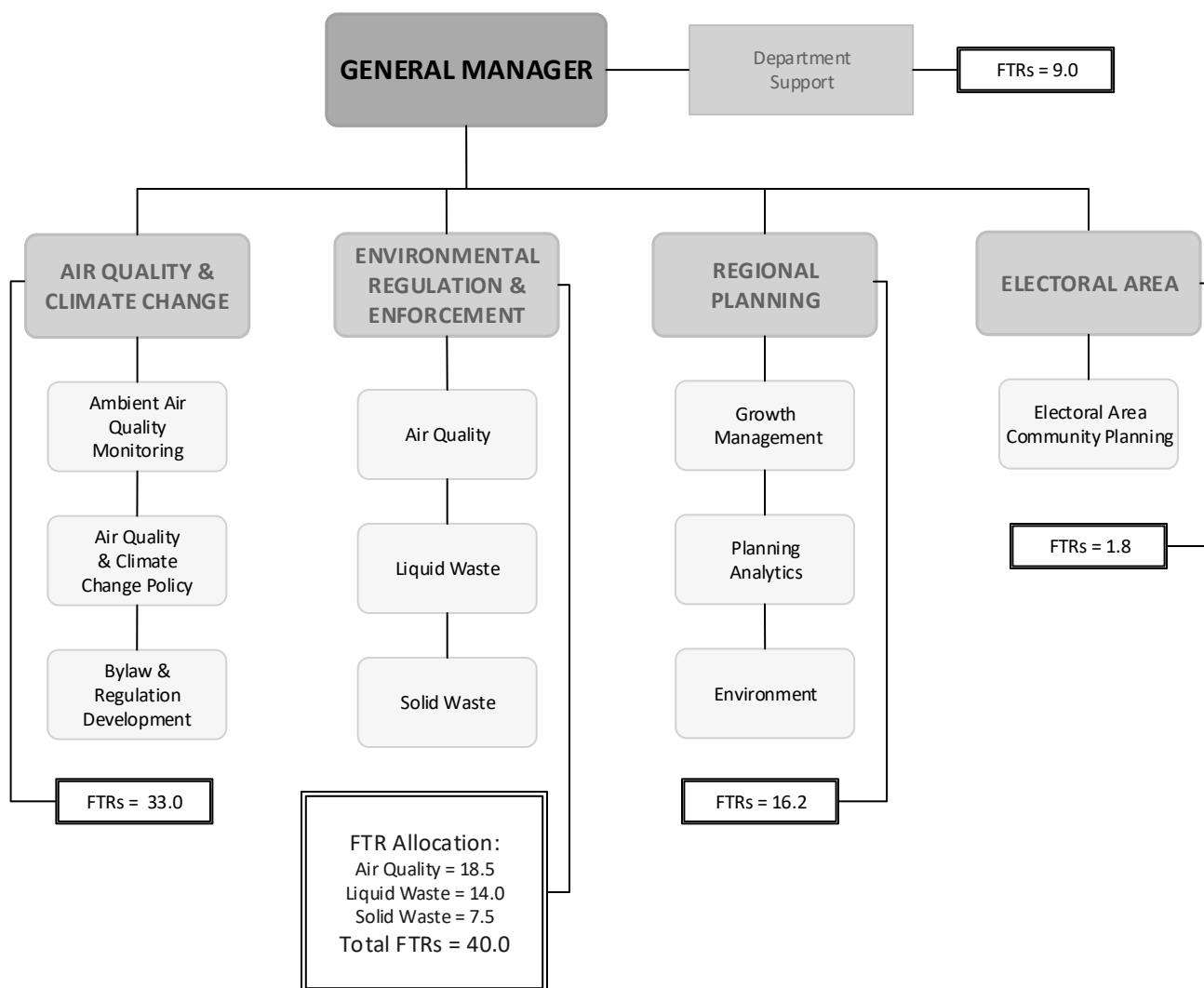
	2019 ENDING BALANCE	2020 OPENING BALANCE	CONTRIBUTION	WITHDRAWALS	INTEREST	2020 ENDING BALANCE	2021 ENDING BALANCE	2022 ENDING BALANCE	2023 ENDING BALANCE	2024 ENDING BALANCE
Regional Planning	\$ 158,663	\$ 158,663	\$ 3,845	\$ -	\$ 3,244	\$ 165,753	\$ 169,910	\$ 178,858	\$ 174,153	\$ 178,606

DISCRETIONARY RESERVES

	2019 ENDING BALANCE	2020 OPENING BALANCE	CONTRIBUTION	WITHDRAWALS	INTEREST	2020 ENDING BALANCE	2021 ENDING BALANCE	2022 ENDING BALANCE	2023 ENDING BALANCE	2024 ENDING BALANCE
Regional Planning										
Regional Planning General Reserve	\$ 3,444,709	\$ 3,444,709	\$ -	\$ (415,000)	\$ 64,744	\$ 3,094,454	\$ 2,729,113	\$ 2,682,695	\$ 2,655,549	\$ 2,627,860



2019



To: Regional Planning Committee

From: Sean Tynan, Acting Senior Planner, Regional Planning

Date: September 16, 2019 Meeting Date: October 11, 2019

Subject: **Amending *Metro Vancouver 2040: Shaping our Future* to Align with the IPCC Special Report on Global Warming of 1.5°C**

RECOMMENDATION

That the MVRD Board:

- a) initiate a Type 3 minor amendment to *Metro Vancouver 2040: Shaping our Future* to reflect a commitment to a carbon neutral region by 2050, and an interim target of reducing greenhouse gas emissions by 45% from 2010 levels by 2030;
 - b) give first, second, and third readings to “Metro Vancouver Regional District Regional Growth Strategy Amendment Bylaw No. 1285, 2019”; and
 - c) direct staff to notify affected local governments and agencies as per Section 6.4.2 of *Metro Vancouver 2040: Shaping our Future*.
-

PURPOSE

This report recommends a Type 3 minor amendment to *Metro Vancouver 2040: Shaping our Future* (*Metro 2040*), the regional growth strategy, for consideration by the Regional Planning Committee and MVRD Board.

BACKGROUND

Per Subsection 429 (d) of the *Local Government Act*, *Metro 2040* includes the region’s greenhouse gas emissions reduction target. The current reduction target in *Metro 2040* is 33% by 2020 and 80% by 2050 as compared to 2007 levels.

Climate 2050 is Metro Vancouver’s overarching long-term strategy guiding the region’s policies and collective actions to transition to a carbon neutral and climate resilient region over the next 30 years. As part of *Climate 2050*, at its meeting on July 26, 2019, the MVRD Board adopted the following resolution:

That the MVRD Board:

- a) *endorse the proposed amendments to the Climate 2050 Strategic Framework to reflect a commitment to a carbon neutral region by 2050, and an interim target of reducing greenhouse gas emissions by 45% from 2010 levels by 2030;*
- b) *direct staff to bring forward a proposed amendment to Metro 2040, the regional growth strategy, to the Metro Vancouver Board for consideration, to incorporate revised greenhouse gas reduction targets (including interim targets).*

In addition, the Metro Vancouver Board Strategic Plan (2019-2022) direction for Regional Planning contains the following statement on climate change:

- 1.2 *Undertake a comprehensive update to Metro 2040 to prioritize climate change, align with the update to the Regional Transportation Strategy, and extend the timeframe to 2050.*

This report responds to the direction of the MVRD Board and the Metro Vancouver Board Strategic Plan by bringing forward a proposed amendment to *Metro 2040* to update the region's greenhouse gas emissions reduction target to align with the October 2018 Intergovernmental Panel on Climate Change Special Report on Global Warming of 1.5 °C above pre-industrial levels.

METRO 2040 GREENHOUSE GAS EMISSIONS REDUCTION TARGETS

Current Greenhouse Gas Emissions Reduction Targets and Policies in Metro 2040

Metro 2040 is the region's collective vision for managing growth in the region. Under Section 3.3.1 of *Metro 2040*, Metro Vancouver commits to:

Implement the strategies and actions of the Regional Growth Strategy which contribute to regional targets to reduce greenhouse gas emissions by 33 percent below 2007 levels by 2020 and 80 percent below 2007 levels by 2050...

Under Section 3.3.4, the role of municipalities is to:

Adopt Regional Context Statements which:

- a) identify how municipalities will use their land development and transportation strategies to meet their greenhouse gas reduction targets and consider how these targets will contribute to the regional targets;*
- b) identify policies and/or programs that reduce energy consumption and greenhouse gas emissions, and improve air quality from land use and transportation infrastructure, such as:*
 - existing building retrofits and construction of new buildings to green performance guidelines or standards, district energy systems, and energy recovery and renewable energy generation technologies, such as solar panels and geoexchange systems, and electric vehicle charging infrastructure;*
 - community design and facility provision that encourages transit, cycling and walking (e.g. direct and safe pedestrian and cycling linkages to the transit system);*
- c) focus infrastructure and amenity investments in Urban Centres and Frequent Transit Development Areas, and at appropriate locations along TransLink's Frequent Transit Network;*

In addition, there are other actions to reduce greenhouse gas emissions included in other sections of *Metro 2040*.

Proposed Amendment to *Metro 2040* and Implications for Member Jurisdictions

The proposed change would replace the existing greenhouse gas emission reduction target in *Metro 2040* in accordance with the table below.

Current Greenhouse Gas Emissions Reduction Target in <i>Metro 2040</i>	Proposed Greenhouse Gas Emissions Reduction Target (Reflected in Climate 2050 Strategic Framework and aligned with the IPCC Special Report)
<ul style="list-style-type: none">• 33% below 2007 levels by 2020• 80% below 2007 levels by 2050	<ul style="list-style-type: none">• 45% reduction from 2010 levels by 2030• Carbon neutral by 2050

The proposed amendment would not require a need for immediate updates to regional context statements. However, municipalities that are currently developing or updating their respective Official Community Plans, Community Energy and Emissions Plans or other strategic planning documents should consider aligning their greenhouse gas emissions reduction targets and actions with the regional targets. The next time regional context statements are developed or updated, each member jurisdiction will need to identify how the respective Official Community Plans are consistent with, or are working towards, the greenhouse gas emissions reduction targets in *Metro 2040*.

Section 6.3.4 of *Metro 2040* allows for some amendments to the regional growth strategy to be undertaken through a Type 3 Minor Amendment. A Type 3 amendment requires the adoption of an amendment bylaw passed by an affirmative 50%+1 weighted vote of the MVRD Board, and does not require a public hearing. Once initiated, affected local governments would receive written notice and be provided a minimum of 30 days to respond. Type 3 minor amendments have been used in the past as a means to amend *Metro 2040*. The proposed amendment bylaw is attached.

The proposed amendment was presented on September 20, 2019, to the Regional Planning Advisory Committee for comment. No comments were received.

ALTERNATIVES

1. That the MVRD Board:
 - a) initiate a Type 3 minor amendment to *Metro Vancouver 2040: Shaping our Future* to reflect a commitment to a carbon neutral region by 2050, and an interim target of reducing greenhouse gas emissions by 45% from 2010 levels by 2030;
 - b) give first, second, and third readings to "Metro Vancouver Regional District Regional Growth Strategy Amendment Bylaw No. 1285, 2019"; and
 - c) direct staff to notify affected local governments and agencies as per Section 6.4.2 of *Metro Vancouver 2040: Shaping our Future*.
2. That the MVRD Board receive for information the report dated September 16, 2019, titled "Amending *Metro Vancouver 2040: Shaping our Future* to Align with the IPCC Special Report on Global Warming of 1.5°C" and direct staff to explore updating the regional growth strategy greenhouse gas emission reduction targets as part of the comprehensive update to *Metro 2040*.

FINANCIAL IMPLICATIONS

If the MVRD Board chooses Alternative 1, the proposed amendment bylaw will be initiated and given first, second, and third readings, and staff will notify affected local governments and agencies to provide an opportunity to offer comment. The proposed amendment bylaw would then be brought back to the MVRD Board with any comments from the notification period for consideration of final reading. The notification period will be a minimum of 30 days and the amendment notice will be posted on the Metro Vancouver website.

If the MVRD Board chooses Alternative 2, the process for updating the greenhouse gas emission reduction target in *Metro 2040* will not be initiated at this time. *Metro 2040* would not be aligned with the recent IPCC Special Report and will be inconsistent with MVRD Board direction to update the *Climate 2050 Strategic Framework*. Staff would then consider the updated greenhouse gas reduction target as part of the development of *Metro 2050*. This would delay updating the target until mid-2022.

SUMMARY / CONCLUSION

This report brings forward a recommendation to update the greenhouse gas emission reduction targets contained in *Metro 2040* to pursue a carbon neutral region by 2050, with an interim target of 45% reduction by 2030. Including this target in *Metro 2040* at this time is consistent with recent MVRD Board direction as well as the 2019-2022 Board Strategic Plan and the *Climate 2050 Strategic Framework*. Alternatively, with the update to *Metro 2040* underway, updating the greenhouse gas emissions target in the regional growth strategy can also be implemented as part of the development of *Metro 2050*, the updated growth strategy, which is anticipated to be finalized and adopted in mid-2022.

Metro Vancouver can set the path towards carbon neutrality for the region, but it will not be able to achieve the targets on its own. To obtain the necessary reductions in regional emissions, significant cooperation, collaboration, and commitment will be required from member jurisdictions, other orders of government, partner organizations, stakeholders, and the public. The new greenhouse gas emissions reduction target would need to be considered by member jurisdictions the next time their respective regional context statements are updated. In the interim, municipalities currently updating their Official Community Plans, Community Energy and Emissions Plans or other strategic planning documents may wish to consider aligning their greenhouse gas emissions reduction targets with Metro Vancouver and the IPCC Special Report. Staff recommend Alternative 1.

Attachment

Metro Vancouver Regional District Regional Growth Strategy Amendment Bylaw No. 1285, 2019

References

1. [IPCC Special Report on Global Warming of 1.5°C](#)
2. [Aligning Climate 2050 with the IPCC Special Report on Global Warming of 1.5°C](#)

**METRO VANCOUVER REGIONAL DISTRICT
BYLAW NO. 1285, 2019**

A Bylaw to Amend "Greater Vancouver Regional District Regional Growth Strategy
Bylaw Number 1136, 2010"

WHEREAS:

- A. Metro Vancouver Regional District's board of directors (the "Board") adopted the "Greater Vancouver Regional District Regional Growth Strategy Bylaw Number 1136, 2010" on July 29, 2011 (the "Regional Growth Strategy");
- B. The Board wishes to revise the greenhouse gas emissions reduction targets included in the Regional Growth Strategy;
- C. In accordance with Regional Growth Strategy Section 6.3.4(j), all amendments to the Regional Growth Strategy that are not identified in Sections 6.3.1 or 6.3.3 are considered Type 3 minor amendments; and
- D. Metro Vancouver Regional District wishes to amend "Greater Vancouver Regional District Regional Growth Strategy Bylaw Number 1136, 2010".

NOW THEREFORE, the Board of Metro Vancouver Regional District enacts as follows:

- 1. "Greater Vancouver Regional District Regional Growth Strategy Bylaw Number 1136, 2010" is hereby amended as follows:

Regional Growth Strategy Section 3.3.1 is deleted and the following is substituted in its place:

3.3.1 Implement the strategies and actions of the Regional Growth Strategy that contribute to regional targets to reduce greenhouse gas emissions by 45 percent below 2010 levels by 2030 and to achieve a carbon neutral region by 2050. Figure 3 identifies examples of strategies and actions contained in the Regional Growth Strategy to address climate change.

- 2. The official citation of this bylaw is "Metro Vancouver Regional District Regional Growth Strategy Amendment Bylaw No. 1285, 2019". This bylaw may be cited as "Regional Growth Strategy Amendment Bylaw No. 1285, 2019".

Read a first time this _____ day of _____, _____

Read a second time this _____ day of _____, _____

Read a third time this _____ day of _____, _____

Passed and finally adopted this _____ day of _____, _____

Sav Dhaliwal, Chair

Chris Plagnol, Corporate Officer

To: Regional Planning Committee

From: Josephine Clark, Environment Planner, Regional Planning

Date: September 21, 2019

Meeting Date: October 11, 2019

Subject: **Ecological Health – Tree Canopy Cover and Impervious Surfaces**

RECOMMENDATION

That the Regional Planning Committee receive for information the report dated September 21, 2019, titled “Ecological Health – Tree Canopy Cover and Impervious Surfaces”.

The attached report titled “Ecological Health – Tree Canopy Cover and Impervious Surfaces” was considered by the Climate Action Committee at its meeting of September 20, 2019, and is presented to the Regional Planning Committee for information.

Attachment:

“Ecological Health – Tree Canopy Cover and Impervious Surfaces”, dated August 23, 2019

32648612

To: Climate Action Committee

From: Josephine Clark, Regional Planner
Planning and Environment Department

Date: August 23, 2019

Meeting Date: September 20, 2019

Subject: **Ecological Health – Tree Canopy Cover and Impervious Surfaces**

RECOMMENDATION

That the Climate Action Committee receive for information the report titled “Ecological Health – Tree Canopy Cover and Impervious Surfaces”, dated August 23, 2019.

PURPOSE

To provide the Climate Action Committee with reporting and analysis of the newly developed regional ecological health indicators – tree canopy cover and impervious surfaces.

BACKGROUND

The Climate Action Committee’s 2019 Work Plan includes “Ecological Health – tree canopy cover and landscape imperviousness monitoring” in the third quarter.

The Ecological Health Framework was adopted by the MVRD Board in October 2018 and proposes a series of regional ecological health indicators that together, when repeated over time, provide a ‘state of the environment’ assessment for the Metro Vancouver region. This report provides the results of analysis for two key regional ecological health indicators – tree canopy cover and impervious surfaces.

REGIONAL TREE CANOPY COVER AND IMPERVIOUS SURFACES REPORT

Tree canopy cover refers to the leaves and branches that form a visible layer if one is viewing the region from the air, and the extent to which they cover the ground. Impervious surfaces, such as paved roads and buildings, are surfaces that allow very little or no water to pass through them. In 2019, staff undertook an analysis of tree canopy cover and impervious surfaces in Metro Vancouver. Findings are provided in the attached report *Regional Tree Canopy Cover and Impervious Surfaces*.

Tree canopy cover and impervious surfaces were both measured using the Metro Vancouver high-resolution land cover classification, which was created in 2017. In addition to providing measures for each indicator at multiple scales, the report explores the relationship between the indicators and land use type and residential density, and future projections of tree canopy cover within the Urban Containment Boundary. A number of recommendations are provided relating to maintaining tree canopy cover and reducing imperviousness.

Why Measure Tree Canopy Cover and Impervious Surfaces?

Trees provide a range of important ecosystem services to people including shading, carbon storage, and stormwater management. Measuring tree canopy cover is a relatively simple way to determine the extent of the urban forest and the magnitude of services it provides. Impervious surfaces are associated with many of the negative effects of urbanization such as increased temperatures (the 'Urban Heat Island' effect) and flood risk, along with impacts to stream health through disrupted hydrological cycles and poor water quality. Measuring the level of landscape imperviousness gives an indication of the extents of these negative effects.

Tree canopy cover and imperviousness are ecological health indicators, but because of their connection to factors such as urban temperatures and stormwater management, they are also indicators of how resilient communities may be to climate-related impacts. Looking at whether these indicators are distributed equitably across cities or regions helps us to identify communities or populations more vulnerable to risks and receiving fewer ecosystem service benefits.

Levels and Trends of Tree Canopy Cover and Impervious Surfaces in the Region

In this region, tree canopy cover measures 54% for the entire Metro Vancouver land base, and 32% for the portion of the land within the Urban Containment Boundary. It should be noted that these measurements are averaged, and there is great variation among neighbourhoods and land use types. Impervious surfaces total 20% of Metro Vancouver's land base and 50% of the land base within the Urban Containment Boundary. Again, there is much variation in how impervious surfaces are distributed.

Perhaps surprisingly, high density housing (e.g. condos and towers) has accommodated increasingly more trees in recent decades, with a corresponding decrease in impervious surfaces. These trends seem to have leveled off in recent years, and it is uncertain what will happen in the future. Lower density housing (especially single-family detached housing) appears to have shifted from a housing model that accommodated many trees to one that accommodates increasingly fewer trees and more impervious surface due to expanding home sizes and lot-splitting. These trends are likely to continue into the future.

Projected growth in the region over the next 20-30 years is expected to impact tree canopy cover within the Urban Containment Boundary as lands planned for future urban growth are developed, and single-family detached housing stock is redeveloped. Tree canopy cover in the Urban Containment Boundary is projected to decrease from 32% to 28% from these sources of loss.

The report presents benchmark data analysis, and comparable historic data is not available to allow the estimation of change. However, a review of other data sources (including member jurisdiction tree canopy assessments) suggest tree canopy cover levels are in decline and levels of impervious surfaces are increasing in urbanizing watersheds. In the coming years, measurement of tree canopy cover and impervious surfaces will be repeated with updated land cover data to enable tracking of change over time and identification of trends.

Offsetting Losses through Tree Planting

Municipalities, including several Metro Vancouver member jurisdictions, often use tree planting programs as a way to maintain or expand their canopy, and actions such as these could help to offset anticipated future losses. To offset the projected decline in Urban Containment Boundary tree canopy cover from 32% to 28% would require 1,100 to 3,000 hectares of lands within the Urban Containment Boundary to be dedicated to tree planting.

Analysis indicates that about 30,000 hectares of land within the Urban Containment Boundary is potentially available for tree planting. Site-level analysis would be required to determine what area is actually available, but it does suggest that the 3,000 hectares required to offset projected losses is attainable. Potential planting availability was calculated using the 'Potential Planting Area' dataset which is detailed in Appendix 2 of the attached report and is available to member jurisdictions to assist with urban forest planning.

NEXT STEPS

The attached *Regional Tree Canopy Cover and Impervious Surfaces* report will be shared with member jurisdiction staff and staff advisory committees, such as the Regional Planning Advisory Committee – Environment Sub-Committee. In addition, staff will provide support for users of Metro Vancouver's Potential Planting Area dataset, which can be used to help members develop planting plans and targets. Metro Vancouver, member jurisdictions and other land owners and managers all have a role to play in maintaining tree canopy cover and reducing imperviousness. The report also provides a set of high level recommendations for consideration to support improved tree canopy cover and limiting impervious surfaces.

As noted earlier, because the attached report presents benchmark data analysis, in the coming years, measurement of tree canopy cover and impervious surfaces will be repeated with updated land cover data to enable tracking of change over time and identification of trends. Once complete, updated levels and trends in tree canopy cover and impervious surfaces will be presented to the Climate Action Committee.

In addition, through the 2020 budget process, a project is being proposed to: develop best practices to support urban forest managers, provide tree ratio guidance, recommend tree canopy cover targets, highlight tree bylaw and tree management best practices. Staff will report out to the Climate Action Committee subject to budget approval.

ALTERNATIVES

This is an information report. No alternatives are presented.

FINANCIAL IMPLICATIONS

Work associated with measuring these indicators was completed by staff as part of the Regional Planning annual work program.

SUMMARY / CONCLUSION

Tree canopy cover and landscape imperviousness are measures of the region's ecological health and have been analyzed in the recently completed *Regional Tree Canopy Cover and Impervious Surfaces* report. Tree canopy cover refers to the leaves and branches that form a visible layer if one is viewing the region from the air, and the extent to which they cover the ground. Impervious surfaces, such as paved roads and buildings, are surfaces that allow very little or no water to pass through them.

In the Metro Vancouver region, tree canopy cover measures 54% for the entire Metro Vancouver land base, and 32% for the portion of the land within the Urban Containment Boundary, with great variation among neighbourhoods and land use types. Impervious surfaces total 20% regionally and 50% of the land base within the Urban Containment Boundary.

High density housing development has accommodated increasingly more trees in recent decades, with a corresponding decrease in impervious surfaces. On the other hand, lower density housing appears to have shifted from a housing model that accommodated many trees to one that accommodates increasingly fewer trees and more impervious surface due to expanding home sizes and lot-splitting.

Overall, the report shows that regional tree canopy cover is in decline and impervious surfaces are most likely increasing as parts of the region urbanize. There are opportunities to turn these trends around, and this report includes a number of recommendations to help do so, including continued monitoring to inform actions, adopting and enforcing tree protection bylaws, and implementing green infrastructure approaches.

Attachment

Regional Tree Canopy Cover and Impervious Surfaces

32360338

August 2019

Regional Tree Canopy Cover and Impervious Surfaces

Analysis of Tree Canopy Cover and Impervious Surfaces in Metro



Prepared by:
Leonardo Nicoletti
Josephine Clark



metrovancouver
SERVICES AND SOLUTIONS FOR A LIVABLE REGION

Contents

Executive Summary	4
Background	6
Key Terms	6
Data and Methodology	6
Analysis Area	6
Section 1 – Tree Canopy Cover	8
Why Measure Tree Canopy Cover?	8
Tree Canopy Cover Levels – General Results	9
Trends in % Tree Canopy Cover	11
% Tree Canopy Cover by Member Jurisdiction	12
Differences between Regional and Member Jurisdiction Tree Canopy Cover Estimates	13
How Much Tree Canopy Cover is Enough?	14
% Tree Canopy Cover Distribution within the Urban Containment Boundary	15
% Tree Canopy Cover within the Urban Containment Boundary: Land Use Patterns	16
Section 2 – Impervious Surface	17
Why Measure Levels of Impervious Surface?	17
Impervious Surface Levels – General Results	17
General Trends in % Impervious Surface	18
% Impervious Surface by Member Jurisdiction	19
How Much Impervious Surface is Too Much?	20
% Impervious Surface Distribution within the Urban Containment Boundary	21
% Impervious Surface within the Urban Containment Boundary: Land Use Patterns	21
Section 3 - The Relationship between Tree Canopy Cover, Impervious Surfaces, and Residential Density - Temporal Analysis and Future Projections	23
Average % Tree Canopy Cover by Residential Density: Temporal Trends	23
Average % Impervious Surfaces by Residential Density: Temporal Trends	24
Observed Relationship Between Tree Canopy Cover and Impervious Surfaces	25
Trend Analysis – Historical Context	26
Section 4 – Future Projections of Tree Canopy Cover within the Urban Containment Boundary	27
‘Offsetting Losses through Tree Planting	28
Conclusion	29
Recommendations	30

Appendix 1: Additional tables for % Tree Canopy Cover, % Impervious Surface and % Potential Planting Area	31
Appendix 2: % Potential Planting Area	38

Executive Summary

Tree canopy cover refers to the leaves and branches that form a visible layer if one is viewing the region from the air, and the extent to which they cover the ground. Impervious surfaces, such as paved roads and buildings, are surfaces that allow very little or no water to pass through them.

Trees provide a range of important ecosystem services to people including shading, carbon storage, and stormwater management. Measuring tree canopy cover is a relatively simple way to determine the extent of the urban forest and the magnitude of services it provides. Impervious surfaces are associated with many of the negative effects of urbanization such as increased temperatures (the 'Urban Heat Island' effect) and flood risk, along with impacts to stream health through disrupted hydrological cycles and poor water quality. Measuring the level of landscape imperviousness gives an indication of the extents of these negative effects. Tree canopy cover and imperviousness are ecological health indicators but because of their connection to factors such as urban temperatures and stormwater management, they are also indicators of how resilient communities may be to climate-related impacts. Looking at whether these indicators are distributed equitably across cities or regions helps us to identify communities or populations more vulnerable to risks and receiving fewer ecosystem service benefits.

In this region, tree canopy cover measures 54% for the entire Metro Vancouver land base, and 32% for the portion of that land within the Urban Containment Boundary (UCB). These measurements are averaged, and there is great variation among neighbourhoods and land use types. Impervious surfaces total 20% of Metro Vancouver's land base and 50% of the UCB. Again, there is much variation in how impervious surfaces are distributed.

Against conventional wisdom, high density housing (e.g. condos and towers) has accommodated increasingly more trees in recent decades, with a corresponding decrease in impervious surfaces. These trends seem to have leveled off in recent years and it is uncertain what will happen in the future. Low density housing (especially single-family detached) appears to have shifted from a housing model that accommodated many trees to one that accommodates increasingly fewer trees and more impervious surface due to expanding home sizes and lot-splitting. These trends are likely to continue into the future.

Projected growth in the region over the next 20-30 years is expected to impact tree canopy cover within the UCB as lands planned for future urban growth are developed, and single-family detached housing stock is redeveloped. Tree canopy cover in the UCB is projected to decrease from 32% to 28% from these sources of loss.

Potential exists to 'offset' losses or increase canopy through tree planting in the UCB. The Metro Vancouver Potential Planting Area dataset summarizes how much area is potentially available for tree planting and can be used by member jurisdictions to assist with planning of the urban forest.

The report includes data and analysis for the entire Metro Vancouver region and was created using 5m resolution land cover data. This is a benchmark data analysis initiative and comparable historic data is not available to allow the estimation of change. However, several member jurisdictions of Metro Vancouver have measured tree canopy locally over time and report losses. In addition, Metro Vancouver's own Sensitive Ecosystem Inventory indicates a loss of about 240 hectares of young and mature forests between 2009 and 2014 in the UCB, and almost 1,000 hectares regionally. Fewer data

sources are available to help identify potential regional trends in impervious surfaces but it is likely increasing in urbanizing watersheds.

Measurement of tree canopy cover and impervious surfaces will be repeated with updated land cover data to enable tracking of change over time and identification of trends.

In conclusion, the regional tree canopy cover is in decline, measurably. Impervious surfaces are most likely increasing as parts of the region urbanize. There are opportunities to turn these trends around, and this report includes a number of recommendations to help do so, including continued monitoring to inform actions, adopting and enforcing tree protection bylaws, and implementing green infrastructure approaches.

Background

Key Terms

High Density Housing Stock: Apartment oriented parcels of type “Low-Rise Apartment” and “Mid/High-Rise Apartment”.

Impervious Surfaces: Surfaces that allow very little to no water to pass through them. Paved roads and asphalt are examples of impervious surfaces.

Land Cover: Biophysical features on the earth’s surface mapped using multispectral satellite imagery and LiDAR (where available). Classes include coniferous tree, deciduous tree, grass/herb, buildings, paved, and water.

Land Use: The way in which land is used by humans for specific purposes. Examples of land use include residential land use and industrial land use.

Low Density Housing Stock: Ground oriented parcels of type “Single-family detached”, “Multi Detached”, and “Townhouse”.

Metrics: Statistical information summarized categorically (e.g. zoning class) or spatially (e.g. Census blocks).

Potential Planting Area: Land that could theoretically be used to increase Tree Canopy Cover. % Potential Planting Area includes areas currently occupied by non-tree vegetation (grass, shrubs etc.), soil patches, barren surfaces, pavement that does not fall on roads, and that under the right circumstances, could be modified to increase tree canopy cover.

Tree Canopy Cover: The area occupied by all deciduous and coniferous tree crowns (i.e. area occupied by leaves as viewed from the top) in an urban area, as measured from aboveground.

Urban Containment Boundary (UCB): Identified by *Metro 2040* as the area where 98% of future urban growth is to be contained.

Data and Methodology

The 2014 Metro Vancouver Land Cover Classification dataset was used to map and measure tree canopy cover and impervious surface across the Metro Vancouver region. The Land Cover is a 5m resolution GIS mapping dataset and was created using RapidEye satellite imagery and where available, LiDAR data.

The Metro Vancouver Generalized Land Use layer was used in order to assess tree canopy cover and impervious surface in relation to different land use types. The 2016 Generalized Land Use is a non-official ‘regional reference map’ that depicts land activities existing across Metro Vancouver.

Analysis Area

The Urban Containment Boundary, or UCB, is the area within Metro Vancouver where urban development and future urban growth are focused (see Figure 1). The UCB is used as the primary analysis area in this report because it is where most people in the region live and work. It is therefore an

important area for the provision of ecosystem services by trees, and where most of the negative impacts from impervious surfaces will be experienced. It is also where losses in tree canopy cover and increases in impervious surfaces are most likely to occur through development and redevelopment.



Figure 1: Metro Vancouver's Urban Containment Boundary

In this report, tree canopy cover and imperviousness are reported as a percentage of an area, for example, % Tree Canopy Cover by city block, or % Impervious Surface of the UCB.

Section 1 – Tree Canopy Cover

Why Measure Tree Canopy Cover?

Trees provide a range of ‘ecosystem services’ – the benefits people obtain from ecosystems – including shading and cooling (which helps to mitigate the Urban Heat Island effect¹), carbon storage, stormwater management, and wildlife habitat. There is also a growing body of evidence demonstrating that trees and other greenspace have significant human health and well-being benefits through disease prevention and promotion of health². Measuring tree canopy cover is a relatively simple way to determine the extent of the urban forest and the magnitude of services it provides³. Healthy forests in both urban and natural areas are an important component of regional livability and resilience to climate change.

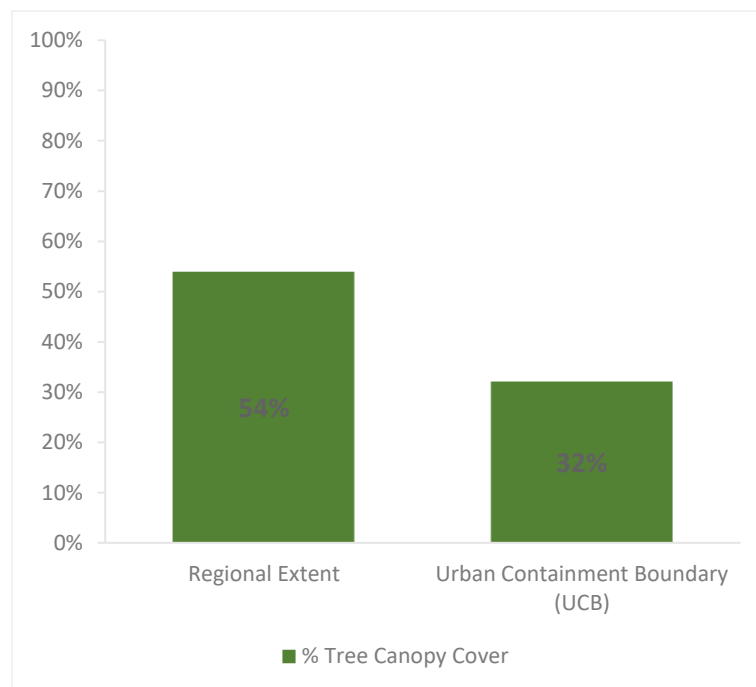


Figure 2: % Tree Canopy Cover for the Metro Vancouver region and within the Urban Containment Boundary.

¹ The term "Urban Heat Island" describes built up areas that are hotter than nearby rural areas

² Van den Bosch, M. & Ode Sang, A. (2017). Urban natural environments as nature-based solutions for improved public health - A systematic review of reviews. *Environmental Research*. 158: 373-384

³ [Leff \(2016\) The Sustainable Urban Forest – A Step-by-Step Approach](#)

Tree Canopy Cover Levels – General Results

The analysis found that 160,400 ha of Metro Vancouver, and 29,000 ha of lands within the UCB are covered by tree canopy. This represents 54% of Metro Vancouver's land base and 32% of lands within the UCB (Figure 2).

Figure 3 shows % Tree Canopy Cover summarized by city block⁴ within the UCB and illustrates the distribution of tree canopy cover within the UCB. Grey indicates very low tree canopy cover (less than 5%) and dark green indicates very high tree canopy cover (more than 60%). Concentrated areas of low tree canopy cover generally correspond to dense urban areas and industrial lands. Areas of high tree canopy cover within the UCB tend to be parks and currently undeveloped areas that are slated to accommodate planned future urban growth.

Maps of the spatial distribution of tree canopy cover (such as Figure 3) can be used by local governments in urban forest planning including determining priority planting locations and identifying underserved communities.

⁴ A dissemination block (DB) is an area "equivalent to a city block" bounded on all sides by roads and/or boundaries of standard geographic areas. The dissemination block is the smallest geographic area for which population and dwelling counts are disseminated. Dissemination blocks cover all the territory of Canada (Statistics Canada. (2018). [Dissemination Block](#). *Dictionary, Census of Population, 2016*.).

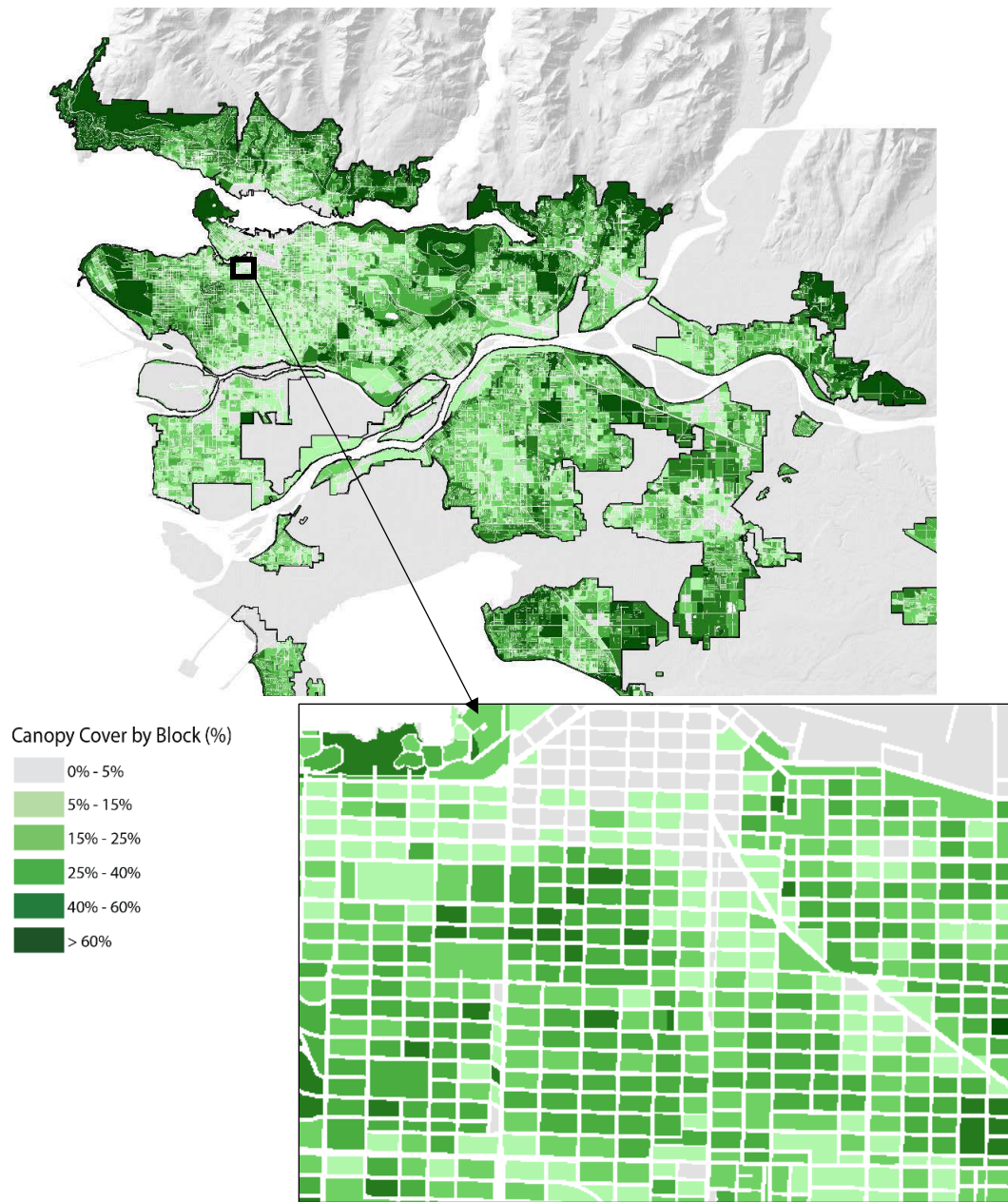


Figure 3: % Tree Canopy Cover summarized by city block within the Urban Containment Boundary.

Trends in % Tree Canopy Cover

It is not yet possible to assess trends in regional tree canopy cover because comparable historical data is unavailable. The regional Land Cover Classification dataset used to measure tree canopy cover will be updated in 2021 and at that point, regional trends will be assessed and reported.

However, other sources of information are available that provide an indication of how the region's tree canopy has changed over time. The Metro Vancouver Sensitive Ecosystem Inventory reported losses of 240 ha of young and mature forests between 2009 and 2014 within the Urban Containment Boundary (UCB) and almost 1,000 ha for the region. In addition, several member jurisdictions have measured their tree canopy cover over time and all have reported losses (Figure 4).

Available data therefore indicates that regional canopy cover is declining but the magnitude of this decline is not clear.

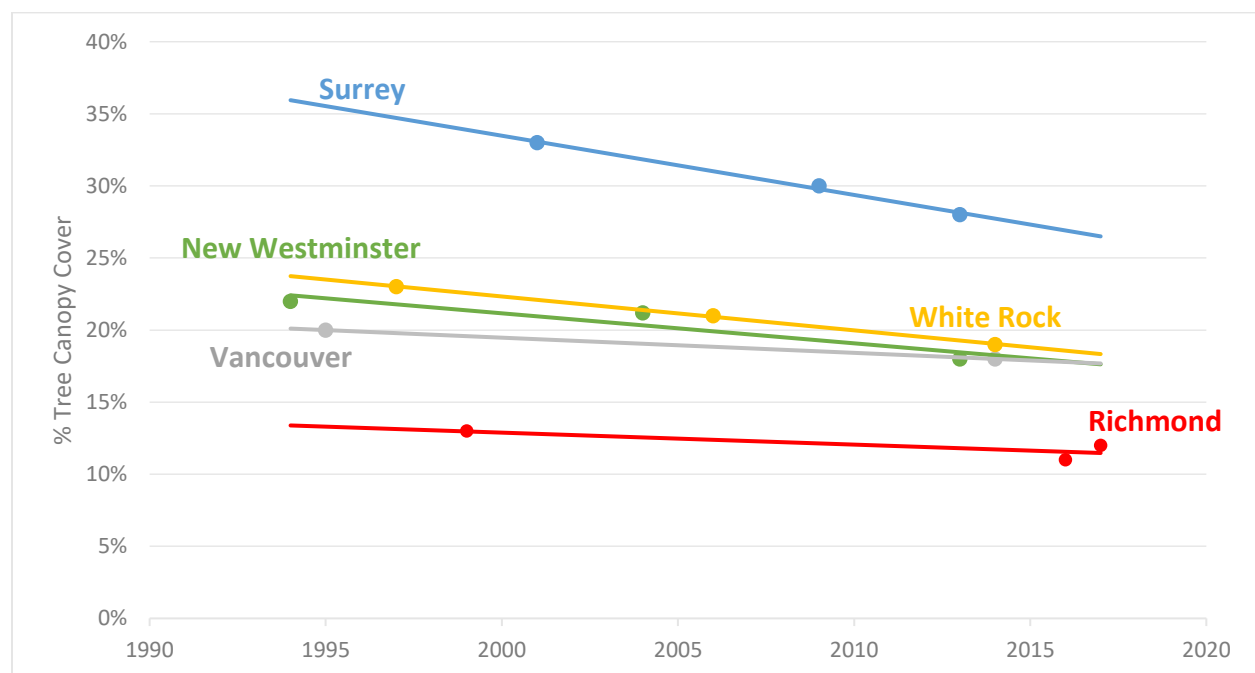


Figure 4: Reported change in % Tree Canopy Cover in Surrey⁵, New Westminster⁶, Vancouver⁷, White Rock⁸, and Richmond⁹

⁵ [City of Surrey Open Data website](#) (visited August 2019)

⁶ [City of New Westminster Urban Forest Management Strategy](#)

⁷ [Vancouver Board of Parks and Recreation, Urban Forest Strategy, 2018 Update](#)

⁸ [City of White Rock Urban Forest Management Plan Workshop, 2015](#)

⁹ Email communication with City of Richmond (A. Kurnicki), 2019

% Tree Canopy Cover by Member Jurisdiction

Figure 5 shows % Tree Canopy Cover within the UCB for each member jurisdiction in 2014. Overall, nine member jurisdictions meet or exceed the UCB average of 32% tree canopy cover for lands within their boundaries and inside the UCB.

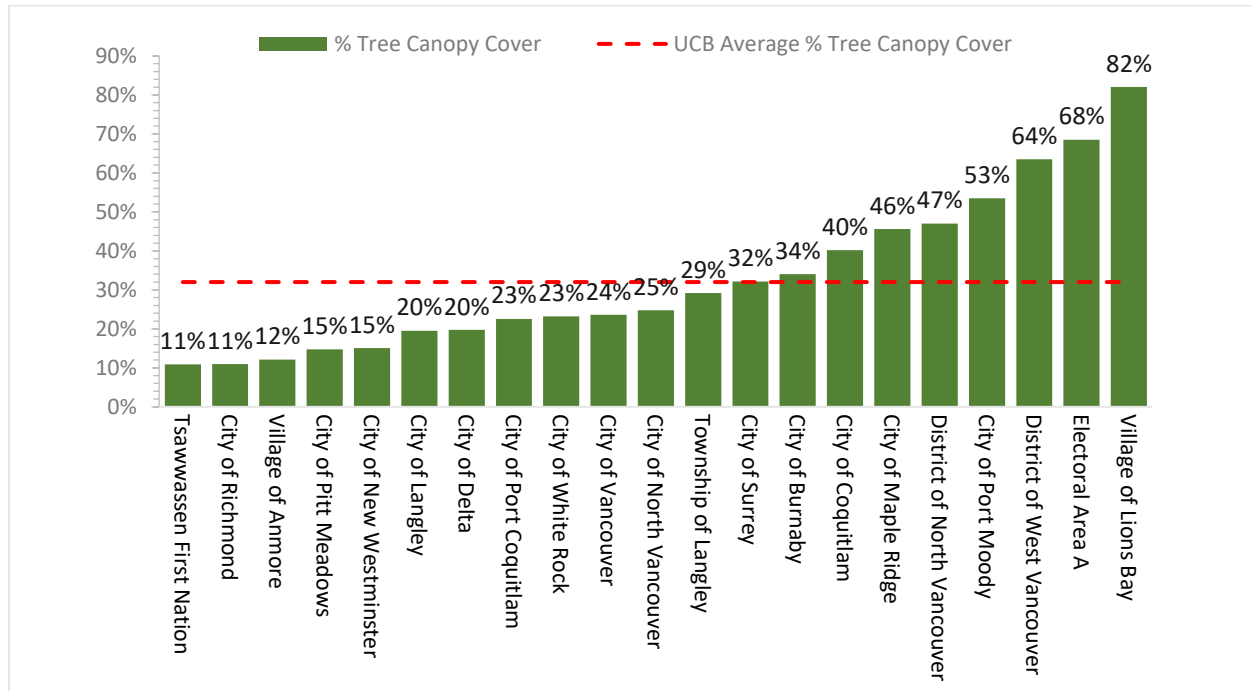


Figure 5: % Tree Canopy Cover within the Urban Containment Boundary by Metro Vancouver member jurisdiction (2014)¹⁰

Table 1 below provides a summary of each member jurisdiction's total tree canopy cover, and tree canopy cover within the UCB¹¹.

¹⁰ Please note that Belcarra and Bowen Island are not included on Figure 5 because they fall outside the UCB - these results show % Tree Canopy Cover within the UCB only.

¹¹ Additional tables with tree canopy cover information are provided in Appendix 1

Member Jurisdiction	% Tree Canopy Cover	
	Within the member jurisdiction's boundary ¹²	Within the UCB
Bowen Island Municipality	94%	Not in UCB
City of Burnaby	34%	34%
City of Coquitlam	62%	40%
City of Delta	15%	20%
City of Langley	20%	20%
City of Maple Ridge	72%	46%
City of New Westminster	16%	15%
City of North Vancouver	25%	25%
City of Pitt Meadows	19%	15%
City of Port Coquitlam	26%	23%
City of Port Moody	67%	53%
City of Richmond	15%	11%
City of Surrey	28%	32%
City of Vancouver	23%	24%
City of White Rock	23%	23%
District of North Vancouver	81%	47%
District of West Vancouver	78%	64%
Electoral Area A	80%	68%
Township of Langley	35%	29%
Tsawwassen First Nation	7%	11%
Village of Anmore	87%	12%
Village of Belcarra	94%	Not in UCB
Village of Lions Bay	83%	82%

Table 1: % Tree Canopy Cover for Metro Vancouver member jurisdictions (2014)

Differences between Regional and Member Jurisdiction Tree Canopy Cover Estimates

Regional and member jurisdiction tree canopy cover estimates will often differ by a few percentage points due to the different methodologies employed to generate the estimates. Available member jurisdiction estimates are provided alongside estimates generated from regional data in Table 2. Where estimates generated by member jurisdictions are available, they should be relied upon instead of the estimate created using regional data.

¹² Excluding ocean and the Fraser River

Member Jurisdiction	Member Jurisdiction Canopy Estimate (Year)	Regional Canopy Estimate (2014)
New Westminster	18% (2013)	16%
Richmond	12% (2017)	15%
Surrey	28% (2013) (excludes ALR)	28%
Vancouver	18% (2014)	23%
White Rock	19% (2014)	23%

Table 2: Comparison between Regional and Member Jurisdiction % Tree Canopy Cover Estimates

How Much Tree Canopy Cover is Enough?

In response to declines in tree canopy, many cities in Metro Vancouver and across North America have begun monitoring canopy cover and establishing targets. Targets set are highly variable, ranging between 20% and 60%¹³. This reflects the many factors that influence target-setting including climate and geography, the pre-development land cover (e.g. grassland vs forest) along with constraints such as existing development densities and land use patterns.

Tree canopy cover targets set in the Metro Vancouver region and Pacific Northwest include:

- City of Surrey – maintain canopy at 30% (excluding the ALR)¹⁴
- City of Vancouver – increase canopy from 18% to 22% by 2050¹⁵
- City of New Westminster – increase canopy to 27% by 2035 and an aspirational long-term goal of 40%¹⁶
- City of Victoria – increase canopy from 18% to 40%¹⁷
- Portland, Oregon – increase canopy from 26% to 33%¹⁸
- Seattle, Washington – increase canopy from 23% to 30% by 2037¹⁹

The North American average for urban tree canopy is 27%²⁰ (and declining²¹) so referring to Figure 5, about half of Metro Vancouver member jurisdictions are above this average.

It should be noted that although much of the Metro Vancouver region was historically forested, some areas (such as Richmond and Delta) would have been less treed, with large areas of grassland and wetlands²². As a result of this historic context, the communities and urban centres now found in these areas often have lower levels of tree canopy cover.

¹³ [Leff, M \(2016\) The Sustainable Urban Forest – A Step-by-Step Approach](#). See p.17 - Tree canopy cover levels and goals for selected cities

¹⁴ [City of Surrey Open Data website](#) (visited August 2019)

¹⁵ [Vancouver Board of Parks and Recreation, Urban Forest Strategy, 2018 Update](#)

¹⁶ [City of New Westminster Urban Forest Management Strategy](#)

¹⁷ [City of Victoria Urban Forest Master Plan \(2013\)](#)

¹⁸ [Portland Plan \(2012\)](#)

¹⁹ [City of Seattle Urban Forest Stewardship Plan \(2013\)](#)

²⁰ Dwyer, J., Nowak, D. (2000) *A national assessment of the urban forest: an overview*. Proceedings of Society of 1999 American Foresters National Convention, Portland, OR.

²¹ Nowak, D.J., and E.J. Greenfield (2012) "Tree and impervious cover change in U.S. cities." *Urban Forestry & Urban Greening*, Vol. 11, 2012; pp 21-30

²² North M.E.A. & Teversham, J.M. (1983) *The vegetation of the floodplains of the Lower Fraser, Serpentine and Nicomekl Rivers, 1859 to 1890*. Syesis 17: 47-66 + loose map

Urban tree canopy extent is the focus of this report but not the only criteria to consider when assessing the health of the urban forest. A sustainable urban forest contains trees in good condition, with a diversity of ages and species, and considers climate resilience in tree selection. And an equitable distribution of trees across neighborhoods and income levels will ensure all residents receive the benefits provided by the urban forest.

% Tree Canopy Cover Distribution within the Urban Containment Boundary

Figure 6 shows the proportion of regional tree canopy cover by member jurisdiction (within the UCB). This chart reveals each jurisdiction's current contribution to regional canopy cover levels. Around half (54%) of Metro Vancouver's tree canopy cover within the UCB is located within four member jurisdictions; Surrey contributes 24% of all canopy cover within the UCB, followed by Burnaby (11%), West Vancouver (10%), and Vancouver (9%).

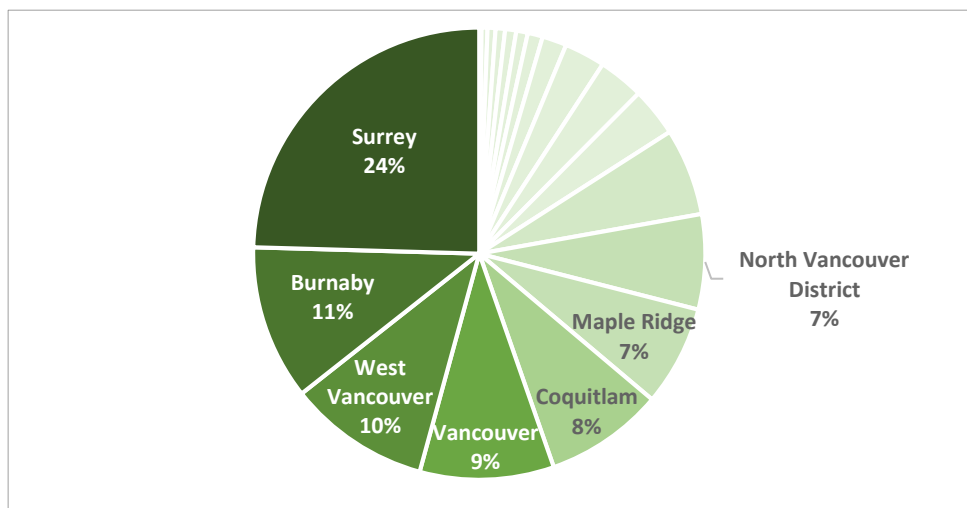


Figure 6: Proportion of tree canopy cover within the Urban Containment Boundary by member jurisdiction.

% Tree Canopy Cover within the Urban Containment Boundary: Land Use Patterns

To further understand the spatial distribution of tree canopy cover within the UCB, canopy was measured in relation to land use. Using the regional Generalized Land Use (2016) layer, % Tree Canopy Cover was calculated for different types of land use and the results are shown in Figure 7.

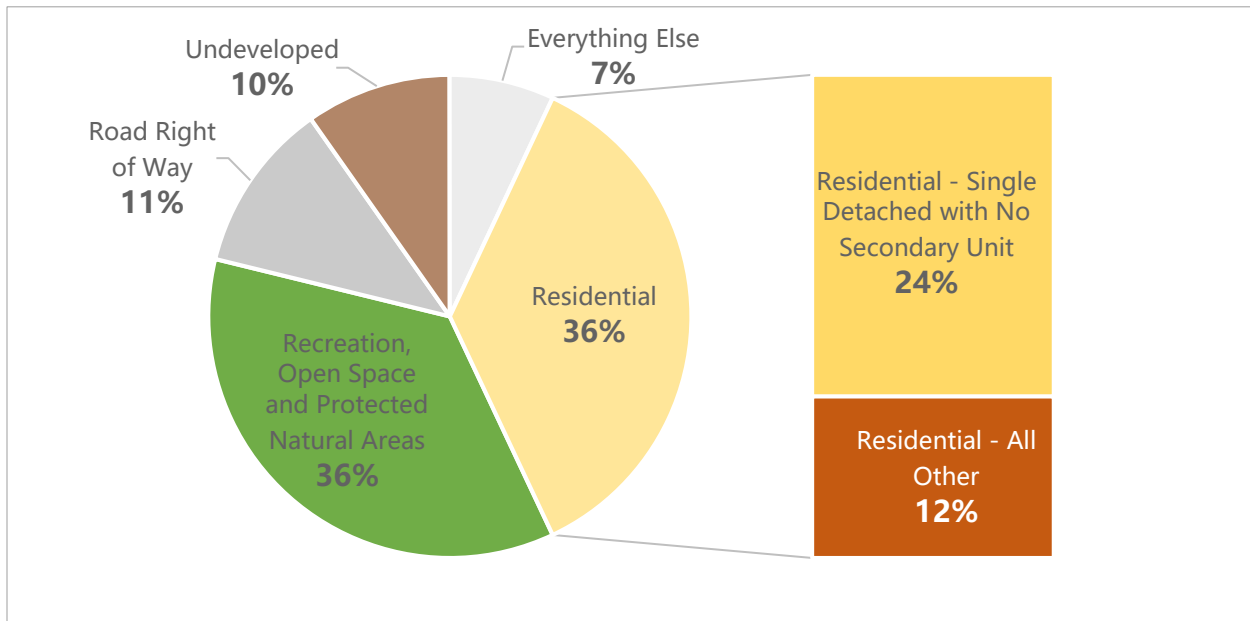


Figure 7: Distribution of tree canopy cover among land use types within the Urban Containment Boundary.

Points to note:

- Most of Metro Vancouver's tree canopy within the UCB is located within recreation and protected natural areas (36%) and residential areas (36%).
- 24% of tree canopy cover within the UCB is found within one particular type of residential area - "Residential – Single-family detached with No Secondary Unit". This residential type covers 30% of land within the UCB, so it is not surprising that most tree canopy is found here.

Some land use types have notably low tree canopy cover. For example, areas designated for 'Parking' have an average of 3% tree canopy cover; 'Retail and Other Commercial' areas have an average of 5% tree canopy cover²³ (see Table 6 in Appendix 1 for a detailed breakdown of tree canopy cover for all land use types).

²³ These land use types are small in overall area so are included within 'Everything Else' in Figure 7

Section 2 – Impervious Surface

Why Measure Levels of Impervious Surface?

The amount of impervious surface is a general measure of urbanization. It is also an ecological health indicator because increasing levels of imperviousness result in disrupted hydrological cycles and increased amounts of polluted runoff entering streams.

Increased imperviousness also results in increased temperatures compared to surrounding rural areas because there is less vegetation, which results in less shade and moisture (from plant evapotranspiration). This is known as the 'Urban Heat Island' effect and identifying areas with high imperviousness is a way of identifying communities at higher risk of potential impacts from heat – an issue of increasing concern as climate change results in increasing temperatures. Areas with high imperviousness may also be at greater risk of localized flooding as water is less able to infiltrate into the ground. This issue will also be exacerbated by climate change which is expected to bring more frequent extreme rain events.

Imperviousness is an indicator of ecological health, vulnerability to climate impacts, and human health and well-being.

Impervious Surface Levels – General Results

The analysis found that 58,000 ha of the Metro Vancouver region, and 45,000 ha of the UCB are covered by impervious surface. This corresponds to 20% of the Metro Vancouver region and 50% of the UCB (Figure 8).

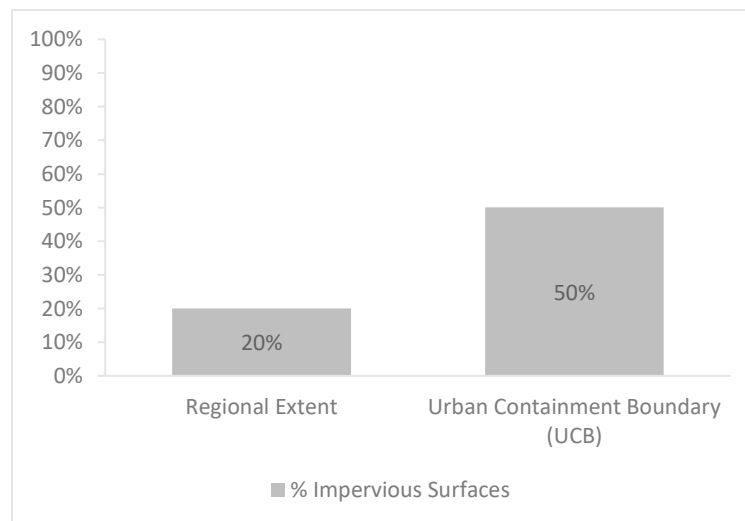


Figure 8: % Impervious Surface for the Metro Vancouver region and the UCB.

Figure 9 is a map of % Impervious Surface summarized by city block²⁴ within the UCB and illustrates the distribution of impervious surfaces within the UCB. Grey indicates very high levels of impervious surface

²⁴ A dissemination block (DB) is an area "equivalent to a city block" bounded on all sides by roads and/or boundaries of standard geographic areas. The dissemination block is the smallest geographic area for which population and dwelling counts are disseminated. Dissemination blocks cover all the territory of Canada (Statistics Canada. (2018). [Dissemination Block](#). *Dictionary, Census of Population, 2016.*).

(more than 80%) and turquoise indicates very low levels of impervious surface (less than 20%). Concentrated areas of high imperviousness generally correspond to urban centers. Areas of low imperviousness within the UCB tend to be parks or greenfield sites that are yet to have been developed.

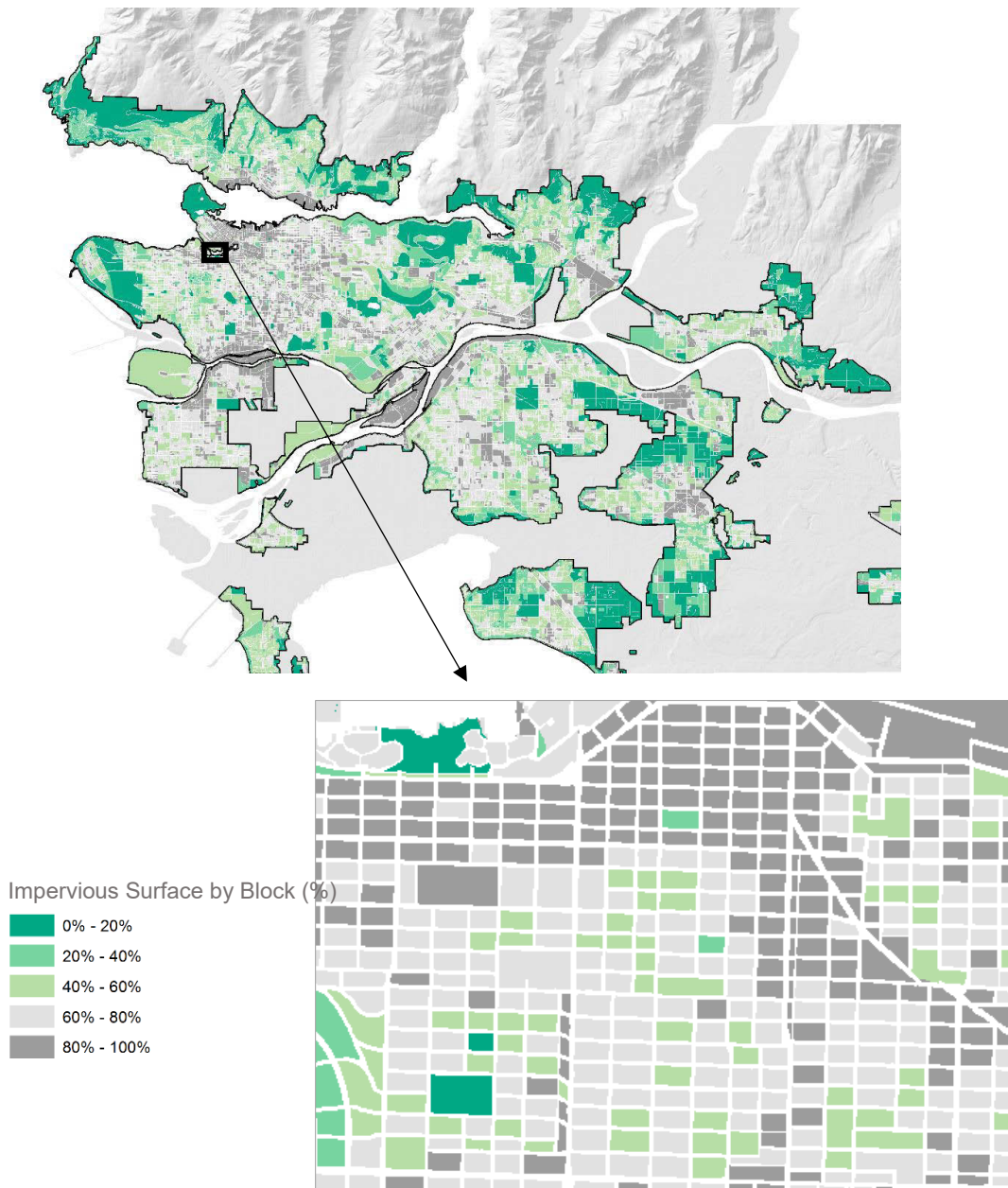


Figure 9: % Impervious Surface summarized by city block within the Urban Containment Boundary

General Trends in % Impervious Surface

It is not yet possible to assess trends in regional impervious surface coverage because comparable historic data is unavailable. However, increasing imperviousness is typically associated with

urbanization and has been recorded by stream health monitoring studies within the region²⁵. It is likely therefore that the trend within Metro Vancouver and particularly the UCB is towards increasing imperviousness. The regional Land Cover Classification dataset used to measure imperviousness will be updated in 2021 and at that point, regional trends will be assessed and reported.

% Impervious Surface by Member Jurisdiction

Figure 10 shows % Impervious Surface within the UCB for each member jurisdiction in 2014. Overall, twelve member jurisdictions are below the UCB average of 50% impervious surface for lands within their boundaries and inside the UCB.

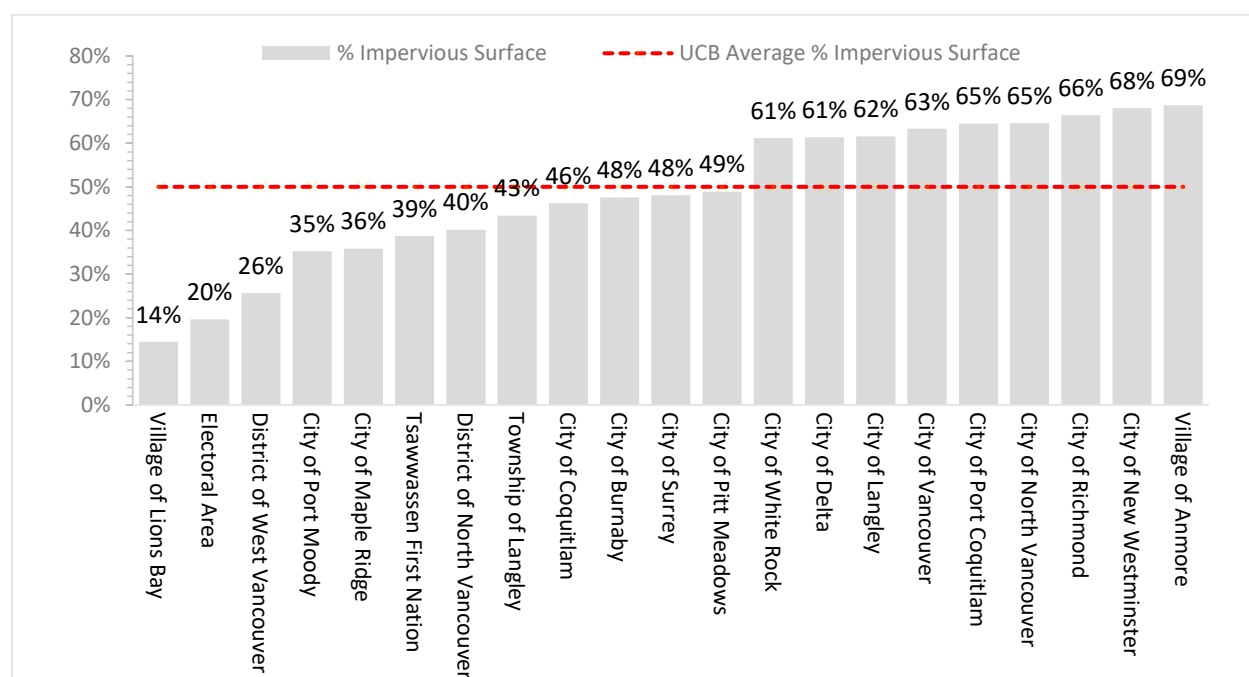


Figure 10: % Impervious Surface within the Urban Containment Boundary by member jurisdiction (2014)²⁶

Table 3 below provides a summary of each member jurisdiction's total amount of impervious surface, and amount of impervious surface within the UCB²⁷.

²⁵ Raincoast Applied Ecology (2013) Stream health monitoring in Metro Vancouver. Report to Metro Vancouver.

²⁶ Please note that Belcarra and Bowen Island are not included on Figure 4 because they fall outside the UCB - these results show % Impervious Surface within the UCB only.

²⁷ Additional tables with impervious surface information are provided in Appendix 1

Member Jurisdiction	% Impervious Surface	
	Within the member jurisdiction's boundary ²⁸	Within the UCB
Bowen Island Municipality	4%	Not in UCB
City of Burnaby	48%	48%
City of Coquitlam	24%	46%
City of Delta	27%	61%
City of Langley	59%	62%
City of Maple Ridge	9%	36%
City of New Westminster	67%	68%
City of North Vancouver	65%	65%
City of Pitt Meadows	13%	49%
City of Port Coquitlam	49%	65%
City of Port Moody	23%	35%
City of Richmond	47%	66%
City of Surrey	35%	48%
City of Vancouver	61%	63%
City of White Rock	61%	61%
District of North Vancouver	11%	40%
District of West Vancouver	14%	26%
Electoral Area A	6%	20%
Township of Langley	16%	43%
Tsawwassen First Nation	29%	39%
Village of Anmore	3%	69%
Village of Belcarra	5%	Not in UCB
Village of Lions Bay	15%	14%

Table 3: % Impervious Surface for Metro Vancouver member jurisdictions (2014)

How Much Impervious Surface is Too Much?

Research has shown there to be 'an empirical correlation between a watershed's total impervious area and its health, where the health of a watershed decreases as its unmitigated imperviousness increases'²⁹.

Many thresholds of biological degradation (e.g. invertebrate and fish diversity) and physical degradation (e.g. hydrology and geomorphology) in streams are associated with 10-20% impervious surface within the watershed³⁰.

²⁸ Excluding ocean and the Fraser River

²⁹ [Metro Vancouver \(2017\) Region-wide Baseline for On-site Stormwater Management](#)

³⁰ Paul, M.J. and Meyer, J.L. (2001) Streams in the Urban Landscape. Annual Review of Ecology and the Systematics. 32:333-65

This report has provided impervious surface measures with respect to administrative boundaries (member jurisdiction boundary, urban containment boundary, etc.) rather than watershed boundaries, so further analysis would be required to determine where in the region has exceeded 10-20% imperviousness. However, given the high levels of impervious surface documented (Figure 10), many watersheds coinciding with the region’s urban areas likely exceed thresholds for degradation.

% Impervious Surface Distribution within the Urban Containment Boundary

Figure 11 shows the proportion of regional impervious surface by member jurisdiction (within the UCB). This chart reveals each jurisdiction’s current contribution to regional impervious surface levels. Around half (49%) of Metro Vancouver’s impervious surface within the UCB is located within three member jurisdictions; Surrey contributes 23% of all impervious surface within the UCB, followed by Vancouver (16%), Richmond (11%), and Burnaby (10%).

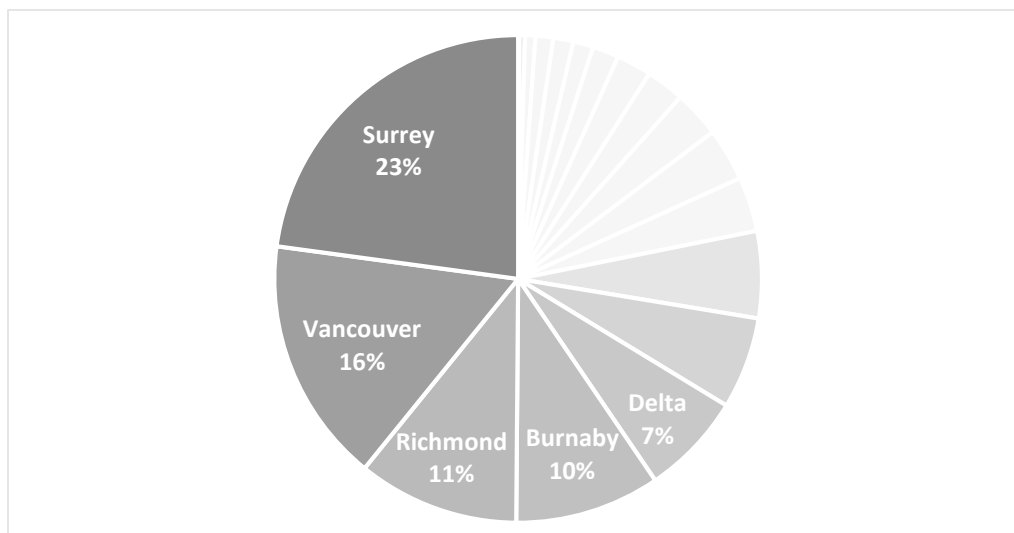


Figure 11: Proportion of impervious surface within the Urban Containment Boundary by member jurisdiction

% Impervious Surface within the Urban Containment Boundary: Land Use Patterns

To further understand the spatial distribution of impervious surface within the UCB, amount of impervious surface was measured in relation to land use. Using the regional Generalized Land Use (2016) layer, % Impervious Surface was calculated for different types of land use and the results are shown in Figure 12.

Points to notes:

- Most of Metro Vancouver’s impervious surface is located within residential areas (42%) and road right of ways (25%).
- 30% of impervious surface within the UCB is found within one particular type of residential area - “Residential – Single-family detached with No Secondary Unit”. This residential type covers 30% of land within the UCB, so it is not surprising that most tree canopy is found here.

Some land use types have notably high levels of impervious surface. For example, areas designated for 'Parking' have an average of 90% impervious surface; 'Retail and Other Commercial' land use types have an average of 92% impervious surface (see Table 6 in Appendix 1 for a detailed breakdown of impervious surface for all land use types).

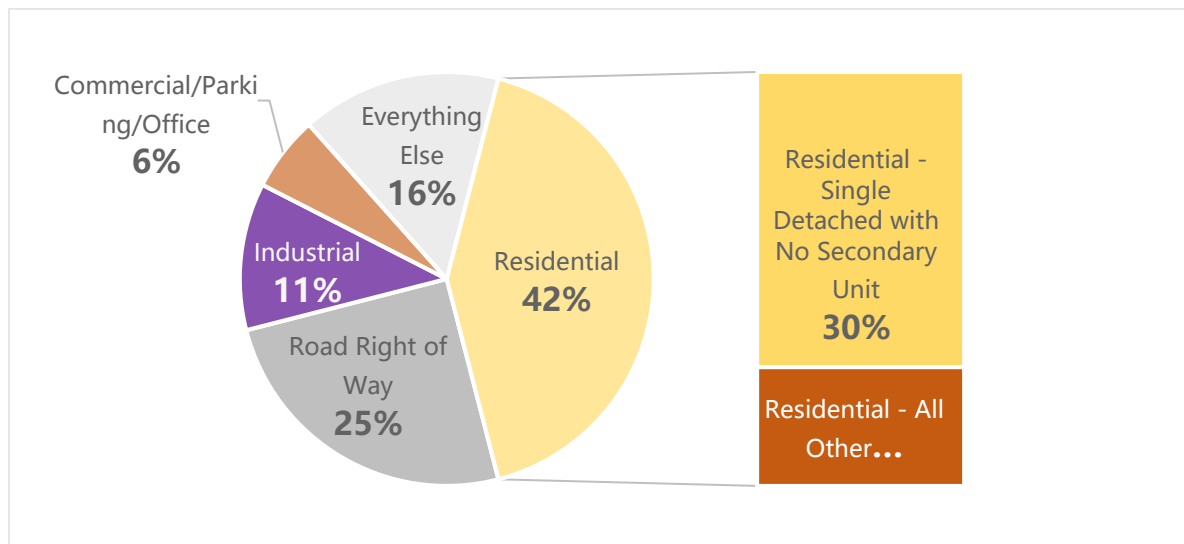


Figure 12: Distribution of impervious surface among land use types within the Urban Containment Boundary

Section 3 - The Relationship between Tree Canopy Cover, Impervious Surfaces, and Residential Density - Temporal Analysis and Future Projections

To explore how tree canopy cover and impervious surface has been influenced by trends in residential building practices, the following analysis looked at the relationship between the year of construction for residential parcels, and the amount of tree canopy cover and impervious surface currently found there.

Tree canopy cover and impervious surface levels are typically related - as the amount of one falls, there is often a corresponding rise in the other. Areas of impervious surface in urban areas include buildings, driveways, paths, and roads. This section explores the relationship between tree canopy cover and impervious surfaces in the Metro Vancouver context.

For this analysis, housing types were split into two categories:

- 'High Density Housing' is defined as apartment oriented parcels with 'Low-Rise Apartment' and 'Mid/High-Rise Apartment'.
- 'Low Density Housing' is defined as ground oriented parcels with 'Single-family detached', 'Multi Detached', and 'Townhouse'.

Average % Tree Canopy Cover by Residential Density: Temporal Trends

Figure 13 illustrates the relationship between amount of tree canopy today on parcels with low density housing and high density housing, and the year in which they were constructed. It demonstrates that for low density housing, there has been a decline in tree canopy cover for parcels constructed in more recent years.

The decline in average % Tree Canopy Cover for low density housing stock parcels has been consistent, from 36% for those built in 1970 to 18% for those built in 2000. This decline indicates that fewer, or smaller, trees are being retained or planted during construction of low density housing over time.

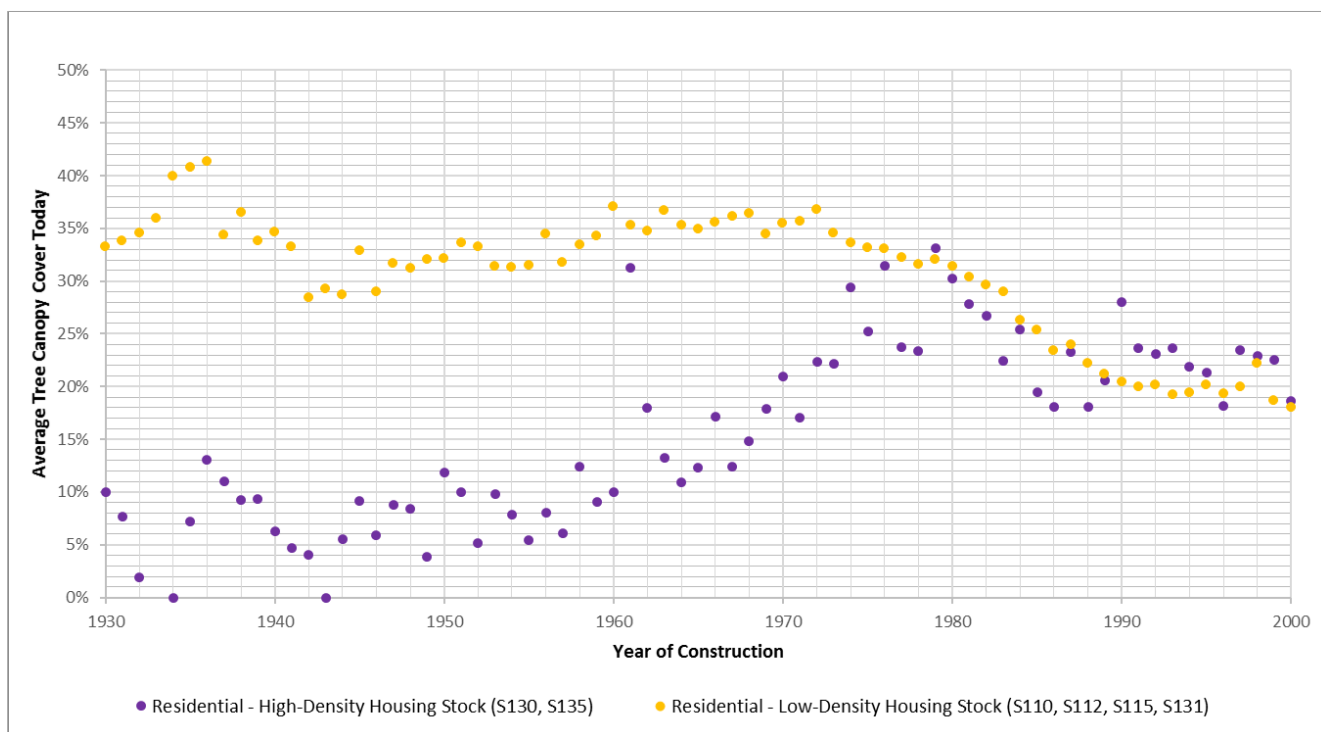


Figure 13: Average % Tree Canopy Cover for low density housing stock and high density housing stock parcels by year of construction.

In contrast, tree canopy is higher for high density housing constructed more recently. Although the relationship is less strongly linear, the data indicates that there has been an overall increase in the number of trees planted or retained for high density housing over time.

Figure 13 only displays results up to the year 2000 because more recently constructed parcels are likely to have a higher proportion of younger, newly planted trees, which have not yet grown a full canopy.

Average % Impervious Surfaces by Residential Density: Temporal Trends

Figure 14 illustrates the relationship between the amount of impervious surface within low density housing and high density housing, and the year in which they were constructed. For almost every year since 1970, the average low density housing parcel has more % Impervious Surface today than the average parcel for the previous year. The analysis shows that there has been a consistent increase in average % Impervious Surface within the low density housing stock, from 49% for parcels built in 1970 to 75% for parcels built in 2012.

In contrast, average % Impervious Surface has been decreasing over time within the high density housing stock. As with % Tree Canopy Cover, the relationship between % Impervious Surface and year of construction for high density housing stock is less linear; but overall there has been a clear trend of decline in levels of impervious surfaces since the 1950's, although this trend has levelled out in recent years.

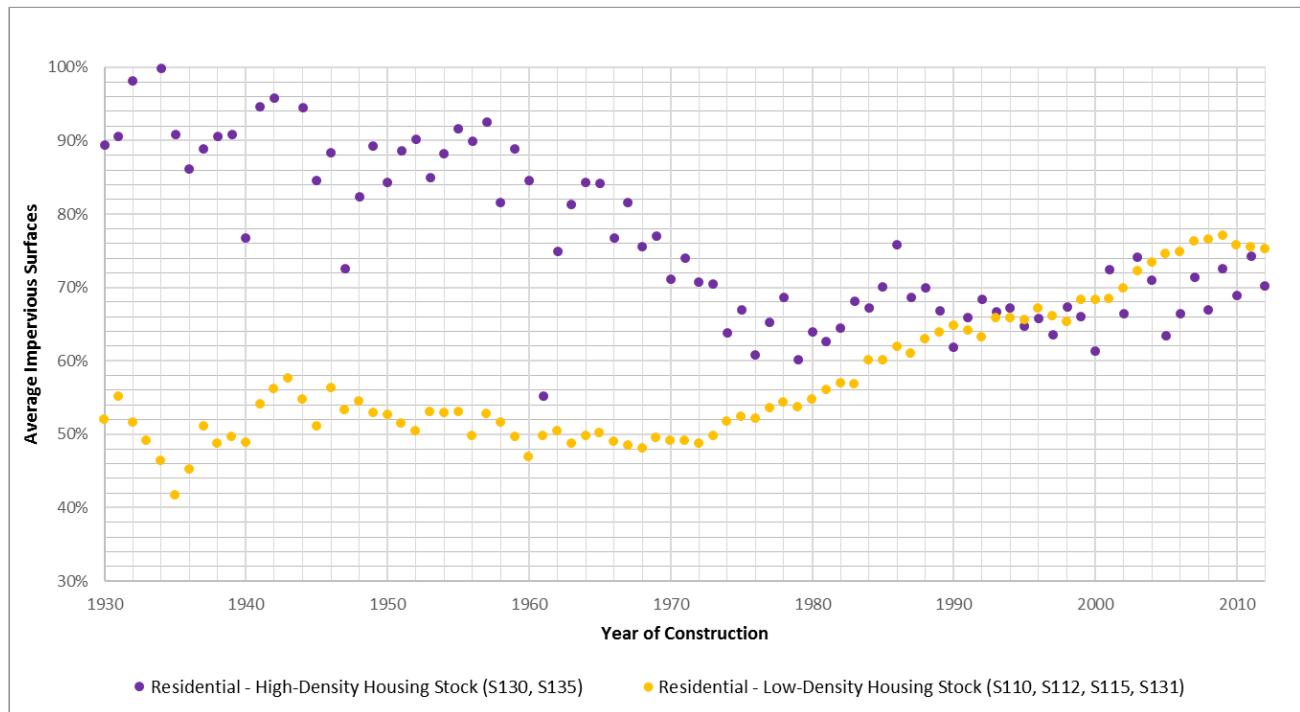


Figure 14: Average % Impervious Surface for low density housing stock and high density housing stock parcels by year of construction.

Observed Relationship Between Tree Canopy Cover and Impervious Surfaces

These results show the amount of tree canopy cover is closely connected to the amount of impervious surface. Comparing Figures 13 and 14 shows that the pattern of change for % Impervious Surface over time mirrors that of % Tree Canopy Cover for both parcels with high density housing and low density housing. As average tree canopy cover has decreased over time within low density housing there has been a corresponding increase in impervious surface. For high density housing this relationship is reversed, and as average tree canopy cover has increased, levels of impervious surface have decreased over time.

Trend Analysis – Historical Context

Low Density Housing: The region experienced rapid urban population growth starting in the 1960's, which resulted in the subdivision of parcels in urban areas to accommodate more housing growth. While lot sizes shrunk, demand for bigger homes increased, resulting in increased lot coverage. This has resulted in less space for trees and an increase in impervious surfaces on low density housing parcels. If these housing trends continue (which seems likely), they may result in ongoing declines in tree canopy and increases in impervious surface.



Figure 10: Examples of low density housing (left) with very low % Tree Canopy Cover (80 people/ha, 0% Tree Canopy Cover), and high density housing (right) with high % Tree Canopy Cover (600 people/ha, 36% Tree Canopy Cover).

High Density Housing - High density housing prior to the 1960's was composed of low-rise apartments which typically had high lot coverage and little greenspace. Economic growth and technological advancement in the region triggered a 'skyscraper' boom in 1960s, 1970s, and 1980s³¹. The new skyscrapers were characterized by tall and slender buildings with low Floor to Area Ratio (FAR), and enough space between them to preserve view corridors³². This *Vancouverism* architectural model featured residential buildings that used up little lot coverage and allowed abundant greenspace, street trees and other public space at the bottom³³. This may explain the observed increase in % Tree Canopy Cover, and decline in % Impervious Surface during the decades leading up to 1980 (Figures 13 and 14). The West End neighborhood in the City of Vancouver is a good example of this phenomenon, where the majority of its residential high rises were constructed between 1960 and 1980³⁴.

After 1980, % Tree Canopy Cover on high density housing parcels shows a slight decline (Figure 13) but this is not matched with a corresponding increase in % Impervious Surface which have remained relatively steady (Figure 14). This suggests that since 1980, trees have been replaced by other types of vegetation (e.g. grass, shrubs) rather than increased lot coverage by buildings or other impervious surface.

³¹ <https://www.theguardian.com/cities/2017/sep/27/wipe-out-era-1970s-vanish-vancouver>

³² [Walsh, R.M. \(2013\) The Origins of Vancouverism: A Historical Inquiry into the Architecture and Urban form of Vancouver, British Columbia](#)

³³ [Walsh, R.M. \(2013\) The Origins of Vancouverism: A Historical Inquiry into the Architecture and Urban form of Vancouver, British Columbia](#); [Skyrise Vancouver web article](#) (visited August 2019)

³⁴ [Walsh, R.M. \(2013\) The Origins of Vancouverism: A Historical Inquiry into the Architecture and Urban form of Vancouver, British Columbia](#)

Section 4 – Future Projections of Tree Canopy Cover within the Urban Containment Boundary

Metro Vancouver’s population is projected to increase by about 1 million people over the next 30 years and this growth will be accommodated through both new urban development and intensification of established areas within the UCB³⁵. This section considers how projected regional growth trends may impact tree canopy cover by looking at where growth is expected to occur. The following information and assumptions were included:

1. *Development on remaining General Urban land*
 - There are currently about 6,500 hectares of lands with the regional land use designation ‘General Urban’ within the UCB, that are undeveloped or rural and planned for future urban growth³⁶ (see Figure 15)
 - The remaining General Urban lands contain 3,900 hectares of tree canopy.
 - It is assumed that the remaining urban lands within the UCB will be largely developed over the next 15-20 years.
 - These areas are expected to be developed as mainly low density housing with some higher density areas but the relative proportions of housing types is unknown.
 - It is assumed that tree canopy cover levels on parcels developed over the next 20-30 years will have comparable tree canopy cover to parcels developed between 1990-2000 (see Figures 13 and 14)³⁷. The post 1990’s average % Tree Canopy Cover for all housing types (low and high density) is 20%.
 - For the purposes of this analysis, it is assumed that by 2040, the remaining General Urban lands planned for future urban growth will be developed to housing types with an average of 20% tree canopy cover.
 - This would result in a loss of over 3,000 ha of tree canopy.
2. *Redevelopment of single-family detached housing within the General Urban regional land use designation*
 - The amount of single-family detached housing (one unit, one lot) is projected to decrease significantly by 2050, mostly as a result of intensification and redevelopment³⁸. For this analysis, a conservative estimate of 25% redevelopment is applied.
 - Redevelopment is projected to focus on multi-unit ground-oriented structures (secondary units, laneway, x-plexes, row houses) and apartments (low rises, mid rises, high rises).
 - Currently, single-family detached housing contains 6,900 hectares of tree canopy within the UCB.

³⁵ Projected regional growth trends are documented in ‘[Metro Vancouver Growth Projections – A Backgrounder](#)’ (2018)

³⁶ For this analysis, 80% of District of West Vancouver’s upper lands special study area was not included within the area considered developable, given the District’s commitment to transfer much of this area to the Conservation and Recreation designation

³⁷ This is the most recent timeframe we have tree canopy cover data for residential housing types

³⁸ [Metro Vancouver Growth Projections – A Backgrounder \(2018\)](#)

- On average, housing built after 1990 has 37% less tree canopy cover than single-family detached housing built before 1990.
- If over the next 30 years, 25% of single-family detached housing is redeveloped to housing types with 37% less tree canopy cover than the current single-family detached housing, the result will be a loss of 650 ha tree canopy cover.

Taking into account only the above two sources of loss, tree canopy cover within the UCB is projected to decrease from 32% to 28% by 2040.

‘Offsetting Losses through Tree Planting

Municipalities (including several Metro Vancouver member jurisdictions) often use tree planting programs as a way to maintain or expand their canopy, and actions such as these could help to offset anticipated future losses. To offset the projected decline in UCB tree canopy cover from 32% to 28% would require 1,100 to 3,000 hectares of the UCB to be dedicated to tree planting³⁹.

Analysis indicates that about 30,000 hectares within the UCB is *potentially* available for tree planting⁴⁰. Site-level analysis would be required to determine what area is *actually* available, but it does suggest that the 3,000 hectares required to offset projected losses is attainable.

Potential planting availability was calculated using the ‘Potential Planting Area’ dataset which is detailed in Appendix 2 and is available to member jurisdictions to assist with urban forest planning.

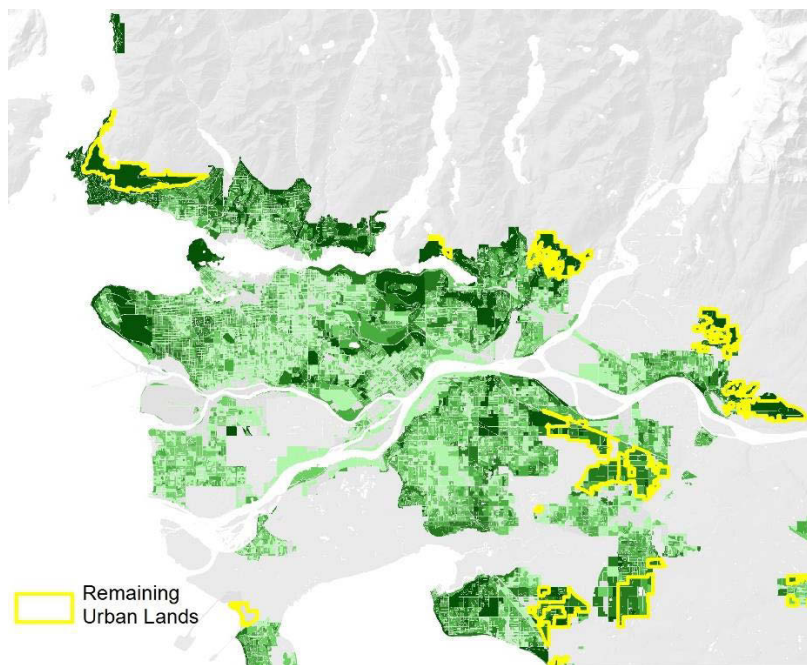


Figure 15: Remaining General Urban areas within the Urban Containment Boundary⁴¹

³⁹ The actual area required depends on the ground-to-crown ratio of trees planted so a range is provided.

⁴⁰ i.e. areas currently occupied by non-tree vegetation (grass, shrubs etc.), soil patches, barren surfaces, and pavement that does not fall on roads. Assessed using the ‘Potential Planting Area’ dataset – see Appendix 2

⁴¹ For this analysis, 80% of District of West Vancouver’s upper lands special study area was not included within the area considered developable, given the District’s commitment to transfer much of this area to the Conservation and Recreation designation

Conclusion

This report provides consistent regional measurements of tree canopy cover and impervious surfaces, which allow for cross-regional comparison and will be repeated with updated land cover data in the future to enable tracking of change over time and identification of trends.

Trees provide a range of important ecosystem services to people including shading, carbon storage, and stormwater management. Measuring tree canopy cover is a relatively simple way to determine the extent of the urban forest and the magnitude of services it provides. Impervious surfaces are associated with many of the negative effects of urbanization such as increased temperatures (the 'Urban Heat Island' effect) and flood risk, along with impacts to stream health through disrupted hydrological cycles and poor water quality. Measuring impervious surfaces gives an indication of the extents of these negative effects. Tree canopy cover and imperviousness are indicators of ecological health but because of their connection to factors such as urban temperatures and stormwater management, they are also indicators of how resilient communities may be to climate-related impacts. Looking at whether these indicators are distributed equitably across cities or regions helps us to identify communities or populations more vulnerable to risks and receiving fewer ecosystem service benefits.

Metro Vancouver's regional tree canopy cover is 54% and for the Urban Containment Boundary (UCB) it is 32%. Canopy is unevenly distributed across the UCB and land use types, with concentrations of canopy within protected natural areas and residential areas. Regional trends will be confirmed when the analysis is repeated with new data but indications from other data sources are that canopy is declining.

For impervious surfaces, 20% of Metro Vancouver and 50% of the UCB is impervious. Most of Metro Vancouver's impervious surface is located within residential areas and road right of ways. Again, regional trends will be confirmed after future updates of the analysis but imperviousness is likely increasing in urbanizing watersheds.

Analysis of the relationship between tree canopy cover, impervious surfaces and residential density showed that over the past few decades, low density housing (especially single-family detached) has shifted from a housing model that accommodated many trees to one that accommodates increasingly fewer trees due to shrinking lot sizes and increasing lot coverage from buildings. This trend is expected to continue. Decreasing tree canopy has been mirrored by increases in amount of impervious surface as higher proportions of lots are covered by buildings, driveways and other paved surfaces. Since the 1960's high density housing has accommodated increasingly more trees with a corresponding decrease in impervious surfaces. This trend seems to have leveled off in recent years, and it is uncertain whether high density housing will continue to accommodate more trees in the future.

Projected growth in the region over the next 20-30 years is expected to impact tree canopy cover within the UCB as lands planned for future urban growth are developed, and single-family detached housing stock is redeveloped. Tree canopy cover in the UCB is projected to decrease from 32% to 28% from these sources of loss.

Potential exists to 'offset' losses or increase canopy through tree planting in the UCB. The Metro Vancouver Potential Planting Area dataset can be used by member jurisdictions to assist with planning of the urban forest.

Recommendations

Metro Vancouver, member jurisdictions and other land owners and managers all have a role to play in maintaining tree canopy cover and reducing imperviousness. The following recommendations are provided for consideration, as appropriate:

1. Monitor the extent, distribution and status of the tree canopy cover and imperviousness to inform planning and management.
2. Establish urban forest management plans that consider how to reduce impacts of future development on tree canopy.
3. Consider focusing tree planting efforts in areas of low canopy cover, particularly when these coincide with areas of high density and vulnerable populations in support of regional and municipal equity.
4. Use Metro Vancouver's Potential Planting Area dataset to develop realistic and achievable planting plans and targets.
5. Adopt and enforce bylaws that protect trees wherever possible, and require trees to be replaced when development results in loss.
6. Prioritize the retention of existing mature trees wherever possible when planning new urban communities as these provide the greatest amount of canopy cover and ecosystem services.
7. Implement on-site stormwater management and green infrastructure approaches throughout urban areas as effective ways of improving water quality and reducing the amount of runoff.
8. Look for opportunities to integrate the objectives of maintaining tree canopy cover and reducing imperviousness into a broad range of departments, plans, and strategies so responsibilities become a shared goal.
9. Given how much tree canopy and impervious surfaces fall within residential areas in the UCB, engage with the public about the importance of tree canopy and its protection, along with the benefits to maintaining permeability. These efforts could be supported with programs to encourage tree planting and maintenance of existing trees on private land.

Appendix 1: Additional tables for % Tree Canopy Cover, % Impervious Surface and % Potential Planting Area

Table 4: % Tree Canopy Cover and % Impervious Surface by member jurisdictions

Member Jurisdiction	% Canopy Cover			% Impervious Surface		
	as a % of the member jurisdiction	as a % of the total regional area	as a % of the total area of existing tree canopy (Region)	as a % of the member jurisdiction	as a % of the total regional area	as a % of the total area of existing tree canopy (Region)
Bowen Island Municipality	94%	2%	3%	4%	0%	0%
City of Burnaby	34%	1%	2%	48%	1%	3%
City of Coquitlam	62%	3%	5%	24%	0%	2%
City of Delta	15%	1%	2%	27%	1%	4%
City of Langley	20%	0%	0%	59%	0%	0%
City of Maple Ridge	72%	7%	13%	9%	0%	2%
City of New Westminster	16%	0%	0%	67%	0%	1%
City of North Vancouver	25%	0%	0%	65%	0%	0%
City of Pitt Meadows	19%	1%	1%	13%	0%	1%
City of Port Coquitlam	26%	0%	0%	49%	0%	1%
City of Port Moody	67%	1%	1%	23%	0%	0%
City of Richmond	15%	1%	1%	47%	1%	5%
City of Surrey	28%	3%	5%	35%	1%	8%
City of Vancouver	23%	1%	2%	61%	1%	3%
City of White Rock	23%	0%	0%	61%	0%	0%
District of North Vancouver	81%	4%	8%	11%	0%	1%
District of West Vancouver	78%	2%	4%	14%	0%	1%
Electoral Area A	80%	23%	43%	6%	2%	8%
Township of Langley	35%	4%	7%	16%	1%	4%
Tsawwassen First Nation	7%	0%	0%	29%	0%	0%
Village of Anmore	87%	1%	2%	3%	0%	0%
Village of Belcarra	94%	0%	0%	5%	0%	0%
Village of Lions Bay	83%	0%	0%	15%	0%	0%

Table 5: % Tree Canopy Cover and % Impervious Surfaces by member jurisdiction within the Urban Containment Boundary

Member Jurisdiction	% Canopy Cover			% Impervious Surface		
	as a % of the member jurisdiction (within the UCB)	as a % of the total UCB area	as a % of the total area of existing tree canopy (within the UCB)	as a % of the member jurisdiction (within the UCB)	as a % of the total UCB area	as a % of the total area of existing tree canopy (within the UCB)
City of Burnaby	34%	3%	11%	48%	2%	3%
City of Coquitlam	40%	3%	8%	46%	1%	2%
City of Delta	20%	1%	3%	61%	1%	3%
City of Langley	20%	0%	1%	62%	0%	0%
City of Maple Ridge	46%	2%	7%	36%	1%	1%
City of New Westminster	15%	0%	1%	68%	0%	1%
City of North Vancouver	25%	0%	1%	65%	0%	1%
City of Pitt Meadows	15%	0%	1%	49%	0%	1%
City of Port Coquitlam	23%	1%	2%	65%	1%	1%
City of Port Moody	53%	1%	3%	35%	0%	1%
City of Richmond	11%	1%	3%	66%	3%	5%
City of Surrey	32%	8%	24%	48%	4%	9%
City of Vancouver	24%	3%	9%	63%	2%	4%
City of White Rock	23%	0%	0%	61%	0%	0%
District of North Vancouver	47%	2%	7%	40%	1%	1%
District of West Vancouver	64%	3%	10%	26%	1%	1%
Electoral Area A	68%	1%	3%	20%	0%	0%
Township of Langley	29%	2%	6%	43%	1%	2%
Tsawwassen First Nation	11%	0%	0%	39%	0%	0%
Village of Anmore	12%	0%	0%	69%	0%	0%
Village of Lions Bay	82%	0%	1%	14%	0%	0%

Table 6: % Tree Canopy Cover and % Impervious Surface metrics by Land use type within the Urban Containment Boundary

Land Use Type	% Potential tree canopy - Total			% Potential tree canopy - Vegetated			% Potential tree canopy - Impervious		
	as a % of land use type (within the UCB)	as a % of the total UCB area	as a % of the total existing area of potential tree canopy (within the UCB)	as a % of land use type (within UCB)	as a % of the total UCB area	as a % of the total existing area of potential tree canopy (within the UCB)	as a % of land use type (within the UCB)	as a % of the total UCB area	as a % of the total existing area of potential tree canopy (within the UCB)
Agriculture	73%	0%	1%	64%	0%	1%	9%	0%	0%
Airport/Airstrip and Ferry	89%	1%	3%	56%	1%	2%	32%	0%	1%
Cemetery	74%	0%	1%	65%	0%	1%	10%	0%	0%
Civic and Other Institutional	55%	0%	0%	10%	0%	0%	45%	0%	0%
Exhibition, Religious and Other Assembly	56%	0%	1%	13%	0%	0%	43%	0%	1%
Health and Education	48%	1%	2%	8%	0%	0%	40%	1%	2%
Hotel, Motel and Rooming House	47%	0%	0%	6%	0%	0%	40%	0%	0%
Industrial	54%	4%	11%	7%	0%	1%	48%	3%	9%
Industrial - Extractive	84%	0%	0%	33%	0%	0%	51%	0%	0%
Lakes, Large Rivers and Other Water	30%	0%	1%	28%	0%	1%	3%	0%	0%
Mixed Residential (Low-rise Apartment) Commercial	32%	0%	0%	2%	0%	0%	29%	0%	0%
Mixed Residential (Mid-Rise or High-Rise Apartment) Commercial	29%	0%	0%	3%	0%	0%	26%	0%	0%
Office	47%	0%	1%	5%	0%	0%	42%	0%	1%
Parking	75%	0%	0%	7%	0%	0%	68%	0%	0%
Protected Watershed	5%	0%	0%	3%	0%	0%	2%	0%	0%
Recreation, Open Space and Protected Natural Areas	34%	6%	17%	24%	4%	12%	9%	2%	5%
Residential - Institutional and Non-Market Housing	38%	0%	0%	12%	0%	0%	26%	0%	0%

Residential - Low-rise Apartment	32%	1%	2%	8%	0%	0%	25%	0%	1%
Residential - Mid/High-rise Apartment	37%	0%	0%	9%	0%	0%	28%	0%	0%
Residential - Mobile Homes	39%	0%	0%	8%	0%	0%	31%	0%	0%
Residential - Multi Detached	25%	0%	0%	9%	0%	0%	16%	0%	0%
Residential - Rural	38%	1%	4%	33%	1%	4%	4%	0%	0%
Residential - Single-family detached with No Secondary Unit	33%	9%	25%	15%	4%	11%	18%	5%	14%
Residential – Single-family detached with One Secondary Unit or Duplex	36%	1%	3%	15%	0%	1%	21%	1%	2%
Residential - Townhouse	35%	1%	3%	8%	0%	1%	26%	1%	3%
Retail and Other Commercial	59%	1%	4%	3%	0%	0%	55%	1%	4%
Road Right-of-Way	14%	3%	7%	10%	2%	5%	4%	1%	2%
Transit, Rail and Other Transportation	66%	1%	3%	16%	0%	1%	50%	1%	2%
Undeveloped and Unclassified	39%	2%	6%	26%	1%	4%	14%	1%	2%
Utility, Communication and Work Yards	64%	0%	1%	18%	0%	0%	45%	0%	1%
Vancouver Fraser Port	78%	1%	2%	6%	0%	0%	71%	1%	2%

Table 7: % Potential Planting Area metrics by member jurisdiction within the Urban Containment Boundary

Member Jurisdiction	% Potential tree canopy - Total			% Potential tree canopy - Vegetated			% Potential tree canopy - Impervious		
	as a % of the member jurisdiction (within the UCB)	as a % of the total UCB area	as a % of the total existing area of potential tree canopy (within the UCB)	as a % of the member jurisdiction (within the UCB)	as a % of the total UCB area	as a % of the total existing area of potential tree canopy (within the UCB)	as a % of the member jurisdiction (within the UCB)	as a % of the total UCB area	as a % of the total existing area of Potential tree canopy (within the UCB)
City of Burnaby	33%	3%	10%	16%	2%	10%	17%	2%	9%
City of Coquitlam	32%	2%	6%	13%	1%	5%	19%	1%	7%
City of Delta	43%	2%	7%	17%	1%	6%	26%	1%	8%
City of Langley	41%	0%	1%	18%	0%	1%	23%	0%	1%
City of Maple Ridge	28%	1%	4%	17%	1%	5%	11%	1%	3%
City of New Westminster	43%	1%	2%	15%	0%	2%	28%	0%	3%
City of North Vancouver	28%	0%	1%	9%	0%	1%	19%	0%	1%
City of Pitt Meadows	61%	1%	2%	35%	0%	3%	25%	0%	2%
City of Port Coquitlam	42%	1%	3%	12%	0%	2%	30%	1%	4%
City of Port Moody	23%	0%	1%	9%	0%	1%	14%	0%	1%
City of Richmond	54%	4%	13%	22%	2%	11%	32%	3%	14%
City of Surrey	36%	9%	25%	18%	4%	27%	18%	4%	23%
City of Vancouver	26%	3%	9%	11%	1%	9%	15%	2%	10%
City of White Rock	37%	0%	1%	15%	0%	1%	22%	0%	1%
District of North Vancouver	24%	1%	3%	11%	0%	3%	14%	1%	3%
District of West Vancouver	20%	1%	3%	10%	0%	3%	10%	1%	3%
Electoral Area A	18%	0%	1%	10%	0%	1%	7%	0%	1%
Township of Langley	42%	3%	8%	25%	2%	10%	17%	1%	6%
Tsawwassen First Nation	80%	0%	1%	49%	0%	1%	31%	0%	1%
Village of Anmore	76%	0%	0%	19%	0%	0%	57%	0%	0%
Village of Lions Bay	9%	0%	0%	2%	0%	0%	7%	0%	0%

Table 8: % Potential Planting Area metrics by Land use type within the Urban Containment Boundary

Land Use Type	% Canopy cover			% Impervious surfaces		
	as a % of land use type (within the UCB)	as a % of the total UCB area	as a % of the total area of existing tree canopy (within the UCB)	as a % of land use type (within the UCB)	as a % of the total UCB area	as a % of the total area of existing impervious surfaces (within the UCB)
Agriculture	21%	0%	0%	14%	0%	0%
Airport/Airstrip and Ferry	0%	0%	0%	43%	1%	1%
Cemetery	23%	0%	0%	11%	0%	0%
Civic and Other Institutional	14%	0%	0%	76%	0%	0%
Exhibition, Religious and Other Assembly	17%	0%	0%	70%	0%	1%
Health and Education	17%	0%	1%	75%	1%	2%
Hotel, Motel and Rooming House	8%	0%	0%	85%	0%	0%
Industrial	11%	1%	2%	82%	6%	11%
Industrial - Extractive	9%	0%	0%	58%	0%	0%
Lakes, Large Rivers and Other Water	16%	0%	0%	4%	0%	0%
Mixed Residential (Low-rise Apartment) Commercial	5%	0%	0%	92%	0%	0%
Mixed Residential (Mid-Rise or High-Rise Apartment) Commercial	7%	0%	0%	89%	0%	0%
Office	12%	0%	0%	82%	1%	1%
Parking	3%	0%	0%	90%	0%	0%
Protected Watershed	94%	0%	0%	3%	0%	0%
Recreation, Open Space and Protected Natural Areas	63%	11%	36%	12%	2%	4%
Residential - Institutional and Non-Market Housing	25%	0%	0%	61%	0%	0%
Residential - Low-rise Apartment	19%	0%	1%	72%	1%	2%
Residential - Mid/High-rise Apartment	22%	0%	0%	67%	0%	1%
Residential - Mobile Homes	18%	0%	0%	73%	0%	0%
Residential - Multi Detached	24%	0%	0%	65%	0%	0%
Residential - Rural	56%	2%	6%	9%	0%	1%
Residential - Single-family detached with No Secondary Unit	28%	8%	24%	55%	15%	30%
Residential – Single-family detached with One Secondary Unit or Duplex	22%	1%	2%	61%	2%	3%

Residential - Townhouse	22%	1%	2%	68%	2%	5%
Retail and Other Commercial	5%	0%	0%	92%	2%	5%
Road Right-of-Way	20%	4%	11%	69%	12%	25%
Transit, Rail and Other Transportation	17%	0%	1%	66%	1%	2%
Undeveloped and Unclassified	59%	3%	10%	15%	1%	2%
Utility, Communication and Work Yards	20%	0%	0%	60%	0%	1%
Vancouver Fraser Port	3%	0%	0%	89%	1%	2%

Appendix 2: % Potential Planting Area

As part of the analysis on Tree Canopy Cover, possible areas of opportunity for new tree canopy were considered. The additional metric, % Potential Planting Area, is the amount of land that could theoretically be used to increase % Tree Canopy Cover. % Potential Planting Area considers non-tree vegetation (grass, shrubs etc.), soil patches, barren surfaces, and pavement that does not fall on roads, that under the right circumstances, could be modified to increase % Tree Canopy Cover. It is a measure of what is **physically possible**, given the current land cover. **Physically possible** planting area does not necessarily translate into **feasible** planting area. Other factors, such as land use, also determine the feasibility of a site for tree planting. However, this tool is meant to remain general, in consideration that any conversion of land cover/land use types to tree canopy requires site specific assessments by land managers. This tool is intended to support discussions about how much and where land owners, member jurisdictions and Metro Vancouver might be able to increase canopy cover.

As with % Tree Canopy Cover and % Impervious Surfaces, % Potential Planting Area was mapped and quantified for the Metro Vancouver region, and the UCB. The analysis found that an area of 89,667 Ha (27%) of the Metro Vancouver region qualifies as % Potential Planting Area. More specifically, 19% of the Metro Vancouver region was found to be vegetated potential area and 8% is impervious potential area. In the regional core, 78,621 Ha (47%) qualifies as % Potential Planting Area. 34% of the regional core was found to be vegetated potential area and 13% is impervious potential area. Finally, 31,710 Ha (35%) of the UCB was found to be vegetated potential area and 19% is impervious potential area. For each of the three study areas, Figure 16 shows the proportion of existing % Tree Canopy Cover, % Potential Planting Area – vegetated and % Potential Planting Area – Impervious. The pink area of the chart corresponds to the proportion of land that was found to be generally unsuitable for the establishment of new tree canopy (e.g. buildings, roads, other built features).

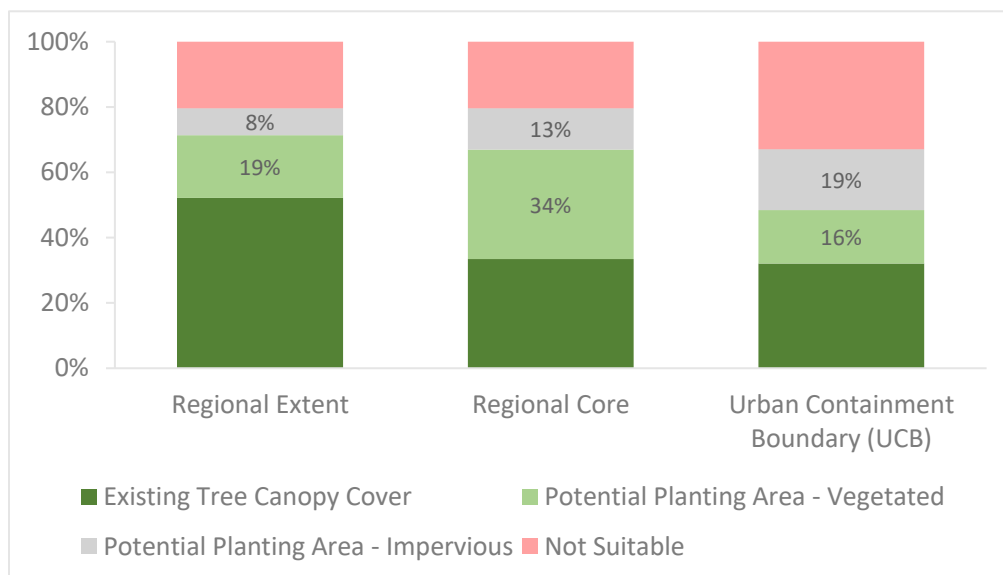


Figure 16: % Potential Planting Area for the Metro Vancouver region and the Urban Containment Boundary.

Figure 17 shows the % Potential Planting Area summarized by census block within the UCB. Beige indicates low % Potential Planting Area (less than 20%) and dark brown indicates high % Potential Planting Area (more than 40%).

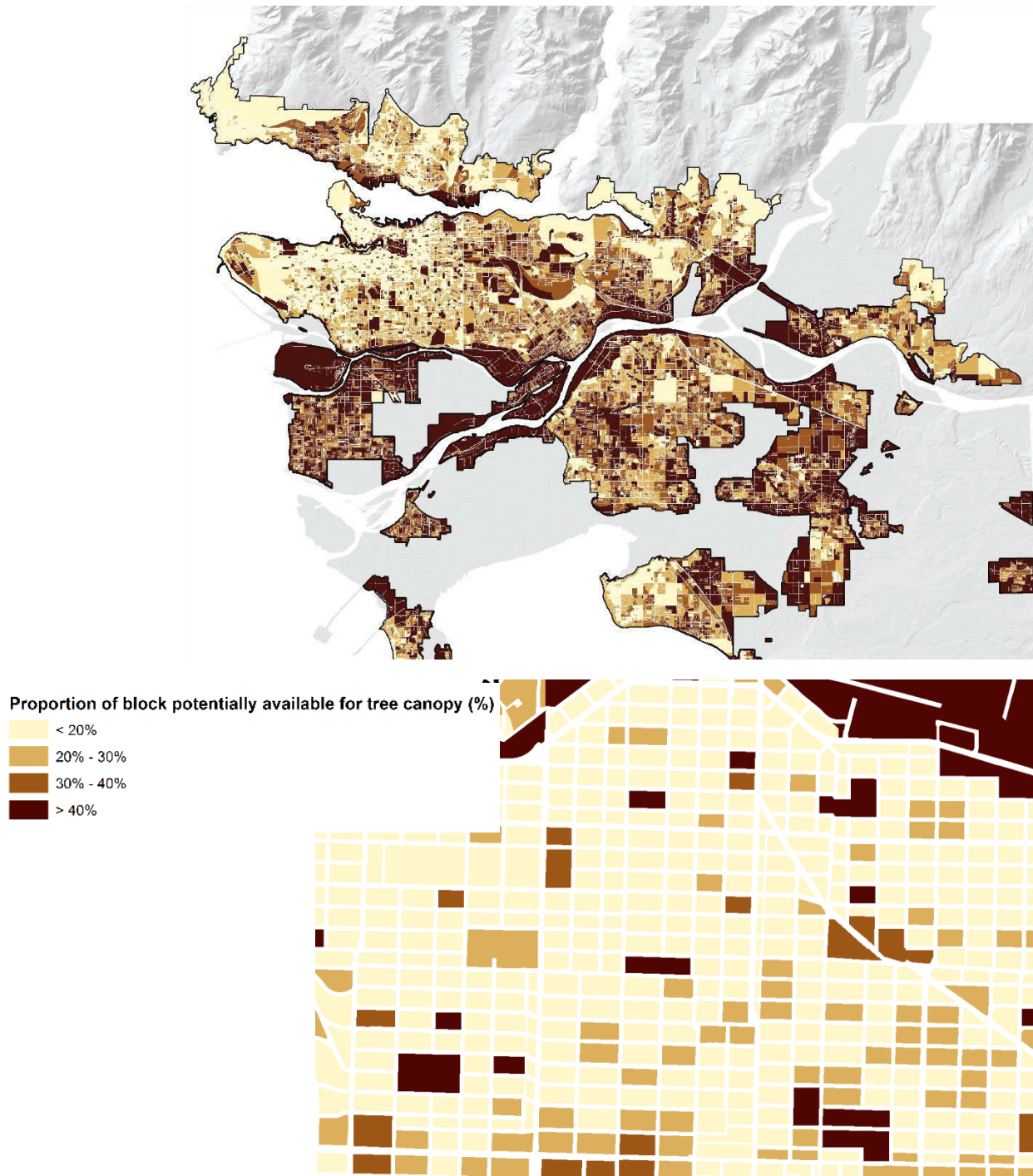


Figure 17: % Potential Planting Area summarized by city block (Urban Containment Boundary)

To: Regional Planning Committee

From: Theresa Duynstee, Senior Planner, Regional Planning

Date: September 13, 2019 Meeting Date: October 11, 2019

Subject: **Study on Applications to the Agricultural Land Commission**

RECOMMENDATION

That the Regional Planning Committee receive for information the report dated September 13, 2019, titled "Study on Applications to the Agricultural Land Commission".

PURPOSE

To inform the Regional Planning Committee and MVRD Board about a new study that will ascertain if approved applications to Agricultural Land Commission (ALC) are beneficial or detrimental to farm use in the Agricultural Land Reserve in Metro Vancouver.

BACKGROUND

A new study is underway by the Institute of Sustainable Food Systems at Kwantlen Polytechnic University (KPU) to determine if successful applications to the ALC for non-farm use and subdivision enhance land for agricultural purposes in the Agricultural Land Reserve. Metro Vancouver has been invited to participate in the study. This report provides a summary of the study and Metro Vancouver's involvement.

APPLICATIONS TO THE AGRICULTURAL LAND COMMISSION

Every year landowners, local governments and provincial agencies apply to the ALC to change land uses in the Agricultural Land Reserve that are not permitted outright in the *Agricultural Land Commission Act* and *Regulations*. These changes are done through an application process as defined under Section 20.1(2) of *Agricultural Land Commission Act (ALC Act)* and are administered by the ALC through an Application Portal.

There are different types of applications that can be submitted to the ALC such as non-farm use or boundary adjustments. The application fee varies depending on the type of application and whether additional costs are incurred by the ALC. The application fee is paid to the ALC and a portion goes to the local government. Information about the application process and requirements are available on the ALC's website (see References).

Administrative Structure of the Agricultural Land Commission

The ALC is an independent administrative tribunal of appointed Commissioners (and staff) who administer the Agricultural Land Reserve throughout the Province. The Commission consists of a Chair and six regional panels. Each panel includes a Vice-Chair and two members. Panel members reside in the regions where they are appointed and make decisions on applications from that region.

Each application is considered on a case-by-case basis by the ALC within the context of the purposes of the ALC. The work of each panel is managed by the ALC Chair and is referred at the Chair's discretion. Some decisions are also made by an Executive Committee comprising the Vice Chair from each regional panel.

How Applications Are Processed by the ALC

The ALC receives applications via the Application Portal and sends a notice to the appropriate local government for their review and to ensure the application information is sufficient for local government staff and the Board or Council to review or make informed recommendations. Local governments can also refer an application to their respective appointed committees for comment (e.g. Agricultural Advisory Committee or an Advisory Planning Commission). Also, if the land is zoned for agriculture or farm use, or if the proposal requires a rezoning, the local government's Board or Council can decide whether to authorize the application to proceed to the ALC. Once the review is done, the local government completes a report and uploads it through the Application Portal. If authorization is not granted, the application process ends and the local government returns a portion of the application fee to the applicant.

During the application review process, the ALC may hold a meeting with the applicant, view the application property and/or refer the application to various agencies for comments and recommendations. The ALC's decision may take several forms, such as: approval of the proposal either as submitted, or with conditions; refusal of the proposal; and / or allowing an alternate proposal. The ALC communicates the reasons for its decisions in writing. The applicant and local government are notified of the finalized decision through the Application Portal and this information becomes publically available.

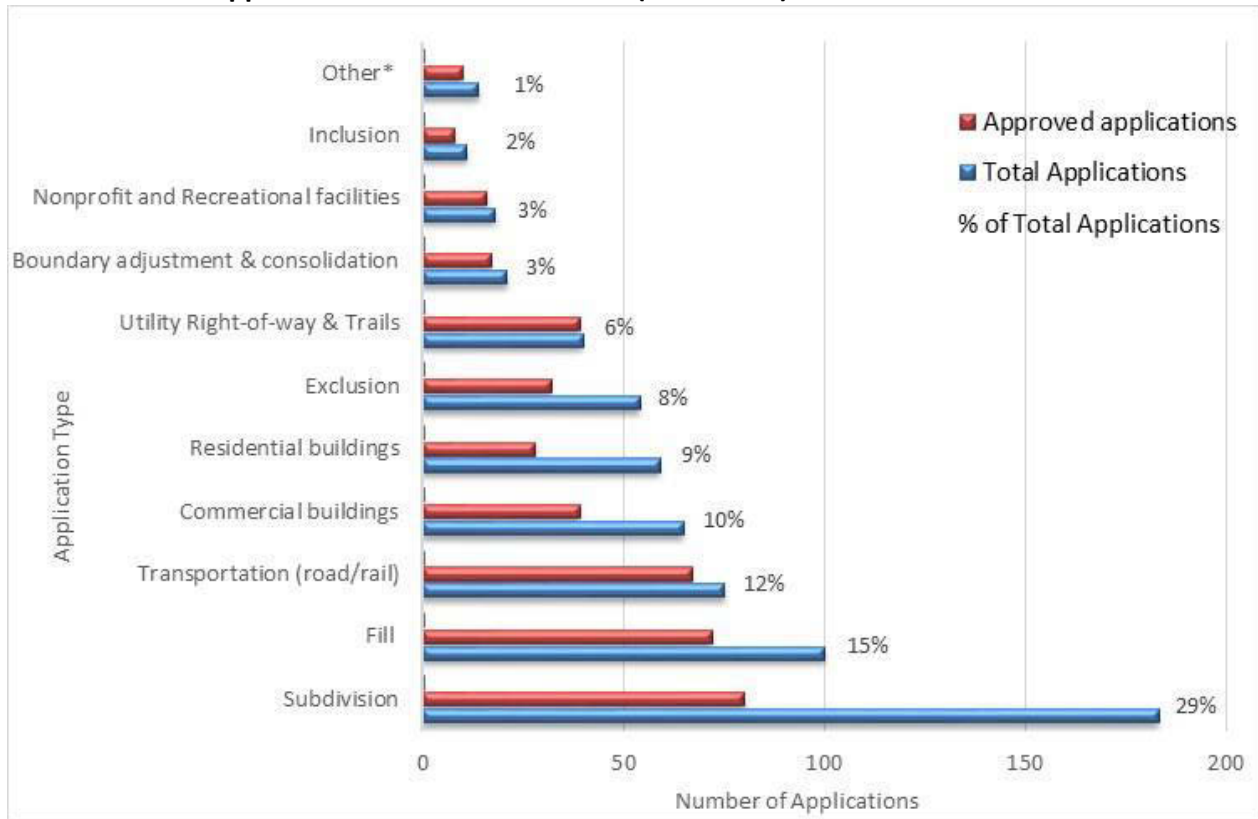
A Summary of ALC Applications (2006-2018)

Staff have compiled a summary of all the 640 applications to the ALC from 2006 to 2018 in the Metro Vancouver region. These applications have been categorized into eleven application types and whether the application was approved or refused. The "other" category includes such applications as communication towers, events and water storage. Table 1 shows a comparison of approved and total applications for each application type as well as the total percent of each type of application.

The reasons for approving an application vary, but some are notable. For example, 5% of the approved subdivisions are in accordance with the ALC's *Homesite Severance Policy*, which allows the original landowner (since 1972) to subdivide a small lot only if there is documented evidence showing a legitimate intention to sell the remainder of the property, and a written commitment that the Homesite is not to be resold for five years, except in the case of estate settlements.

Other conditions for approved non-farm use may be granted for the sole benefit of the applicant and is not transferable to other operators or future land owners, which would require a provision for removal of the non-farm use from the property. In other circumstances fencing may be required to be maintained via a covenant so that future land owners are aware of an obligation or requirement to plant and maintain vegetative buffers to separate farm from neighbouring non-farm activities.

Table 1: All ALC Applications in Metro Vancouver (2006-2018)



The results from the staff analysis are insightful but are not comprehensive. There is no information in these results about the final outcomes from these approved applications and whether the change in land use has resulted in a net benefit to agriculture as proposed in the original applications.

KWANTLEN POLYTECHNIC UNIVERSITY STUDY

A new study is underway by the Institute of Sustainable Food Systems at Kwantlen Polytechnic University (KPU) to determine if successful applications to the ALC for non-farm use and subdivision enhance land for agricultural purposes in the Agricultural Land Reserve. The KPU study intends to address the question: “Do successful non-farm use and subdivision applications support or detract from the farm use of ALR land?”.

The purpose of the study is to:

- review previously submitted and approved non-farm use and subdivision applications (1997-2016) by the ALC within the Agricultural Land Reserve in select, representative Metro Vancouver municipalities; and
- evaluate whether these changes remain as originally approved, and if they have served to enhance or detract from agricultural use of the land.

The research questions are:

1. How many subdivision and non-farm use applications have there been; how many applications were approved; and what was the rationale for approval?
2. What are the long term impacts of these approved applications? Are lands for which applications were approved being used to enhance agriculture or being used for other purposes without any adverse impacts to the Agricultural Land Reserve?

KPU Study Methodology

The study will investigate all approved applications for subdivision and non-farm use and their rationale for approval. The study will include applications in the Cities of Delta, Maple Ridge, Pitt Meadows, Richmond, Surrey and the Township of Langley from 1997 to 2016.

To identify whether the rationale for approval is fulfilled per the stated purpose in the approved application, primary data will be collected using qualitative observational methods. The evaluation of all subject properties approved for subdivision and non-farm will be performed through a windshield survey to attempt to find out if the intended land used exemption is in effect, whether the land is being used for agriculture and if there any other activities on the land.

Benefits to Metro Vancouver

There are several reasons why the results of this study is of value and interest to Metro Vancouver:

- The study focuses on all 6 of the municipalities with the most agricultural land in the region;
- Non-farm uses of the Agricultural Land Reserve are considered the major threat to protecting agricultural land for food production, yet there is no empirical data to understand what types of non-farm uses are most detrimental or if there are long term impacts of permitting a non-farm use in the Agricultural Land Reserve – the study will support Metro 2040 implementation;
- The data and results will help staff assess proposed amendments to *Metro 2040*, and will inform the development of future regional and municipal planning tools or other studies on land use in the region; and
- The resulting data can also be used to address questions relating to edge planning, alienated agricultural land, urban rural conflict areas and what commercial uses may be appropriate in the Agricultural Land Reserve.

ALTERNATIVES

This is an information report. No alternatives are presented.

FINANCIAL IMPLICATIONS

The estimated budget for the KPU study is \$23,000 (include \$11,500 in-kind contributions). KPU has secured funding for the study from five member jurisdictions (\$3,000 each), but additional financial contributions are necessary to undertake the review of ALC applications back to 1997 and to complete the windshield surveys for all six municipalities. \$5,000 is available in the Board approved

2019 Regional Planning budget to provide to support the KPU study. These funds will be reallocated from Regional Planning's agricultural portfolio to support the implementation of Metro 2040

SUMMARY / CONCLUSION

Metro Vancouver is participating in a study being undertaken by Kwantlen Polytechnic University to investigate the outcomes of previously approved non-farm use and subdivision applications to the Agricultural Land Commission. The results will provide insight on how to address regional and municipal agricultural land use planning challenges and can help ensure the long term protection of the Agricultural Land Reserve for food and agricultural production into the future.

References

1. [Agricultural Land Commission - Applications and Decisions](#)
2. [2018-2019 Annual Report Agricultural Land Commission](#)

31039280

To: Regional Planning Committee

From: Heidi Lam, Senior Policy and Planning Analyst, Regional Planning

Date: September 22, 2019 Meeting Date: October 11, 2019

Subject: ***Metro Vancouver 2040: Shaping our Future - 2018 Procedural Report***

RECOMMENDATION

That the MVRD Board receive for information the report dated September 22, 2019, titled “*Metro Vancouver 2040: Shaping our Future - 2018 Procedural Report*”.

PURPOSE

This report conveys the 2018 *Metro Vancouver 2040: Shaping our Future Procedural Report* as required under the *Regional Growth Strategy Procedures Bylaw No. 1148, 2011*.

BACKGROUND

Metro Vancouver 2040: Shaping our Future (Metro 2040), the regional growth strategy, as well as the *Greater Vancouver Regional District Regional Growth Strategy Procedures Bylaw No. 1148, 2011 (RGS Procedures Bylaw)* were adopted by the MVRD Board in July 2011. The *RGS Procedures Bylaw* includes requirements for reporting on operational performance measures associated with *Metro 2040*, including such items as the number of amendments processed and resources required to implement the regional growth strategy.

PROCEDURAL PERFORMANCE REPORTING

Procedural reporting requirements are in addition to, and separate from, reporting on the performance measures listed in Section G of *Metro 2040*, which Metro Vancouver is required to report on annually as per Subsection 452 (1)(b) of the *Local Government Act*.

The *RGS Procedures Bylaw* states:

7. *The Regional Growth Strategy Annual Report shall include a report on those measures set out in Section G of the Regional Growth Strategy.*
8. *Additionally, the Regional Growth Strategy Annual Report shall include a report on the following measures:*
 - a. *Metro Vancouver staff time, expressed in the number of full-time equivalent staff budgeted to administer the Regional Growth Strategy;*
 - b. *The total cost of implementing, managing, monitoring and amending the Strategy for the calendar year, including the cost Metro Vancouver and municipal staff, costs related to referral of requested amendments to the Technical Advisory Committee [now called: Regional Planning Advisory Committee], external consultants, external legal advisors and all other resources;*
 - c. *The number of requested amendments and approved amendments to the Regional Growth Strategy by type;*

- d. *A comparison of items a), b) and c) year over year and pre- and post-adoption of the Regional Growth Strategy: and*
- e. *A record of the timelines to process amendments to the Regional Growth Strategy, including staff, Technical Advisory Committee [now called: Regional Planning Advisory Committee] and Board review.*
- 9. *If requested by an Affected Local Government, Metro Vancouver will make a presentation on the Regional Growth Strategy Annual Report to that Affected Local Government's Council or board, answer any questions that may arise and report back to the Board on information received during the presentation.*

There are a number of different tasks associated with implementing *Metro 2040*, including reviewing Regional Context Statements, preparing supporting implementation documents, conducting policy research and analysis, and processing proposed amendments. Consistent with the *RGS Procedures Bylaw*, the 2018 *Metro Vancouver 2040: Shaping our Future* Procedural Report provides an update on procedural performance measures for 2018.

ALTERNATIVES

This is an information report. No alternatives are provided.

FINANCIAL IMPLICATIONS

Staffing and resources to support the implementation and monitoring of *Metro 2040* are incorporated into the annual budget for Regional Planning approved by the MVRD Board on an annual basis.

SUMMARY / CONCLUSION

This report conveys the *Metro Vancouver 2040: Shaping our Future* 2018 Procedural Report as required under the *Regional Growth Strategy Procedures Bylaw No. 1148, 2011*. The report documents the resources that have been required to implement, administer and amend the regional growth strategy since its adoption to year end 2018.

Staffing and resources required to implement *Metro 2040* include a variety of tasks, such as preparing and reviewing Regional Context Statements, preparing supporting implementation documents, conducting policy research and analysis, and processing proposed amendments. Since the adoption of *Metro 2040* in mid-2011, the number of staff directly associated with regional planning has remained consistent. Total costs have also remained relatively consistent.

In keeping with the *RGS Procedures Bylaw*, Metro Vancouver staff are available to make a presentation on annual regional growth strategy performance monitoring to any affected local government's Council or Board on request, answer any questions that may arise, and report back to the MVRD Board on information received during the presentation(s) if required.

Attachment: *Metro Vancouver 2040: Shaping our Future* 2018 Procedural Report

Metro Vancouver 2040: Shaping our Future
2018 Procedural Report

As required by Greater Vancouver Regional District
Regional Growth Strategy Procedures Bylaw No. 1148, 2011

September 22, 2019

Introduction

Metro Vancouver 2040: Shaping our Future (Metro 2040), the regional growth strategy, and the *Greater Vancouver Regional District Regional Growth Strategy Procedures Bylaw No. 1148, 2011 (RGS Procedures Bylaw)* were both adopted by the Greater Vancouver Regional District (GVRD) Board in July 2011. The *RGS Procedures Bylaw* includes requirements for reporting on procedural performance measures associated with *Metro 2040*, such as the number of amendments processed and resources required to implement the regional growth strategy.

Supporting Work to Implement *Metro 2040*

To advance *Metro 2040* implementation, Metro Vancouver conducts research and undertakes supporting analysis and studies. These publications include *Metro 2040* implementation guidelines to support interpretation and procedures, and specific studies/reports providing technical information, analysis and recommendations on particular *Metro 2040* strategies and actions.

By year-end 2018, eight Implementation Guidelines had been prepared for adopted by the MVRD Board to advance the implementation of *Metro 2040*.

- *Implementation Guideline #1: Regional Context Statements (2012)*. Guidance for municipalities on developing Regional Context Statements
- *Implementation Guideline #2 - Amendments to the Regional Growth Strategy (2012; updated in 2014)*. Detailed explanation of Metro 2040 amendment procedures (should be read with the Regional Growth Strategy Procedures Bylaw)
- *Implementation Guideline #3: What Works: Affordable Housing Initiatives in Metro Vancouver Municipalities (2012)*. Information for municipalities on how to develop Housing Action Plans
- *Implementation Guideline #4: Identifying Frequent Transit Development Areas (2013)*. Information for municipalities on how to Identify Frequent Transit Development Areas, a key tool for transit-oriented development
- *Implementation Guideline #5: Metro Vancouver Industrial Land Protection and Intensification Policies (2014)*. Guidance for municipalities on how to protect and efficiently develop industrial lands
- *Implementation Guideline #6: What Works: Municipal Measures for Sustaining and Expanding the Supply of Purpose-Built Rental Housing (2016)*. Information on municipal measures for sustaining and expanding the supply of purpose-built rental housing along with project profiles.
- *Implementation Guideline #7: Extension of Regional Sewerage Services (2017)*. Information on *Metro 2040* policies and procedures for connection to regional sewerage services in Agricultural and Rural areas of Metro Vancouver.
- *Implementation Guideline #8: Metro Vancouver 2040 Performance Monitoring Guideline (2017)*. Information about *Metro 2040* performance measures and the monitoring and reporting process.

On June 27, 2014, the *Regional Growth Strategy Procedures Amendment Bylaw No. 1206, 2014 (Procedures Bylaw)* was adopted to improve the amendment process. The related *Metro 2040 Implementation Guideline # 2 – Amendments to the Regional Growth Strategy* was also updated in this effort to improve the amendment process.

Progress on the Completion of Regional Context Statements

Per the British Columbia *Local Government Act*, within the first two years following adoption of a regional growth strategy member municipalities are required to submit an updated Regional Context Statements (RCS) that clearly lays out how local plans and aspirations as expressed in Official Community Plans align with the regional objectives laid out in *Metro 2040*. All required RCSs had been accepted by the MVRD Board.

The *Local Government Act* requires that municipalities review the regional context statement at least once every 5 years after acceptance by the Board, and if no amendment is proposed, submit the statement to the Board for its continued acceptance.

Table 1: Status of Regional Context Statements to mid-year 2019

Municipality	Status	Year
Anmore	Accepted	2019
Belcarra	Accepted	2011
Burnaby	Accepted	2019
Coquitlam	Accepted	2013
Delta	Accepted	2013
Langley City	Accepted	2013
Langley Township	Accepted	2016
Lions Bay	Accepted	2016
Maple Ridge	Accepted	2018
New Westminster	Accepted	2017
North Vancouver City	Accepted	2015
North Vancouver District	Accepted	2014
Pitt Meadows	Accepted	2019
Port Coquitlam	Accepted	2013
Port Moody	Accepted	2015
Richmond	Accepted	2012
Surrey	Accepted	2014
Tsawwassen First Nation	Not Required	
Vancouver	Accepted	2013
West Vancouver	Accepted	2018
White Rock	Accepted	2017
University of British Columbia*	Approved by Province	2015
University Endowment Lands*	Not Required	

*within Electoral Area A

Metro 2040 Amendments

In 2018, the MVRD Board processed two Type 3 Minor Amendment requests from member jurisdictions to amend regional land use designations. The Type 3 Minor Amendment from City of Port Moody for the Flavelle site was approved on May 25, 2018, and the Type 3 Minor Amendment from Township of Langley for the Williams Neighbourhood Plan was approved on September 28, 2018 (please see Appendix 1 for further information).

Table 2 shows the number and type of requested *Metro 2040* amendments, and those approved for the years 2011-2018 by calendar year.

Table 2: Metro 2040 Bylaw Amendments Requested, Approved and Declined, 2011-2018

	2011	2012	2013	2014	2015	2016	2017	2018	Total
Requested Amendments									
Type 1	2	-	-	-	-	-	-	-	2
Type 2	1	1	2	1	-	2	1	-	8
Type 3	4	-	3	4	2	2	2	2	19
Total	7	1	5	5	2	4	3	2	29
Approved Amendments									
Type 1	-	1	-	-	-	-	-	-	1
Type 2	-	-	1	1	-	-	1	-	3
Type 3	4	-	2	1	3	-	3	2	15
Total	4	1	3	2	3	0	4	2	19
Declined Amendments									
Type 1	1	-	-	-	-	-	-	-	1
Type 2	1	-	2	-	-	-	-	1	4
Type 3	-	-	1	2	-	-	-	-	3
Total	2	0	3	2	0	0	0	1	8

The Type 3 Minor Amendments were processed as part of the regular work program of Metro Vancouver's Regional Planning and Electoral Area Services division, with no additional resources required to complete this work. Type 2 Minor Amendments require a regional public hearing and, as such, there are additional costs associated with organizing, advertising and holding the meeting.

The average processing time for approved amendment requests between 2011 and 2018 was **30** weeks. In 2012, a Type 1 amendment requested by the City of Coquitlam which required approval from each member municipality was initiated just after the adoption of the regional growth strategy, and took 78 weeks to process. If this outlier is removed from the inventory of amendments, the average processing time drops to **27** weeks, and includes review by the Regional Planning Advisory Committee, review by the Regional Planning Committee, initiation of an early readings of an associated amendment bylaw from the Board, a notification period to allow for affected local government comment, and final consideration of the amendment bylaw by the Board. The key milestones and associated timeline for *Metro 2040* amendments to year-end 2018 are provided in Appendix 1.

Metro 2040 Implementation Costs and Staffing

Between 2011 and year-end 2018, *Metro 2040* was primarily supported by Regional Planning and Electoral Area Services staff and resources, which includes financial resources for planning staff as well as other resources such as consulting and data acquisition. Regional Planning staff also work on and support initiatives throughout the organization.

The Regional Planning Budget is adopted annually by the MVRD Board. Information regarding the 2018 budget for staffing, consulting and data acquisition associated with the development, administration, implementation and monitoring of *Metro 2040* can be found in Report G4.1 titled “MVRD 2019 Budget and 2019 – 2023 Financial Plan and Five Year Bylaw 1280” at:

http://www.metrovancouver.org/boards/GVRD/RD_2018-Oct-26_AGE.pdf

Previous year budgets can also be found on the Metro Vancouver website.

Appendix 1: Summary of Processed Amendments to Metro Vancouver 2040: Shaping our Future, 2011-2018

Amendment Type and Bylaw Number	Municipality	Amendment Request Description	Date of Amendment Request Letter from Municipality	Date Considered by RPAC ¹	Date Considered by Regional Planning Committee ²	Date Bylaw Initiated/ Referred by MVRD Board	Date Bylaw Considered by MVRD Board for Initial Readings	Date Bylaw Considered by MVRD Board for Adoption	Total Processing Time (Weeks)
Type 3 Bylaw No. 1150, 2011	City of Richmond	Land Use Designation Amendment: General Urban to Conservation and Recreation (3 sites totaling 149 ha)	Mar 2, 2011	Sept 6, 2011	Sept 16, 2011	Sept 23, 2011	Oct 28, 2011	Oct 28, 2011	34
	Tsawwassen First Nation	Text Amendment (Table A.1): Revise growth projections for the TFN	Mar 7, 2011	Sept 6, 2011	Sept 16, 2011	Sept 23, 2011	Oct 28, 2011	Oct 28, 2011	33
	District of West Vancouver	Overlay Amendment: Extend Special Study Area (1 site designated General Urban, 679 ha)	Mar 8, 2011	Sept 6, 2011	Sept 16, 2011	Sept 23, 2011	Oct 28, 2011	Oct 28, 2011	33
		Text Amendment (Section 6.12.5 Special Study Areas): acknowledge inclusion of revised Special Study Area for West Vancouver	Mar 8, 2011	Sept 6, 2011	Sept 16, 2011	Sept 23, 2011	Oct 28, 2011	Oct 28, 2011	
	City of Coquitlam	Land Use Designation Amendment: General Urban to Conservation & Recreation (numerous sites totaling 459 ha)	Mar 22, 2011	Sept 6, 2011	Sept 16, 2011	Sept 23, 2011	Oct 28, 2011	Oct 28, 2011	31
Type 1 Bylaw No. 1160, 2012	City of Coquitlam	Text Amendment (Section 6.3.4 b): Remove phrase, "Conservation and Recreation lands utilized for commercial extensive recreation facilities"	Mar 22, 2011	Sept 6, 2011	Sept 16, 2011	Sept 23, 2011	Mar 30, 2012	Sept 21, 2012	78
Type 1 Did Not Proceed	District of North Vancouver	Process Amendment: Amend the RGS to require a 2/3 majority vote for Conservation & Recreation lands to be converted to Agricultural land and then Industrial lands in two steps conversion	Mar 22, 2011	Sept 6, 2011	Sept 16, 2011	Sept 23, 2011	Sept 23, 2011: Board declined amendment request; did not proceed to bylaw readings. Issue addressed in RGS Procedures Amendment Bylaw No. 1206, 2014 and <i>Implementation</i>		26

¹ Regional Planning Advisory Committee (previously named Technical Advisory Committee)

² Previously named the regional Planning and Agriculture Committee

³ Previously named the Greater Vancouver Regional District (GVRD)

Appendix 1: Summary of Processed Amendments to Metro Vancouver 2040: Shaping our Future, 2011-2018

Amendment Type and Bylaw Number	Municipality	Amendment Request Description	Date of Amendment Request Letter from Municipality	Date Considered by RPAC ¹	Date Considered by Regional Planning Committee ²	Date Bylaw Initiated/ Referred by MVRD Board	Guideline # 2 – Amendments to the RGS		Total Processing Time (Weeks)
							Date Bylaw Considered by MVRD Board for Initial Readings	Date Bylaw Considered by MVRD Board for Adoption	
Type 2 Did Not Proceed	District of North Vancouver	Overlay Amendment: Designate Lower Lynn as a Municipal Town Centre	Mar 22, 2011	Sept 6, 2011	Sept 16, 2011	Sept 23, 2011	Sept 23, 2011: Board declined amendment request; did not proceed to bylaw readings. Subsequently identified as a Frequent Transit Development Area in the 2014 RCS.		26
Type 2 Bylaw No. 1168, 2012	Village of Anmore	Land Use Designation Amendment: Rural to General Urban and extend the Urban Containment Boundary (1 site, 2 ha)	Feb 29, 2012	Feb 24, 2012	May 4, 2012	Mar 30, 2012	May 25, 2012	Jul 27, 2012	21
Type 3 Bylaw No. 1185, 2013	City of Port Moody	Overlay Amendment: Create 3 Special Study Areas (2 sites designated Industrial totaling 397 ha; 1 site designated General Urban, 70 ha)	Jan 30, 2013	Mar 22, 2013	Apr 5, 2013 & Jul 5, 2013	Apr 26, 2013	Jul 26, 2013	Jul 26, 2013	25
		Text Amendment (Section 6.12.5 Special Study Areas): to acknowledge inclusion of revised Special Study Area for the City of Port Moody	Jan 30, 2013	Mar 22, 2013	Apr 5, 2013 & Jul 5, 2013	Apr 26, 2013	Jul 26, 2013	Jul 26, 2013	25
Type 2 Did Not Proceed	Corporation of Delta	Land Use Designation Amendment (MK Delta Lands): Conservation and Recreation to General Urban and expand the Urban Containment Boundary	Jun 12, 2013	Jun 19, 2013	Jul 5, 2013	Jul 26, 2013	On hold at the request of the Corporation of Delta (Submitted new amendment request on Jan 29, 2019)		n/a
Type 2 Did Not Proceed	Township of Langley	Land Use Designation Amendment (North Murrayville and Hendricks): Agricultural to General Urban	Jun 24, 2013	Jun 19, 2013	Jul 5, 2013	Jul 26, 2013	Oct 11, 2013: Board declined the RGS amendment request; did not proceed with bylaw readings.		16

¹ Regional Planning Advisory Committee (previously named Technical Advisory Committee)

² Previously named the regional Planning and Agriculture Committee

³ Previously named the Greater Vancouver Regional District (GVRD)

Appendix 1: Summary of Processed Amendments to Metro Vancouver 2040: Shaping our Future, 2011-2018

Amendment Type and Bylaw Number	Municipality	Amendment Request Description	Date of Amendment Request Letter from Municipality	Date Considered by RPAC¹	Date Considered by Regional Planning Committee²	Date Bylaw Initiated/ Referred by MVRD Board	Date Bylaw Considered by MVRD Board for Initial Readings	Date Bylaw Considered by MVRD Board for Adoption	Total Processing Time (Weeks)
Type 3 Did Not Proceed	Township of Langley	Land Use Designation Amendment (Highway #1 at 200th Street): Mixed Employment to General Urban	Jun 24, 2013	Jun 19, 2013	Jul 5, 2013	Jul 26, 2013	Oct 11, 2013: Board declined the RGS amendment request; did not proceed with bylaw readings.		16
Type 3 Bylaw No. 1207, 2014	City of Surrey	Land Use Designation Amendment (Central Newton Cultural Commercial District): Industrial to Mixed Employment (1 site, 6.5 ha)	May 2, 2014	May 22, 2014	June 6, 2014	Jun 27, 2014	Jun 27, 2014	Sept 19, 2014	20
Type 2 Bylaw No. 1203, 2014	Corporation of Delta	Land Use Designation Amendment (Southlands): Agricultural to General Urban and extend the Urban Containment Boundary (1 site, 59.7 ha); Agricultural to Conservation and Recreation (1 site, 42.4 ha)	Jan 14, 2014	Feb 21, 2014	Mar 7, 2014	Mar 28, 2014	Mar 28, 2014	Jun 27, 2014	23
Type 3 Bylaw No. 1209, 2014	City of Port Moody	Land Use Designation Amendment (Moody Centre Transit Oriented Development Area and Murray Street Boulevard Area): Mixed Employment and Industrial to General Urban (1 site, 8.3 ha)	Jun 2, 2014	June 20, 2014	July 4, 2014	Jul 11, 2014	Jul 11, 2014	May 15, 2015	49
Type 3 Did Not Proceed	City of Port Moody	Land Use Designation Amendment (Andres Wine Site): Industrial to General Urban	Jun 2, 2014	June 20, 2014	July 4, 2014	Jul 11, 2014	July 11, 2014: Board declined the RGS amendment request; did not proceed with bylaw readings.		6
Type 3 Did Not Proceed	City of Port Moody	Land Use Designation Amendment (Mill and Timber Site): Industrial to General Urban (1 site)	Jun 2, 2014	June 20, 2014	July 4, 2014	Jul 11, 2014	July 11, 2014: Board declined the RGS amendment request; did not proceed with bylaw readings.		6

¹ Regional Planning Advisory Committee (previously named Technical Advisory Committee)

² Previously named the regional Planning and Agriculture Committee

³ Previously named the Greater Vancouver Regional District (GVRD)

Appendix 1: Summary of Processed Amendments to Metro Vancouver 2040: Shaping our Future, 2011-2018

Amendment Type and Bylaw Number	Municipality	Amendment Request Description	Date of Amendment Request Letter from Municipality	Date Considered by RPAC¹	Date Considered by Regional Planning Committee²	Date Bylaw Initiated/ Referred by MVRD Board	Date Bylaw Considered by MVRD Board for Initial Readings	Date Bylaw Considered by MVRD Board for Adoption	Total Processing Time (Weeks)
Type 3 Bylaw No. 1222, 2015	Township of Langley	Land Use Designation Amendment (2 adjacent sites in the Latimer area): Mixed Employment to General Urban (1 site, 1 ha), and General Urban to Mixed Emp. (1 site, 7.5 ha)	April 2, 2015	May 1, 2015	May 22, 2015	June 12, 2015	June 12, 2015	Sept 4, 2015	22
Type 3 Bylaw No. 1223, 2015	Metro Vancouver (North Vancouver District, Anmore, Surrey, New Westminster, North Vancouver City, West Vancouver, and Port Moody)	Incorporate changes stemming from 7 GVRD board accepted RCS. Amendment includes revisions to regional land use designation boundaries, the addition of Frequent Transit Development Areas (FTDAs), and local centres. The proposed amendment also includes updates to the Metro 2040 Appendix A, Table A-1: Population, Dwelling Unit and Employment Projections for Metro Vancouver Sub regions and Municipalities.	n/a	Jun 5, 2015	Jul 10, 2015	Jul 31, 2015	Jul 31, 2015	Oct 30, 2015	21
Type 2 Did not Proceed	Corporation of Delta	Land Use Designation Amendment (Ladner Trunk Road): Agricultural to Rural (1 site, 0.23 ha)	May 27, 2016	n/a	Jul 15, 2016	Jul 29, 2016	Jul 29, 2016: Board determined the proposed RGS amendment request is not required		9
Type 2 Bylaw No. 1236, 2016	Metro Vancouver	Text Amendment: Update the policy provisions regarding the extension of regional sewerage services, and adopt associated implementation guidelines #7, Extension of Regional Sewerage Services.	n/a	n/a	Sept 9, 2016	Sept 23, 2016	Sept 23, 2016	Apr 28, 2017	33

¹ Regional Planning Advisory Committee (previously named Technical Advisory Committee)

² Previously named the regional Planning and Agriculture Committee

³ Previously named the Greater Vancouver Regional District (GVRD)

Appendix 1: Summary of Processed Amendments to Metro Vancouver 2040: Shaping our Future, 2011-2018

Amendment Type and Bylaw Number	Municipality	Amendment Request Description	Date of Amendment Request Letter from Municipality	Date Considered by RPAC¹	Date Considered by Regional Planning Committee²	Date Bylaw Initiated/ Referred by MVRD Board	Date Bylaw Considered by MVRD Board for Initial Readings	Date Bylaw Considered by MVRD Board for Adoption	Total Processing Time (Weeks)
Type 3 Bylaw No. 1237, 2016	Metro Vancouver	Text Amendment (Appendix A Table A.2): update figures on 10 years regional and municipal household growth projections by tenure.	n/a	Sept 8, 2016	Oct 14, 2016	Oct 28, 2016	Oct 28, 2016	Apr 28, 2017	33
Type 3 Bylaw No. 1243, 2017	Metro Vancouver	Text Amendment (Schedule G): update and reduce 55 performance measures to 15 key summary measures. The reduced number of measures facilitates simpler and more useful annual reporting.	n/a	Nov 18, 2016	Mar 10, 2017	Mar 31, 2017	Mar 31, 2017	Jul 28, 2017	20
Type 3 Bylaw No. 1246, 2017	Metro Vancouver (Langley Township, Surrey, and North Vancouver City)	Incorporate land use designation and overlay map revisions stemming from 3 MVRD Board accepted RCS amendments	n/a	Jun 23, 2017	Jun 9, 2017	Jun 23, 2017	Jun 23, 2017	Oct 27, 2017	18
Type 3 Bylaw No. 1259, 2018	City of Port Moody	Land Use Designation Amendment (Flavelle Mill Site): Industrial to General Urban (12.7 ha), removal of special study area	Sep 15, 2017	Nov 17, 2017	Feb 2, 2018	Feb 23, 2018	Feb 23, 2018	May 25, 2018	36
Type 2 Did Not Proceed	City of Surrey	Land Use Designation Amendment (Hazelmere): Rural to General Urban, 23.7 ha, extension of UCB	Oct 23, 2017	Nov 17, 2017	Feb 2, 2018	Feb 23, 2018	Mar 23, 2018: Board declined the RGS amendment request; did not proceed with bylaw readings.		22

¹ Regional Planning Advisory Committee (previously named Technical Advisory Committee)

² Previously named the regional Planning and Agriculture Committee

³ Previously named the Greater Vancouver Regional District (GVRD)

Appendix 1: Summary of Processed Amendments to Metro Vancouver 2040: Shaping our Future, 2011-2018

Amendment Type and Bylaw Number	Municipality	Amendment Request Description	Date of Amendment Request Letter from Municipality	Date Considered by RPAC¹	Date Considered by Regional Planning Committee²	Date Bylaw Initiated/ Referred by MVRD Board	Date Bylaw Considered by MVRD Board for Initial Readings	Date Bylaw Considered by MVRD Board for Adoption	Total Processing Time (Weeks)
Type 3 Did Not Proceed	City of Surrey	Land Use Designation Amendment (South Campbell Heights): Rural & Special Study Area (235 ha) to General Urban (143 ha), Mixed Emp (37 ha), Con Rec (55 ha) & extension of UCB; Mixed Emp (22.4 ha) to Con Rec (16.4 ha), General Urban (6 ha); Rural & Special Study Area (12 ha) to Agricultural & ALR	Jan 16, 2018	Apr 20, 2018	May 4, 2018	May 25, 2018	May 25, 2018: Board referred the amendment back to City of Surrey to consider an alternative amendment.		18
Type 3 Bylaw No. 1266, 2018	Township of Langley	Land Use Designation Amendment (Williams Neighbourhood Plan): Mixed Employment to General Urban (4 ha), General Urban to Mixed Emp (2 ha)	May 8, 2018	May 11, 2018	Jun 8, 2018	Jun 22, 2018	Jun 22, 2018	Sep 28, 2018	20
Type 3 Under Review	Corporation of Delta	Land Use Designation Amendment (MK Delta Lands): Agricultural to Industrial (62.7 ha) and extension of UCB	Jan 29, 2019	Mar 15, 2019	Apr 5, 2019	May 24, 2019	Under review		
Type 3 Under Review	Metro Vancouver (Vancouver, Anmore, and New Westminster)	Incorporate land use designation amendment and addition of new FTDA's stemming from 3 MVRD Board accepted RCS amendments	n/a	Apr 12, 2019	May 3, 2019	May 24, 2019	Under review		

¹ Regional Planning Advisory Committee (previously named Technical Advisory Committee)

² Previously named the regional Planning and Agriculture Committee

³ Previously named the Greater Vancouver Regional District (GVRD)

To: Regional Planning Committee

From: Heather McNell, Director of Regional Planning and Electoral Area Services
Planning and Environment Department

Date: September 25, 2019 Meeting Date: October 11, 2019

Subject: **Manager's Report**

RECOMMENDATION

That the Regional Planning Committee receive for information the report dated September 25, 2019, titled "Manager's Report".

Regional Planning Committee 2019 Work Plan

The attachment to this report sets out the Committee's Work Plan for 2019. The status of work program elements is indicated as pending, in progress, ongoing or complete. The listing is updated as needed to include new issues that arise, items requested by the Committee, and changes to the schedule.

Attachment

Regional Planning Committee 2019 Work Plan

Regional Planning Committee 2019 Work Plan

1 st Quarter	Status
Long Range Population, Land Use and Transportation Scenarios – Update (Feb)	Complete
Transit Oriented Affordable Housing Project (TOAH) Phase 2: Revolving Loan Fund, Policy Tools – Draft Findings (Feb)	Complete
Transit Oriented Affordable Housing Project (TOAH) Phase 3: Scoping	Complete
Lougheed Corridor Study – Final Report (Mar)	Complete
Regional Parking Study – Final Report and Recommendations (Mar)	Complete
Office in Urban Centres (2018 Update) – Final Report (Mar)	Complete
Walkability Surface Dashboard	Complete
2016 Agricultural Land Use Inventory - Results	In Progress
Food Flow – Agri-food Distribution in Metro Vancouver – Update	Complete
<i>Metro 2040</i> – Environment Policy Review – Project Initiation (Mar)	Complete
<i>Metro 2040</i> – Proposed Amendments and Regional Context Statements	Complete
2nd Quarter	
Long Range Population, Land Use and Transportation Scenarios – Final Report (Apr)	Complete
Transit Oriented Affordable Housing Project (TOAH) Phase 2: Revolving Loan Fund, Policy Tools – Final Report	Complete
Health and Economic Benefits of Walkability – Final Report	Complete
Equity in Regional Planning – Project Scope	Complete
Urban Centres and Corridors Dashboard	Complete
<i>Metro 2040</i> – Agriculture Policy Review – Progress to date	Complete
<i>Metro 2040</i> – Proposed Amendments and Regional Context Statements	Complete
3rd Quarter	
Urban Centres and FTDA Policy Review - Update	Complete
Transit Oriented Affordable Housing Project (TOAH) Phase 3: Progress Update	Complete
<i>Metro 2040</i> - Industrial & Mixed Employment Lands Policy Review: Project Initiation	Pending
Regional Food System Action Plan - Update	Pending
<i>Metro 2040</i> – Environment Policy Forum - Results	Complete
<i>Metro 2040</i> – Proposed Amendments and Regional Context Statements	Complete
30-year Financial Plan – Regional Planning Service	In Progress
4th Quarter	
Annual Budget and 5-year Financial Plan	In Progress
Urban Centres and FTDA Policy Review – Final Report	In Progress
Transit Oriented Affordable Housing Project (TOAH) Phase 3: Draft findings	Pending
Equity in Growth Management – Draft Report	In Progress
<i>Metro 2040</i> – Industrial & Mixed Employment Lands Policy Review – Update	Pending
<i>Metro 2040</i> – Environment Policy Review – Update	In Progress
<i>Metro 2040</i> – Agriculture Policy Review – Update	In Progress
Food Flow – Agri-food Distribution in Metro Vancouver – Final Report	Pending
<i>Metro 2040</i> – Proposed Amendments and Regional Context Statements	In Progress