AGENDA

1. AGENDA

1.1 March 15, 2019 Meeting Agenda
That the Regional Planning Advisory Committee adopt the agenda for its regular
meeting scheduled for March 15, 2019 as circulated.

2. MINUTES

2.1 February 15, 2019 Meeting Minutes
That the Regional Planning Committee adopt the minutes of its regular meeting held
February 15, 2019 as circulated.

3. INVITED PRESENTATIONS

3.1 Tracey Olsen, Ministry of Municipal Affairs and Housing
Subject: Effects of Building Act on City Bylaws that Regulate Recycling Storage Space
and Access Requirements

4. REPORTS

4.1 RPAC Environment Subcommittee – Review of Accomplishments in 2018, Terms of
Reference and Work Plan Priorities for 2019
Designated Speaker: Rodney Stott, Chair, RPAC Environment Subcommittee
That the Regional Planning Advisory Committee:
   a) receive for information the report dated February 28, 2019, titled “RPAC
      Environment Subcommittee – Review of Accomplishments in 2018, Terms of
      Reference and Work Plan Priorities for 2019”; and
   b) receive for information the 2019 RPAC Environment Subcommittee Terms of
      Reference.
4.2 Metro 2040 Environment Policy Review – Scope and Process  
*Designated Speaker: Laurie Bates-Frymel, Senior Planner, Regional Planning*  

4.3 TOAH Phase II  
*Verbal Update*  
Designated Speakers: Raymond Kan, Senior Planner, Regional Planning  
Ian Carlton, Project Director, ECONorthwest  
Jay Wollenberg, Consultant, Wollenberg Munro Consulting Ltd.

4.4 Regional Parking Study  
*Verbal Update*  
Designated Speaker: Raymond Kan, Senior Planner, Regional Planning

4.5 Metro Vancouver 2040: Shaping our Future Land Use Designation Amendment Request from the City of Delta – MK Delta  
*Designated Speakers: James Stiver, Division Manager of Growth Management and Transportation, Regional Planning, and Gord Tycho, Senior Planner, Regional Planning*  
That the Regional Planning Advisory Committee receive for information the report dated March 4, 2019, titled “Equity in Regional Growth Management – Project Initiation”.

4.6 Equity in Regional Growth Management – Project Initiation  
*Designated Speakers: Erin Rennie, Senior Planner, Raymond Kan, Senior Planner, Jessica Hayes, Planner, Regional Planning*  
That the Regional Planning Advisory Committee receive for information the report dated March 1, 2019, titled “Lougheed Corridor Land Use and Monitoring Study – Final Report”.

4.8 RGS Update  
*Verbal Update*  
Designated Speaker: Heather McNell, Director, Regional Planning and Electoral Area Services, Planning and Environment Department

4.9 Long Range Growth Scenarios – Update  
*Verbal Update*  
Designated Speaker: Sean Tynan, Planner, Regional Planning
4.10 GVS&DD Development Cost Charge Waiver or Reduction for Not-for-Profit Rental Housing – 2018 Annual Report  
**Designated Speaker: Jessica Hayes, Planner, Regional Planning**  
That the Regional Planning Advisory Committee receive for information the report dated February 22, 2019, titled “GVS&DD Development Cost Charge Waiver or Reduction for Not-for-Profit Rental Housing – 2018 Annual Report”.

4.11 TransLink Update  
**Verbal Update**  
Designated Speaker: Joanna Brownell, Manager, Partner Planning, TransLink

4.12 Housing Issues  
**Verbal Update**  
Designated Speaker: James Stiver, Division Manager of Growth Management and Transportation, Regional Planning  
RPAC Members

4.13 Round Table and Discussion  
**Verbal Updates and Discussion**  
RPAC Members

4.14 Manager’s Report  
**Designated Speaker: James Stiver, Division Manager of Growth Management and Transportation, Regional Planning**  
That the Regional Planning Advisory Committee receive for information the report dated March 1, titled “Manager’s Report”.

5. INFORMATION ITEMS

5.1 January 17, 2019 Housing Subcommittee Meeting Minutes

5.2 December 6, 2018 Social Issues Subcommittee Meeting Minutes

5.3 November 22, 2019 Environment Subcommittee Meeting Minutes

5.4 February 8, 2019 Regional Food System Action Plan Meeting Minutes

6. OTHER BUSINESS

7. ADJOURNMENT  
That the Regional Planning Advisory Committee adjourn/conclude its regular meeting of March 15, 2019.
### Membership:

#### MUNICIPAL MEMBERS:

- Smith, Jason - Anmore Village
- Dysart, Lorna - Belcarra Village
- Martin, Daniel - Bowen Island
- Garnett, Lee-Ann - Burnaby
- Merrill, Andrew - Coquitlam
- Sangret, Marcy - Delta
- Pachcinski, Marcin - Electoral Area A
- Minchuk, Gerald - Langley City
- Seifi, Ramin - Langley Township
- De Jong, Peter - Lions Bay Village
- Carter, Christine - Maple Ridge
- Stiver, James - Metro Vancouver
- Adin, Emilie - New Westminster
- Epp, Michael - North Vancouver City
- Milburn, Dan - North Vancouver District
- Grant, Lisa - Pitt Meadows
- Little, Jennifer - Port Coquitlam
- Boel, Andre - Port Moody
- Konkin, Barry – Richmond
- Heer, Preet - Surrey
- Brownell, Joanna - TransLink
- Shaikh, Komal - Tsawwassen First Nation
- Robertson, Chris - Vancouver
- Bailey, Jim – West Vancouver District
- Isaak, Carl - White Rock
MEMBERS PRESENT:
Chair, Marcy Sangret, City of Delta
Vice Chair, Lee-Ann Garnett, City of Burnaby
Emilie Adin, City of New Westminster
Joanna Brownell, TransLink
Michael Epp, City of North Vancouver
Preet Heer, City of Surrey
Carl Isaak, City of White Rock
Marcin Pachcinski, Electoral Area A
Chris Robertson, City of Vancouver
Meredith Seeton, City of Port Coquitlam (alternate)
Komal Shaikh, Tsawwassen First Nation
James Stiver, Metro Vancouver

ASSOCIATE MEMBERS PRESENT:
Chris Bishop, Port of Vancouver (alternate)
James Lu, Vancouver Coastal Health
Kamelli Mark, Agricultural Land Commission (alternate)
Grant Miller, University of British Columbia
Eric Nicholls, Ministry of Municipal Affairs and Housing (by phone commencing at 11:35 a.m.)

MEMBERS ABSENT:
Jim Bailey, District of West Vancouver
Andre Boel, City of Port Moody
Christine Carter, Maple Ridge
Peter DeJong, Village of Lions Bay
Lorna Dysart, Village of Belcarra
Lisa Grant, City of Pitt Meadows
Barry Konkin, City of Richmond
Daniel Martin, Bowen Island Municipality
Andrew Merrill, City of Coquitlam
Dan Milburn, District of North Vancouver
Gerald Minchuk, City of Langley
Ramin Seifi, Township of Langley
Jason Smith, Village of Anmore

ALSO PRESENT:
Carrie Peacock, Recording Secretary
1. AGENDA

1.1 February 15, 2019 Regular Meeting Agenda

It was MOVED and SECONDED
That the Regional Planning Advisory Committee adopt the agenda for its regular meeting scheduled February 15, 2019.

CARRIED

2. MINUTES

2.1 January 18, 2019 Regular Meeting Minutes

It was MOVED and SECONDED
That the Regional Planning Advisory Committee adopt the minutes of its regular meeting held January 18, 2019.

CARRIED

3. INVITED PRESENTATIONS

3.1 Raymond Kwong, Director, Major Projects, BC Housing

Raymond Kwong, BC Housing, provided a presentation titled, “BC Housing New Funding Programs”, and highlighted:

- BC Housing’s role is to create and facilitate affordable housing;
- Provincial housing programs: BuildingBC, Homes for BC and HousingHub;
- Government-assisted housing, including: emergency shelters; transitional, supported and assisted living housing; etc.;
- The province’s $7 billion investment commitment in housing over 10 years, including $116 million over three years to expand the rental assistance program;
- Details regarding programs aimed at middle income households, including rental and affordable home ownership;
- The Affordable Home Ownership Program (AHOP), delivered by BC Housing through HousingHub, is intended to:
  - Increase the supply and range of affordable home ownership options for eligible households across BC;
  - Support transition to homeownership; and
  - Enable homeowners to build equity.
- It was noted that municipalities would need to enter into Partnering Agreements with BC Housing.
Clarifications were provided on program eligibility, mortgage arrangements, community benefits and the involvement of municipalities and developers to support the success of AHOP.

Discussion ensued on:
- Difficulties applying AHOP without municipal concessions and collaboration;
- Approved AHOP projects in Port Moody and Colwood;
- The vetting of purchasers by the developer, based on criteria outlined in BC Housing’s application form (including income testing);
- The vetting of tenants by the landlord, based on criteria outlined in BC Housing’s application form;
- The intent that AHOP homes would not exceed a market value of $700,000.

Members were invited to contact rkwong@bchousing.org for further information regarding BC Housing’s new funding programs.

3.2 Eric Aderneck, Planning Consultant

Eric Aderneck, Planning Consultant, presented his report titled “Office Development in Metro Vancouver’s Urban Centres”. He reviewed the report’s intent to: explore factors that influence regional scale office development and tenant occupancy decisions; and, identify challenges and opportunities for office potential in Metro Vancouver’s urban centres.

Mr. Aderneck’s presentation also covered:
- Declining office vacancies and the scale of office development in downtown Vancouver;
- The results of interviews with key stakeholders (i.e. office developers, brokers, municipal staff etc.), which contributed to the report;
- The trend towards open-concept offices and co-working spaces;
- Actions to consider, including:
  - Streamlining development approval processes
  - Encouraging mixed-use projects with an office component
  - Allowing “general” (non-specific) office use within zoning
  - Municipal incentives to encourage office development
  - Encouraging office development in urban centres.

Discussion ensued on:
- Situating office space near amenities, shopping and childcare;
- Identifying the best areas within the region, to reserve for office space;
- Encouraging (rather than enforcing) the inclusion of office space in new development projects.

Agenda Varied

The order of the agenda was varied to consider Item 4.6 prior to Item 4.1.
4. REPORTS

4.6 Housing Subcommittee Workplan, Priorities and Terms of Reference
Wendy Tse, Chair, and Meredith Seeton, Vice-Chair, RPAC – Housing Subcommittee, reviewed a presentation and the report titled, “RPAC Housing Subcommittee – Review of 2018 Accomplishments and 2019 Work Plan Priorities”.

In response to questions raised, it was noted that:
- The subcommittee’s minutes are forwarded regularly to RPAC as information items and progress updates will be provided twice per year;
- Relevant presentations and reports will be posted to the subcommittee’s website, which is accessible to RPAC members;
- RPAC members were encouraged to identify housing topics of interest for reports back from the subcommittee or general discussion at the RPAC table.

It was MOVED and SECONDED

CARRIED

4.1 Regional Child Care Forum
Erin Rennie, Senior Planner, Regional Planning, referenced the report titled, “Regional Child Care Forum 2018”, and highlighted:
- The October 30, 2018 Child Care Forum at which municipal social planners interacted with Ministry of Children and Family Development representatives on funding opportunities for child care;
- The Social Issues Subcommittee’s intent to work towards developing a resource guide for planners seeking to expand social spaces within their communities.

Discussion ensued on:
- Challenges identified at the forum, including difficulties in including child care space in building permits;
- The need to collaborate with health authorities on their criteria, which in some cases may be difficult to achieve in higher density areas;
- Potentially requiring developments to “provide access to an adjacent public play space” rather than “incorporating outdoor play spaces for children”;
- Discussions with UBCM towards a funding program to undertake a child care needs assessment/strategy.
It was MOVED and SECONDED  
That the Regional Planning Advisory Committee receive for information the report dated February 1, 2019, and titled “Regional Child Care Forum”.  

CARRIED

4.2 Long Range Growth Scenarios  
Sean Tynan, Planner, Regional Planning, reviewed a presentation titled “Long Range Growth Scenarios, Overview and Update” and highlighted:
- Fundamental assumptions related to growth and external forces within the region and the transportation network;
- Input recently received from subject matter experts;
- Next steps, including a February 27, 2019 workshop.

Discussion ensued on:
- The intent to gather feedback at the upcoming February 27, 2019 workshop;
- Noting that jurisdictions with multiple registrants at the workshop may need to reduce their number of registrants to enable others to participate;
- The public engagement period for the Regional Transportation Strategy scheduled to commence later in the year;
- Conveying information to the Metro Vancouver Board, prior to May 2019.

Members interested in attending the February 27, 2019 workshop were encouraged to contact Mr. Tynan, as some seats may still be available.

4.3 Food Flow: Agri-food Distribution in Metro Vancouver – Scope of Work  
Theresa Duynstee, Senior Planner, Regional Planning, reviewed a presentation and the report titled, “Food Flow: Agri-Food Distribution in Metro Vancouver – Scope of Work”.

Members were informed regarding:
- Defining the extent of the agri-food distribution system and connections to land use policy and transportation;
- Next steps, including refining the database and study questions, verifying results and conducting interviews.

Ms. Duynstee was encouraged to contact Vancouver Coastal Health representatives, on the availability of previously gathered related information.

It was MOVED and SECONDED  
That the Regional Planning Advisory Committee receive for information the report dated February 4, 2019, and titled “Food Flow: Agri-food Distribution in Metro Vancouver – Scope of Work”.  

CARRIED
4.4 **Agriculture Land Use Planning Policy Lab**
Theresa Duynstee, Senior Planner, Regional Planning, reviewed a report titled, “2019 Agricultural Land Use Planning Policy Forum”. She explained that the April 3, 2019 BC AgLUP Policy Lab:

- Is designed to address issues related to agricultural land use planning;
- Will include presentations on how policy and planning initiatives could protect agricultural land in the future.

Discussion ensued on:

- Ensuring the agenda topics at the April 3, 2019 BC AgLUP Policy Lab and a May 30, 2019 Agricultural Land Committee meeting, would not overlap;
- Meetings hosted by Metro Vancouver on the Food System Action Plan.

**It was MOVED and SECONDED**
That the Regional Planning Advisory Committee receive for information the report dated February 4, 2019, and titled “2019 Agricultural Land Use Planning Policy Forum”.

CARRIED

Laurie Bates-Frymel, Senior Planner, Regional Planning, reviewed a presentation titled “RPAC Regional Invasive Species Subcommittee Accomplishments” and the report titled, “RPAC Invasive Species Subcommittee – Review of Accomplishments in 2018, Terms of Reference and Work Plan for 2019”.

Members acknowledged that the spread of invasive species via soil movement and climate change has relevance for their work.

**It was MOVED and SECONDED**
That the Regional Planning Advisory Committee receive for information:

a) the report dated January 31, 2019, and titled “RPAC Invasive Species Subcommittee – Review of Accomplishments in 2018, Terms of Reference and Work Plan for 2019”; and

b) the 2019 RPAC Invasive Species Subcommittee Terms of Reference.

CARRIED

4.7 **TransLink Update**
Joanna Brownell, Manager, Partner Planning, TransLink, provided a verbal update on TransLink projects, and commented on:

- The Development Cost Charge framework;
- Information and project updates on the Surrey-Langley Skytrain (surreylangleyskytrain.ca).

A request was made for the appropriate TransLink staff to present at a future RPAC meeting on the details regarding the planned roll-out for the Transit
Development Cost Charges.

Mark Seinen, TransLink, referenced the September 8-11, 2019 Rail~Volution Conference in Vancouver, reviewed the “2019 Conference Sponsorship and Exhibitor Opportunities” booklet, and highlighted:

- The focus of the conference is on transit and community development;
- Conference registration opens May 17, 2019;
- A “Regional Day” scheduled September 11, 2019, will be focussed on local issues;
- Volunteers required throughout the conference;
- Mobile workshops anticipated, to address multiple perspectives.

11:35 a.m.

Eric Nicholls, Ministry of Municipal Affairs and Housing, joined the meeting via teleconference for Item 4.8.

4.8 Housing Issues

James Stiver, Division Manager, Growth Management and Transportation, welcomed members to submit feedback on housing-related issues for the new standing item on the agenda pertaining to housing issues.

Eric Nicholls, Manager, Planning and Land Use, Ministry of Municipal Affairs and Housing, provided comments regarding:
- The development of the regulation and implementation guide related to the Housing Needs Reports;
- Local governments having three years to complete their first reports once the Regulation is released, and five years to complete subsequent reports;
- Committing to informing RPAC when the Regulation has been approved by Cabinet.

It was noted that the Ministry has been looking into development approvals processes. Further information about this initiative and the results would be of interest to RPAC when available.

4.9 Round Table and Discussion

Members provided verbal updates on projects being worked on in their municipalities.

4.10 Manager’s Report

James Stiver, Division Manager, Growth Management and Transportation, reviewed the “Manager’s Report”.
It was MOVED and SECONDED
That the Regional Planning Advisory Committee receive for information the report dated February 1, 2019, and titled “Manager’s Report”.

CARRIED

5. INFORMATION ITEMS

It was MOVED and SECONDED
That the Regional Planning Advisory Committee receive for information the following:
5.1  November 1, 2018 Housing Subcommittee Meeting Minutes; and
5.2  October 25, 2018 Invasive Species Subcommittee Meeting Minutes.

CARRIED

6. OTHER BUSINESS
Members were invited to submit feedback on the BC Housing programs or other housing-related topics they would like to share or discuss at the next RPAC meeting.

7. CONCLUSION
The Regional Planning Advisory Committee concluded its regular meeting of February 15, 2019 at 12:05 p.m.
To: Regional Planning Advisory Committee

From: Rodney Stott, Chair, RPAC – Environment Subcommittee

Date: February 28, 2019

Meeting Date: March 15, 2019


RECOMMENDATION
That the Regional Planning Advisory Committee:
   a) receive for information the report dated February 28, 2019, titled “RPAC Environment Subcommittee – Review of Accomplishments in 2018, Terms of Reference and Work Plan Priorities for 2019”; and
   b) receive for information the 2019 RPAC Environment Subcommittee Terms of Reference.

PURPOSE
To provide a summary of the progress and outcomes of key activities of the RPAC Environment Subcommittee (RPAC-ENV) in 2018 and convey its 2019 work plan and updated Terms of Reference.

BACKGROUND
The RPAC-ENV was created in 2016 to:
   • advise the Regional Planning Advisory Committee and Metro Vancouver Planning and Environment staff on environment issues of common concern to member jurisdictions, and on environment issues pertinent to implementation of Metro Vancouver 2040: Shaping our Future (Metro 2040), the regional growth strategy;
   • participate in and provide feedback on environment research and related initiatives that assist in policy development and public education; and
   • provide an opportunity for member jurisdictions to share technical and policy information on environment issues of common concern.

This report responds to RPAC’s Terms of Reference, which indicates that its subcommittees will provide an annual work plan and regular meeting minutes as information for the parent committee. The Subcommittee is also to develop a work plan annually and an outline of the work plan, and the status of work within, to be reported to RPAC twice each year.

2019 RPAC-ENV TERMS OF REFERENCE
In 2017, the RPAC-ENV Terms of Reference was amended to include a list of non-voting Associates, update Metro Vancouver department names, and remove the requirement to appoint an RPAC liaison. Very minor revisions have been made to the Terms of Reference this year to reflect changes to Metro Vancouver department nomenclature. An updated version of the RPAC-ENV Terms of Reference showing proposed changes are attached (Attachment 1).
2018 ACCOMPLISHMENTS
Consistent with its terms of reference, the RPAC-ENV received presentations and engaged in discussions about the following topics in 2018:

1. Green Infrastructure
   • Rain City Strategy – Melina Scholefield, City of Vancouver
   • Salmon Safe Communities – Theresa Fresco, Fraser Basin Council

2. Ecosystem Services
   • Human Health Benefits of Access to Green Space – Matilda van den Bosch and Ingrid Jarvis, UBC
   • Regional Carbon Storage Dataset – Clive Wellam, 3GreenTree

3. Mapping/Data
   • Greater Vancouver Urban Bird Atlas – James Casey, Bird Studies Canada
   • GIS Data Available from Metro Vancouver – Metro Vancouver

4. Urban Forestry
   • Next Steps for Urban Forest Climate Adaptation Project – Metro Vancouver

5. Public Engagement
   • Grow Green Forum Recap – Metro Vancouver
   • Engaging the Public on Environmental Issues – Metro Vancouver

In addition to these 2018 work plan priorities, the RPAC-ENV provided feedback on Metro Vancouver’s Ecological Health Framework and Climate 2050 Strategic Framework. The RPAC-ENV also worked together with the Regional Engineers Advisory Committee-Climate Protection Subcommittee to co-organize an afternoon session with speakers on local climate adaptation efforts.

2019 WORK PLAN
The 2019 RPAC-ENV work plan is provided in Attachment 2 for discussion, including potential discussion topics and speakers. RPAC-ENV proposes to retain the same work plan priorities from 2018, but will place additional focus this year on topics relevant for the Metro 2040 environment policy review.

The 2019 work plan is consistent with the RPAC-ENV terms of reference.

The RPAC-ENV also expects to again coordinate with the Regional Engineers Advisory Committee-Climate Protection Subcommittee to co-organize another meeting focused on climate adaption in the third or fourth quarter of 2019.

ALTERNATIVES
This is an information report. No alternatives are presented.

FINANCIAL IMPLICATIONS
The proposed 2019 work plan of the RPAC-ENV is consistent with the 2019 Regional Planning Budget approved by the MVRD Board on October 26, 2018.
SUMMARY / CONCLUSION
The 2019 RPAC-ENV work plan conveys priorities that are consistent with the Subcommittee’s terms of reference and the 2019 Regional Planning budget approved by the MVRD Board. As per the Subcommittee’s terms of reference, staff welcome discussions about additional items identified by Subcommittee and RPAC committee members at any time.

The RPAC-ENV continues to provide a forum for knowledge sharing and opportunities to improve coordination and collaboration on environmental planning efforts amongst member municipalities, Metro Vancouver and RPAC-ENV associates. This Subcommittee will provide RPAC with an update on the implementation of the 2019 work plan later this year.

Attachments:
1. Regional Planning Advisory Committee Environment Subcommittee 2019 Terms of Reference
Regional Planning Advisory Committee
Environment Subcommittee
2018-2019 Terms of Reference

1.0 PURPOSE

The purpose of the Metro Vancouver Regional Planning Advisory Committee Environment Subcommittee (Subcommittee) is threefold:

- to advise Regional Planning Advisory Committee and Metro Vancouver Parks, Planning, and Environment staff on environment issues of common concern to member jurisdictions, and on environment issues pertinent to implementation of *Metro Vancouver 2040: Shaping our Future*, the regional growth strategy;
- to participate in and provide feedback on environment research and related initiatives that assist in policy development and public education; and
- to provide an opportunity for member jurisdictions to share technical and policy information on environment issues of common concern.

Environment issues of common concern may include, but are not limited to, ecological health, urban forests, regional green infrastructure, environmental assessments and invasive species management.

2.0 ESTABLISHMENT AND AUTHORITY

The Subcommittee was formed by the Regional Planning Advisory Committee (RPAC) in 2016. It is a task-oriented technical subcommittee of RPAC. The Subcommittee reports to RPAC which in turn reports to Metro Vancouver Board through the Regional Administrative Advisory Committee (RAAC) and Climate Action Committee.

3.0 COMPOSITION

**Subcommittee Members**

Membership in the Subcommittee includes staff representation from member jurisdictions responsible for the environmental portfolio in their respective organization or their designate. Metro Vancouver’s Division Manager of Electoral Area Services and Environment or their designate is a member and the Subcommittee Coordinator.

**Non-voting Associates**

Staff representatives of other organizations with an interest in environment issues of common concern are invited to participate in the Subcommittee as non-voting Associates. They include: BC Ministry of Environment and Climate Change Strategy; BC Ministry of Forests, Lands and Natural Resource Operations and Rural Development; Bowen Island Municipality; Fisheries and Oceans Canada; Environment and Climate Change Canada; Natural Resources Canada; Fraser Health Authority; and Vancouver Coastal Health Authority.

Additional Subcommittee Members and Associates must be approved through RAAC.
At any time, the Subcommittee may strike “working groups” to pursue research and policy development on any specific environment issue identified by the Subcommittee. The membership of these task forces is to be determined by the Subcommittee, but will include members of the Subcommittee itself.

4.0  MEETINGS

The Subcommittee meets quarterly, or as needed at the call of the Chair. Adopted meeting minutes are forwarded to the RPAC for information. The location of meetings will be at the Metro Vancouver Head Office, but meeting location may be varied by the Chair of the Subcommittee.

5.0  OFFICERS

The Subcommittee will have a Chair, to be elected from among the representatives on the Subcommittee. The Subcommittee will also have a Vice-Chair, to be elected from among the representatives on the Subcommittee. These officers are to be elected every two years, at the first meeting of the calendar year. Working groups struck by the Subcommittee are to select a Chair or rotating Chair from among their members. This person will be a member of the Subcommittee.

6.0  RESOURCES

Metro Vancouver staff from the Parks, Planning, and Environment Department provide administrative and professional support to the Subcommittee. Regional Planning staff is responsible for developing meeting agendas, taking minutes, liaising with delegations and invited speakers, summarizing and presenting relevant research, confirming priorities, and managing projects where appropriate and funding is available.

Support from Regional Planning staff shall similarly be made available to “working groups” of the Subcommittee, upon request from the Chair.

7.0  WORKPLAN

The objective for the Subcommittee is to assist with the implementation of several short and medium term ecological health-related research and coordination priorities, such as ecological health, ecosystem services/natural capital, urban forestry, green infrastructure, regional metrics and targets, and public engagement.

The Subcommittee will develop a workplan annually. An outline of the workplan, and the status of work within it will be reported to RPAC twice each year. Components of the workplan may include:

- Sharing information and experiences about existing local government environment programs and initiatives;
- Identifying regional priority projects, ensuring alignment of the work plan and local government environmental sustainability/biodiversity conservation plans;
- Vetting and sharing research on promising regulatory and non-regulatory initiatives and ideas from key stakeholders that might contribute to the elements of the workplan; and
• Providing information to help local governments make budget decisions around environmental management.
## 2019 Work Plan

**Priorities**

<table>
<thead>
<tr>
<th>1st Quarter</th>
<th>Status</th>
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<tbody>
<tr>
<td>Confirm 2019 Work Plan and Terms of Reference</td>
<td>Complete</td>
</tr>
<tr>
<td>GI: Biodiversity Health and Green Infrastructure in a Changing Climate – SFU Adaption to Climate Change Team</td>
<td>Complete</td>
</tr>
<tr>
<td>MD: Further Analysis of the Sensitive Ecosystem Inventory – Metro Vancouver</td>
<td>Complete</td>
</tr>
<tr>
<td>Information sharing: Professional Reliance Intentions Paper, Round table</td>
<td>Complete</td>
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<thead>
<tr>
<th>2nd Quarter</th>
<th>Status</th>
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<tbody>
<tr>
<td>GI: International Green City Initiatives – Bill Hardy, International Association of Horticultural Producers</td>
<td>Pending</td>
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<tr>
<td>GI: Life cycle analysis of grey vs green infrastructure – Speaker TBD</td>
<td>Pending</td>
</tr>
<tr>
<td>MD: Canopy Cover, Imperviousness, and Connectivity Indicators – Metro Vancouver</td>
<td>Pending</td>
</tr>
<tr>
<td>MD: Annual Update to Municipal Environmental Protection Efforts Spreadsheet – Metro Vancouver</td>
<td>Pending</td>
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<tr>
<td>Information sharing: Round table</td>
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<th>3rd Quarter</th>
<th>Status</th>
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<tbody>
<tr>
<td>ES: Update on Municipal Natural Assets Initiative projects – Michelle Molnar, David Suzuki Foundation</td>
<td>Pending</td>
</tr>
<tr>
<td>ES/MD: Regional Carbon Storage Dataset – Metro Vancouver</td>
<td>Pending</td>
</tr>
<tr>
<td><em>Metro 2040</em> Environment Policy Review: Forum Results – Metro Vancouver</td>
<td>Pending</td>
</tr>
<tr>
<td>Information sharing: Round table</td>
<td>Pending</td>
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<tr>
<th>4th Quarter</th>
<th>Status</th>
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<tbody>
<tr>
<td>PE: Public Engagement on Environmental Issues – Speaker TBD</td>
<td>Pending</td>
</tr>
<tr>
<td>UF: New Westminster’s Urban Forest Management Strategy – New Westminster</td>
<td>Pending</td>
</tr>
<tr>
<td>UF: Update on Urban Forest Climate Adaptation Next Steps – Metro Vancouver</td>
<td>Pending</td>
</tr>
<tr>
<td>Information sharing: Round table</td>
<td>Pending</td>
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GI = Green Infrastructure  
MD = Mapping and/or Data  
UF = Urban Forestry  
ES = Ecosystem Services  
PE = Public Engagement
To: Regional Planning Advisory Committee

From: Laurie Bates-Frymel, Senior Planner, Regional Planning

Date: February 28, 2019

Meeting Date: April 5, 2019

Subject: Metro 2040 Environment Policy Review – Scope and Process

RECOMMENDATION

PURPOSE
To provide the Regional Planning Advisory Committee (RPAC) with an overview of the proposed scope and process for the Metro 2040 Environment Policy Review, as well as the opportunity for members to provide feedback.

BACKGROUND
In preparation for a review of Metro 2040, the regional growth strategy, staff are conducting several policy reviews. The output of these reviews will inform the upcoming update to the regional growth strategy. As signatories to the regional growth strategy, member jurisdictions will be involved in these policy reviews, through RPAC, appropriate RPAC Subcommittees, and the Regional Planning Committee and MVRD Board.

EXISTING POLICY CONTEXT
Adopted in July 2011, Metro 2040 created the region’s “Conservation and Recreation” land use designation, which is intended to “protect significant ecological and recreation assets, including: drinking watersheds, conservation areas, wildlife management areas and ecological reserves, forests, wetlands, riparian corridors, major parks and recreation areas, ski hills and other tourist recreation areas”. Metro 2040 Goal 3: Protect the Environment and Respond to Climate Change Impacts (Attachment) also established the following strategies:

- Strategy 3.1 Protect Conservation and Recreation lands
- Strategy 3.2 Protect and enhance natural features and their connectivity
- Strategy 3.3 Encourage land use and transportation infrastructure that reduce energy consumption and greenhouse gas emissions, and improve air quality
- Strategy 3.4 Encourage land use and transportation infrastructure that improve the ability to withstand climate change impacts and natural hazard risks

Each strategy identifies policy actions for Metro Vancouver and member municipalities, and requests actions of other governments.
POLICY REVIEW SCOPE AND PROCESS

Scope
The Metro 2040 Environment Policy Review seeks to determine if, and to what extent, policies in the regional growth strategy can be adjusted to better support the region’s shared environmental goals. The scope of the policy review will focus on Strategy 3.1 Protect Conservation and Recreation lands, and Strategy 3.2 Protect and enhance natural features and their connectivity, including related maps. Strategies 3.3 and 3.4 are focused on minimizing air emissions from land use and transportation, and adapting to climate change. Staff will also be conducting a separate Metro 2040 Climate Policy Review.

The objectives of the Metro 2040 Environment Policy Review are to:
1. Evaluate Metro 2040 Strategies 3.1 and 3.2;
2. Ensure that member jurisdictions participate in the review process; and
3. Develop a set of policy options to inform an update to the regional growth strategy.

Process
The policy review will consist of three main phases: 1) background research, 2) a policy forum, and 3) policy option exploration, as described below. Staff will involve RPAC, the RPAC-Environment Subcommittee, and the Regional Planning Committee throughout the process and will report on the outcomes at each stage.

Phase 1: Evaluation and research (Spring 2019)
Staff will evaluate the existing policies under Strategy 3.1 and 3.2 by:
- Reviewing past policy reports and regional growth strategies;
- Conducting a scan of the regional context statements of member municipalities for good practices and gaps;
- Comparing Conservation and Recreation designated lands to the Sensitive Ecosystem Inventory;
- Assessing existing greenways, ecological connectivity, and green infrastructure policies; and
- Exploring regional growth strategy policies related to green space within urban areas.

A consultant will be retained to investigate how environmentally sensitive areas are designated in regional growth strategies from other areas, and how they incorporate connectivity language, maps, regional green infrastructure planning, urban green spaces, and ecosystem services. This consultant will also investigate and report on a range of tools / mechanisms and governance structures that have been used to deliver tangible outcomes.

Phase 2: Policy forum (Summer 2019)
Staff will host a policy forum with key stakeholders (including RPAC members, RPAC-Environment Subcommittee members, provincial staff, academics, and other Metro Vancouver staff) to obtain additional feedback about existing policy gaps and implementation challenges.

During this phase, staff will build on the results from the background research and the policy forum to develop policy options and a set of evaluation criteria in collaboration with RPAC and the RPAC-Environment Subcommittee.

Staff would appreciate input from RPAC members on the proposed scope of work.

ALTERNATIVES

As this is an information report, no alternatives are provided.

FINANCIAL IMPLICATIONS

$15,000 is included in the 2019 Board-approved Regional Planning budget to engage a consultant to undertake research in phase 1 of the policy review.

SUMMARY / CONCLUSION

Adopted in July 2011, Metro 2040 established policies to protect the region’s Conservation and Recreation lands, natural features and their connectivity. The Metro 2040 Environment Policy Review, consists of three phases:

1) evaluating the existing policies and researching good examples from other areas;
2) hosting a policy forum with key stakeholders to better understand environmental policy gaps and implementation challenges; and
3) exploring environmental policy options.

Regional Planning will involve the Regional Planning Advisory Committee, the RPAC-Environment Subcommittee, and the Regional Planning Committee throughout the process and will report on the outcomes at each stage.

Attachment:

Metro 2040 Goal 3 Protect the Environment and Respond to Climate Change Impacts - Including Maps 8-10 (orbit doc # 28792810)
GOAL 3
Protect the Environment and Respond to Climate Change Impacts

Metro Vancouver has a spectacular natural environment. Many of Metro Vancouver’s ecosystems have global significance and provide both internationally important fish habitat and key feeding and resting points for migratory birds along the Pacific Flyway. The region’s forests, fields, coastal and intertidal areas, wetlands, and watercourses together are integral pieces of a habitat network for fish and wildlife.

The natural environment is important to livability and sustainability as well as our sense of place. The region’s diverse open space in mountain, coastal and river areas offers recreation and healthy lifestyle opportunities for residents and visitors. The region’s environment also provides essential ecosystem services such as clean drinking water. Protecting these natural features boosts the region’s ecological health and resiliency in the face of climate change and natural hazard risks.

The Conservation and Recreation land use designation is intended to help protect the important environmental and recreation areas throughout the region. Strategies and actions recognize the importance of providing connectivity throughout the region linking important natural features, and emphasize the collaborative effort needed to protect and enhance natural assets.

A strategy in this section also addresses climate change, noting that to a large extent greenhouse gas reductions will be achieved by actions contained throughout the Regional Growth Strategy as well as by actions in other Metro Vancouver management plans. The most significant contributions of the Regional Growth Strategy to climate change mitigation will be made through a continued focus on urban containment and land use patterns that support sustainable transportation and reduce energy use. Policies on climate change adaptation, such as protection for at-risk coastal floodplain areas, are included. The strategy also addresses other natural hazards such as flooding, mudslides, interface fires, and earthquakes.

Strategies to achieve this goal are:

3.1 Protect Conservation and Recreation lands
3.2 Protect and enhance natural features and their connectivity
3.3 Encourage land use and transportation infrastructure that reduce energy consumption and greenhouse gas emissions, and improve air quality
3.4 Encourage land use and transportation infrastructure that improve the ability to withstand climate change impacts and natural hazard risks
STRATEGY 3.1
Protect Conservation and Recreation lands

Metro Vancouver’s role is to:

3.1.1 Direct the Greater Vancouver Sewerage and Drainage District to not allow connections to regional sewerage services to lands with a Conservation and Recreation regional land use designation. Notwithstanding this general rule, in the exceptional circumstances specified below, the GVRD Board will advise the GVS&DD Board that it may consider such a connection for existing development or for new development where, in the GVRD Board’s opinion, that new development is consistent with the underlying Conservation and Recreation regional land use designation and where the GVRD Board determines either:

a) that the connection to regional sewerage services the only reasonable means of preventing or alleviating a public health or environmental contamination risk; or

b) that the connection to regional sewerage services would have no significant impact on the strategy to protect lands with a Conservation and Recreation regional land use designation.

3.1.2 Implement the Metro Vancouver Regional Parks and Greenways Plan in collaboration with municipalities, to identify, secure and enhance habitat and park lands and buffer, where feasible, park and conservation areas from activities in adjacent areas.

3.1.3 Accept Regional Context Statements that protect lands within the Conservation and Recreation areas and that meet or work towards Action 3.1.4.

The role of municipalities is to:

3.1.4 Adopt Regional Context Statements which:

a) identify Conservation and Recreation areas and their boundaries on a map generally consistent with the Regional Land Use Designations map (Map 2);

b) include land use policies to support the protection of Conservation and Recreation areas that are generally consistent with the following:

i) public service infrastructure, including the supply of high quality drinking water;

ii) environmental conservation;

iii) recreation, primarily outdoor;

iv) education, research and training facilities and uses that serve conservation and/or recreation users;

v) commercial uses, tourism activities, and public, cultural or community amenities that are appropriately located, scaled and consistent with the intent of the designation;

vi) limited agricultural use, primarily soil-based;

c) include policies, where appropriate, that effectively buffer Conservation and Recreation areas from activities in adjacent areas.
Actions Requested of Other Governments and Agencies

3.1.5 That the province, utility companies and TransLink strive to avoid fragmentation of Conservation and Recreation areas when developing and operating utility and transportation infrastructure, but where unavoidable, consider mitigating the impacts, including possible enhancement to the areas.

3.1.6 That the province actively manage provincial park / environmental lands with the intent of enhancing natural assets and recreational opportunities.

3.1.7 That the federal government and the province and their agencies:

a) recognize the Conservation and Recreation areas and ensure that activities within or adjacent to these areas are consistent with the intent of the Conservation and Recreation land use designation;

b) strive to improve consultation and collaboration among all levels of government in the planning of Conservation and Recreation lands.
Metro Vancouver’s role is to:

3.2.1 In collaboration with other agencies, develop and manage the Metro Vancouver Regional Recreation Greenway Network, as conceptually shown on the Regional Recreation Greenway Network map (Map 9).

3.2.2 Manage Metro Vancouver assets and collaborate with municipalities and other agencies to:

a) protect, enhance and restore ecologically important systems, features and corridors and establish buffers along watercourses, coastlines, agricultural lands, and other ecologically important features, as conceptually shown on the Natural Features and Land Cover map (Map 10);

b) incorporate into land use decision-making and land management practices planning tools, incentives, green technologies and infrastructure that support ecological innovation, minimize negative impacts on ecologically important features and maximize ecosystem function through restoration.

3.2.3 Accept Regional Context Statements that advance the protection and enhancement of a connected network of ecosystems, features and corridors throughout the region, and that meet or work towards Actions 3.2.4 to 3.2.7.

The role of municipalities is to:

3.2.4 Adopt Regional Context Statements which include policies and/or maps that indicate how ecologically important areas and natural features will be managed (as conceptually shown on Map 10) (e.g. steep slopes and ravines, intertidal areas and other natural features not addressed in Strategy 3.1).

3.2.5 In collaboration with other agencies, develop and manage municipal components of the Metro Vancouver Regional Recreation Greenway Network and connect community trails, bikeways and greenways to the Regional Recreation Greenway Network where appropriate.

3.2.6 Identify where appropriate measures to protect, enhance and restore ecologically important systems, features, corridors and establish buffers along watercourses, coastlines, agricultural lands, and other ecologically important features (e.g. conservation covenants, land trusts, tax exemptions and ecogifting).

3.2.7 Consider watershed and ecosystem planning and/or Integrated Stormwater Management Plans in the development of municipal plans.

Actions Requested of Other Governments and Agencies

3.2.8 That TransLink coordinate the development of a regional cycling network with Metro Vancouver’s Regional Recreation Greenway Network.

3.2.9 That the federal government and the province collaborate to enhance endangered species and ecosystem protection legislation that identifies, protects and restores habitats and biodiversity.
The Regional Recreation Greenway Network map illustrates existing, planned and desired connections of regional significance. This map is conceptual and is not a regional land use designation. Although primarily intended for recreational purposes, these greenways are multi-functional, promote connectivity at a landscape level and offer ancillary ecological benefits by linking Conservation and Recreation areas, protecting natural assets along the corridors, and improving resiliency. They provide locations for recreational activities, and cycling and walking routes. Because of the variety of uses and intents, these greenways often vary in form, function, surfacing, land ownership and management arrangements. The Regional Recreation Greenway Network is a conceptual network, and greenway alignments are determined collaboratively with municipalities and other agencies.

Map 9: Regional Recreation Greenway Network

Note: As stated in Section 6.13.2, this map is included in the Regional Growth Strategy as reference only.
Map 10: Natural Features and Land Cover

The Natural Features and Land Cover map illustrates the region’s natural features and land cover. This map is conceptual and is not a regional land use designation. The region’s natural assets are present within all regional land use designations and include globally significant mudflats and intertidal areas, a diversity of riparian corridors, wetlands, ravines, forests, soil and hedgerows in agricultural areas, and open space, backyards and street trees in urban settings. These features offer a variety of services such as habitat, biodiversity, stormwater management, flood protection, air and water cleansing, and recreation.

Note: Map for reference only, see section 6.13.2.
**STRATEGY 3.3**

**Encourage land use and transportation infrastructure that reduce energy consumption and greenhouse gas emissions, and improve air quality**

**Metro Vancouver’s role is to:**

3.3.1 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. Figure 3 identifies examples of strategies and actions contained in the Regional Growth Strategy to address climate change.

3.3.2 Work with the federal government and the province, TransLink, municipalities, non-governmental organizations, and the private sector to:

a) support the ongoing monitoring of energy consumption, greenhouse gas emissions, and air quality related to land use and transportation infrastructure;

b) promote best practices and develop guidelines to support local government actions to reduce energy consumption and greenhouse gases, and improve air quality related to land use and transportation infrastructure (e.g. district heating systems and renewable energy opportunities).

3.3.3 Accept Regional Context Statements that encourage land use and transportation infrastructure that reduce energy consumption and greenhouse gas emissions, and improve air quality, and that meet or work towards Action 3.3.4.

**The role of municipalities is to:**

3.3.4 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 geothermal 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);

- focus infrastructure and amenity investments in Urban Centres and Frequent Transit Development Areas, and at appropriate locations along TransLink’s Frequent Transit Network;

- implement land use policies and development control strategies which support integrated storm water management and water conservation objectives.
**Actions Requested of Other Governments and Agencies**

3.3.5 That TransLink, in collaboration with Metro Vancouver and municipalities, establish criteria for defining major development proposals, which are referenced in the *South Coast British Columbia Transportation Authority Act*, in order to help meet the objective of concentrating major trip-generating uses in areas well served by transit.

3.3.6 That TransLink pursue reductions of common air contaminants and greenhouse gas emissions from on-road transportation sources in support of regional air quality objectives and greenhouse gas reduction targets.

3.3.7 That TransLink manage its transit fleet and operations with the goal of increasing fuel efficiency and reducing common air contaminants and greenhouse gas emissions over time, in support of the Regional Growth Strategy and Air Quality Management Plan.

3.3.8 That the federal government and the province and their agencies establish further legislative and fiscal actions to help the public and private sectors to maximize reductions in energy consumption and greenhouse gas emissions, and improve air quality, such as:

- a) in the building sector,
  - accelerate the modernization of the BC Building Code
  - increase incentives for residential and commercial building retrofits
  - support, where feasible and appropriate, energy recovery, renewable energy generation and district energy systems and related transmission needs

- b) in the transportation sector,
  - enable the implementation of regional transportation demand management measures such as transportation user-based pricing
  - increase funding for sustainable transportation infrastructure
  - continue to advance stringent standards for on-road vehicle emissions and fuel carbon content.

**FIGURE 3**

How Land Use and Transportation Actions Address Climate Change

Note: Figure for reference only, see section 6.13.2 The numbers relate to the applicable strategy in the Regional Growth Strategy
STRATEGY 3.4
Encourage land use and transportation infrastructure that improve the ability to withstand climate change impacts and natural hazard risks

Metro Vancouver’s role is to:

3.4.1 Incorporate climate change and natural hazard risk assessments into the planning and location of Metro Vancouver utilities, assets and operations.

3.4.2 Work with the federal government and the province, TransLink and municipalities to:

a) consider climate change impacts (e.g. sea level rise) and natural hazard risks (e.g. earthquake, flooding, erosion, subsidence, mudslides, interface fires) when extending utilities and transportation infrastructure that encourages land use development;

b) research and promote best practices in adaptation to climate change as it relates to land use planning.

3.4.3 Accept Regional Context Statements that encourage land use, transportation and utility infrastructure which improve the ability to withstand climate change impacts and natural hazard risks and that meet or work towards Actions 3.4.4 and 3.4.5.

The role of municipalities is to:

3.4.4 Adopt Regional Context Statements that include policies to encourage settlement patterns that minimize risks associated with climate change and natural hazards (e.g. earthquake, flooding, erosion, subsidence, mudslides, interface fires).

3.4.5 Consider incorporating climate change and natural hazard risk assessments into the planning and location of municipal utilities, assets and operations.

Actions Requested of Other Governments and Agencies

3.4.6 That the Integrated Partnership for Regional Emergency Management, in collaboration with the federal government and the province, and other agencies:

a) identify areas that are vulnerable from climate change and natural hazard risks, such as those listed in Actions 3.4.2 and 3.4.4;

b) coordinate priority actions to address the vulnerabilities identified, including implementation and funding strategies.

3.4.7 That the federal government and the province, in collaboration with the Integrated Partnership for Regional Emergency Management and other agencies:

a) provide financial assistance and timely data and information, such as flood hazard mapping, shoreline mapping, hydrological and hydraulic studies, to better enable local governments to fulfill their flood hazard management roles and responsibilities;

b) provide a coordination role to address flood hazard issues and management decisions;

c) implement appropriate preparatory actions to address the implications of long-term sea level rise on infrastructure planning, construction, and operations;

d) review and improve the effectiveness of existing provincial legislation and guidelines regarding flood hazard management by municipalities.
To:                   Regional Planning Committee

From:                Raymond Kan, Senior Planner, Regional Planning

Date:                February 15, 2019

Subject:             The 2018 Regional Parking Study – Key Findings

MEETING DATE: March 8, 2019

RECOMMENDATION
That the MVRD Board:

a) receive for information the report dated February 15, 2019, titled “The 2018 Regional Parking Study – Key Findings”; and
b) write letters to share the key findings of the 2018 Regional Parking Study and Technical Report to the Mayors’ Council on Regional Transportation, the TransLink Board of Directors, and the Councils of member jurisdictions.

PURPOSE
To communicate the 2018 Regional Parking Study key findings and seek MVRD Board approval to distribute the key findings of the 2018 Regional Parking Study and Technical Report to TransLink and Metro Vancouver’s member jurisdictions.

BACKGROUND
The 2018 Regional Parking Study (the Study) was co-led by TransLink and Metro Vancouver to expand the knowledge base of multi-residential (apartment) parking supply and demand in different areas of the region. Preliminary observations from the three phases of data collection were presented to the Regional Planning Committee over three meetings in 2018, and to staff advisory committees. The key findings of the Study have now been finalized and are ready for distribution.

THE REGIONAL PARKING STUDY
The 2018 Regional Parking Study is an update to the 2012 Apartment Parking Study, which was the first regional study of apartment parking supply and demand in Metro Vancouver and, at the time, the largest study ever undertaken in Canada and the United States. In general, these studies provide timely information and data to municipal planning and engineering staff as a consideration during parking bylaw updates, as well as rezoning and development permit reviews. Depending on the type of development, improving the match between supply and demand can also support housing affordability objectives.

Residential parking is a cross-cutting policy issue in Metro Vancouver 2040: Shaping Our Future (Metro 2040), the regional growth strategy, and TransLink’s Regional Transportation Strategy. Metro 2040 encourages municipalities to establish or maintain reduced residential and commercial parking provision in Urban Centres and Frequent Transit Development Areas, while the Regional Transportation Strategy recognizes parking management as a form of transportation demand management.
Components of the 2018 Regional Parking Study
The Study collected data on 73 apartment sites across the region during the Fall/Winter 2017, and comprises three components: a Parking Facility Survey, Street Parking Survey, and Household Survey.

Parking Facility Survey
The purpose of the Parking Facility Survey was to capture parking utilization at peak times in a selection of apartment sites throughout the region. Access to 73 apartment sites was granted by the respective strata councils and/or property management companies. Surveyors entered parking facilities to complete the counts generally after 11:00pm on weeknights (i.e. Monday – Thursday) to ensure that the highest parking utilization was being captured. The surveyors also collected information on: the number of residential and visitor parking stalls; the number of parked vehicles; the presence of secured bicycle parking; and the presence of dedicated plug-in electric vehicle chargers.

Street Parking Survey
The 2012 study recognized that a more holistic and systems-based approach toward on-site and street parking is warranted. It was also noted that a limitation of the initial study was the lack of quantitative information on street parking utilization. The purpose of the Street Parking Survey as part of this latest iteration of the Study was to capture parking utilization on the streets within walking distance (~200 metres) of the surveyed apartment sites. Surveys were undertaken on weekdays (i.e. Monday – Thursday) between 6:30pm-8:30pm and 10:00pm-12:00am, and on Saturdays between 6:30pm-8:30pm.

Household Survey
The purpose of the voluntary Household Survey was to obtain additional contextual information about the residents who live in the participating apartment buildings, such as: vehicle ownership; whether they own or rent their dwelling unit and parking stall(s); visitor parking patterns; bicycle parking conditions; interest in purchasing plug-in electric vehicles; willingness to forgo a parking stall; and basic demographic information. Approximately 1,500 completed surveys, both online and hard copy, were returned out of 11,000 households in the survey area.

Project Advisory Group
In addition to consulting with the Regional Planning Advisory Committee and the Regional Transportation Advisory Committee on the Study’s scope in 2017, Regional Planning established a Project Advisory Group as a means for local jurisdiction representatives to shape the scope and to review the data analysis. The Project Advisory Group comprised a self-selected group of planners and engineers representing nine local jurisdictions with an interest or expertise in parking issues. The multidisciplinary composition of the Project Advisory Group was in keeping with parking being a cross-cutting issue affecting many aspects of community planning and engineering in the region. The Project Advisory Group has shown interest in TransLink and Metro Vancouver staff to continue to convene the group on a regular basis to address and share knowledge around parking policies and management going forward.
Engagement
A key lesson learned from the 2012 study was the need to engage regularly with staff from member jurisdictions and the Regional Planning Committee. The feedback received has been useful in helping to shape the scope, conduct of the analysis, and the interpretation of the findings of the Study.

Regional Planning staff presented preliminary observations of the component parts of the Study to the following committees in 2018:

- Preliminary Observations of Parking Facility Survey:
  - Regional Planning Advisory Committee – May 11, 2018
  - Regional Planning Committee – June 8, 2018
  - City of Burnaby planning staff – June 21, 2018
  - Regional Transportation Advisory Committee – June 27, 2018
  - Housing Committee – July 13, 2018 (information item; no presentation)

- Preliminary Observations of Street Parking Survey:
  - Regional Planning Advisory Committee – July 13, 2018
  - Regional Transportation Advisory Committee – July 26, 2018
  - Regional Planning Committee – September 7, 2018

- Preliminary Observations of Household Survey
  - Regional Planning Advisory Committee – October 19, 2018
  - Regional Transportation Advisory Committee – November 29, 2018
  - Regional Planning Committee – October 5, 2018

Key Findings
The key findings of the 2018 Regional Parking Study are consistent with those in the 2012 study, with some new insights about street parking. Member jurisdictions and the housing development community will be encouraged to review and engage in a dialogue about the key findings and technical report (Attachment) to supplement local data and contexts as appropriate. It is anticipated that the findings and data will: inform the review of apartment rezoning and development applications; municipal parking bylaw reviews; considering the impacts and needs of rental housing projects; the preparation of area and neighbourhood plans; and street parking management efforts.

The key findings are:

1. **For both rental and strata buildings, apartment parking supply exceeds use across the region.**

Supporting information (based on the Parking Facility Survey and Household Survey):
- For strata apartment buildings, parking supply exceeds utilization by 42 percent;
- For market rental apartment buildings, parking supply exceeds utilization by 35 percent;
- For mixed tenure and mixed rental apartment buildings, parking supply exceeds utilization by 41 percent;
- Parking supply exceeds utilization in strata and rental apartment buildings across the region;
• Parking supply appears to be declining for newer strata and market rental apartment buildings;
• Small strata or market rental units (0 or 1 bedroom units, or unit less than 800 sq.ft.) tend to have at most 1 parked vehicle per unit;
• The smallest market rental units (0-bedroom units or units less than 600 sq.ft.) have the largest oversupply of parking.

2. **Apartment parking supply and use is lower for buildings closer to frequent transit.**

Supporting information (based on the Parking Facility Survey and Household Survey):
• For strata apartment buildings, parking utilization near frequent transit (bus or SkyTrain) ranges 0.86 – 0.97 vehicles per unit, compared to 1.09 for buildings further away;
• For market rental sites, parking utilization near transit (bus or SkyTrain) ranges 0.35 – 0.72 vehicles per unit, compared to 0.99 for sites further away from the FTN;
• Parking supply is lower in buildings close to frequent transit;
• Small strata or rental units (0 or 1 bedroom units) tend to be most responsive to proximity to frequent transit, followed by 2 bedroom units.

3. **Transit use is generally higher where apartment parking use is lower, especially for rental buildings.**

Supporting information (based on the Parking Facility Survey and transit data):
• Transit boardings (bus boardings within 400 metres of the apartments; SkyTrain/SeaBus boardings within 800 metres of the apartments) are higher when apartment residential parking utilization is lower;
• The relationship is stronger for rental apartment sites, than for strata sites.

4. **Street parking is complex in mixed-use neighbourhoods. Some of the factors contributing to street parking use include: visitors to non-residential land uses in the evenings; apartment visitors on weekends, holidays, and special occasions; and some apartment residents parking on a nearby street.**

Supporting information (based on the Street Parking Survey):
• Generally, street parking utilization is higher in the evenings (weekday or Saturday) than on a weekday late night;
• Out of 65 surveyed street networks, 7 networks experienced high street parking utilization in at least two of the three surveyed time periods. The exceedances typically occur in the evenings. Nearby non-residential trip generators, such as parks, restaurants, and other commercial uses appear to be one factor;
• Apartment visitors typically encounter greater difficulty finding a parking space in the apartment parking facility or nearby street on weekends, holidays, and special occasions;
• Where households reported parking on a nearby street, they typically park within a five-minute walk of their apartment building;
• For rental sites where residential parking is not included in the rent, both apartment residential parking supply and utilization are lower compared to sites where parking is included in the rent. For the former, nearby street parking utilization is also higher, but does not exceed the 85 percent threshold.

5. The design and capacity of bicycle parking facilities in apartment buildings appear to discourage use by many residents.

Supporting information (based on the Household Survey):
• About one-third of bicycle-owning households do not use their building’s secured bicycle parking facility. The rate of usage is consistent across different building ages. The most frequently cited concerns were risk of damage to or loss of the bicycles, crowded facilities, and adverse perceptions of safety and convenience.

The technical report (Attachment) also contains a ‘Looking Ahead’ section, which outlines some of the issues, challenges, and opportunities associated with parking regulation and management that haven’t been explored as part of the Study. These future considerations include: the implications of ride-hailing on curb management and parking requirements; the opportunities and challenges of shared parking facilities; trends in increasing personal and commercial vehicle sizes; and accessibility needs with an aging population. These issues and others may be explored during the forthcoming updates to the Regional Transportation Strategy and Metro 2040.

TransLink and Regional Planning will continue to work with the Project Advisory Committee to develop a summary booklet for the Regional Parking Study.

ALTERNATIVES
1. That the MVRD Board:
   a) receive for information the report dated February 15, 2019, titled “The 2018 Regional Parking Study – Key Findings”; and
   b) write letters to share the key findings of the 2018 Regional Parking Study and Technical Report to the Mayors’ Council on Regional Transportation, the TransLink Board of Directors, and the Councils of member jurisdictions.

2. That the MVRD Board receive for the information the report dated February 15, 2019, titled “The Regional Parking Study – Key Findings” and provide alternative direction to staff.

FINANCIAL IMPLICATIONS
There are no financial implications associated with either alternative. In 2017, a memorandum of understanding was signed between TransLink and Metro Vancouver setting the project scope, roles, and responsibilities. TransLink is the majority funder of the Regional Parking Study at approximately $100,000 and is responsible for managing the consultant contract. Metro Vancouver contributed $20,000 out of the 2017 MVRD Board-approved Regional Planning budget. All the data analysis and report writing were completed by project staff with guidance provided by the Project Advisory Group.
REGIONAL GROWTH MANAGEMENT IMPLICATIONS
Parking is both a land use and transportation issue. Regional Planning will continue to look for opportunities to undertake research for the benefit of member jurisdictions, including incorporating the study findings in regional planning efforts, such as the Lougheed Corridor Land Use and Monitoring Study and the Metro 2040 policy reviews. As requested by the Project Advisory Group, TransLink and Regional Planning staff will continue to convene the group on a regular basis to address and share knowledge around parking policies and management going forward.

SUMMARY / CONCLUSION
The 2018 Regional Parking Study is a major planning research initiative that was co-led by TransLink and Metro Vancouver. The Study’s findings are consistent with those of the 2012 study, with some new insights about street parking. While the Study’s key findings are not exhaustive, the key findings and technical report provide timely information to local municipal planning and engineering staff as a consideration for municipal parking bylaw updates, rezoning and development reviews, developing area and neighbourhood plans, corridor planning efforts, and street parking management efforts. Depending on the type of development, improving the match between supply and demand can also support housing affordability objectives.

Regional Planning has engaged and consulted extensively on the project scope and draft analysis with the Project Advisory Group, comprising local jurisdiction planners and engineers, as well as the Regional Planning Advisory Committee, Regional Transportation Advisory Committee, and the Regional Planning Committee.

The 2018 Regional Parking Study provides information to inform ongoing dialogues about integrated land use and transportation, housing affordability, and neighbourhood livability. Given the interest in parking in general, a subsequent deliverable will be a summary booklet to articulate the technical information in a more readily accessible manner. For the reasons of advancing the key findings and technical report to practitioners and policymakers, staff recommend Alternative 1.

Attachment: Regional Parking Study Technical Report
Reference: Regional Parking Studies Webpage
The 2018 Regional Parking Study
Technical Report

Prepared by TransLink and Metro Vancouver
March 2019
Executive Summary

The 2018 Regional Parking Study is the second regional-scale apartment parking study to be undertaken in the Metro Vancouver region. In a metropolitan area where six out of 10 new housing units built are in apartment buildings, the availability of timely data to inform appropriate apartment parking requirements is likely to continue. An excessive supply of parking represents an inefficient use of land and capital resources, especially in Urban Centres and areas along the Frequent Transit Network, and a missed opportunity to reflect evolving transportation choices and to reduce the cost of housing construction. The Regional Parking Study, a collaborative effort between TransLink and Metro Vancouver, draws out patterns to expand the knowledge base of practitioners and policymakers in member jurisdictions and the development community.

Many of the patterns are consistent with expectations and reflect the success that the region has had in coordinating land use and transportation decisions. The findings also reveal opportunities to ‘right size’ the amount of parking in apartment buildings for both motorized vehicles and bicycles, and highlight the opportunity to treat on-site and on-street parking as a system.

The findings of the 2018 Regional Parking Study largely corroborate those in the 2012 Apartment Parking Study, and includes new insights about street parking supply and utilization. Apartment parking supply remains excessive relative to observed utilization. Apartment buildings close to frequent transit, whether or bus or SkyTrain, have lower parking supply and utilization. The lower rates of parking utilization are associated with higher transit use as measured by the number of bus boardings near the buildings, and this relationship is stronger for rental apartment sites.

Street parking is inherently complex in mixed-use neighbourhoods. Some of the factors contributing to street parking use include visitors to non-residential land uses, such as restaurants, shops, and parks; apartment visitors on weekends, holidays, and special occasions; and some apartment residents parking on the street. Even with these factors, only a handful of surveyed street networks experienced persistently high street parking utilization.

Finally, the 2018 Regional Parking Study highlights a challenge that remains unchanged from the 2012 Study. The design and capacity of current bicycle parking facilities in apartment buildings are discouraging their use by many residents.

Looking ahead, practitioners and policymakers should be mindful of evolving mobility choices, technology, and consumer preferences, and the potential implications for vehicle ownership, parking demand, and parking requirements in apartment buildings, on streets, and in other building structures. TransLink and Metro Vancouver will continue to look for opportunities to undertake and support research related to parking in accordance to regional policies, and to support the efforts of member jurisdictions to coordinate land use and transportation decisions.
Acknowledgements

TransLink and Metro Vancouver would like to thank the Project Advisory Group for providing expert perspectives and feedback. The Project Advisory Group’s sustained interest in the study supports future regional research and the planning needs of member jurisdictions in the Metro Vancouver region on land use and transportation matters.

The 2018 study could not have been completed without the cooperation of the apartment property managers and condominium strata organizations for granting access to the parkades.

Acuere Consulting provided survey services for the parking facility, street parking, and household surveys. Special thanks go to BC Hydro for providing estimates of low electricity-usage apartment units.

All analyses and key findings presented in this technical report were prepared by the project staff at TransLink and Metro Vancouver.
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1. Introduction
Parking is a community issue that time and again evokes strong opinions from residents and businesses alike. When considering new residential development applications, parking is frequently a top concern.

The first region-wide apartment parking study was completed by Metro Vancouver in 2012 and examined the apartment parking supply and utilization in 80 apartment sites distributed throughout the region. While those study findings continue to be referenced, there have been renewed requests from member jurisdictions\(^1\) for updated information on apartment parking, especially for purpose-built rental apartment sites.

With the support of the MVRD Board, Mayors’ Council and relevant advisory committees, such as the Regional Planning Advisory Committee and Regional Transportation Advisory Committee, TransLink and Metro Vancouver jointly undertook a second region-wide apartment parking study, as an update to the 2012 study, in 2017 – 2018. The 2018 Regional Parking Study’s objectives are to:

a) Expand the knowledge base about parking supply and demand for a sample of apartment sites throughout the region;

b) Document and report out in a user-friendly way that clearly communicates the key findings, potential trends and patterns, and opportunities to inform local practice, in particular for new developments in transit-oriented locations; and,

c) Use the study dataset and analytics to set the stage for potential additional phases of applied policy research or to support other initiatives in the region.

The 2018 Regional Parking Study comprises the following components:

- Three surveys:
  - Parking Facility Survey of parking supply and utilization at over 70 apartment sites
  - Street Parking Survey of parking supply and utilization on streets near the selected apartment sites
  - Household Survey of 1,500 households residing at the selected apartment sites
- Key informant interviews with municipal staff on street parking strategies and tactics.
- Review of current apartment parking supply requirements in local municipal bylaws.

The three surveys were conducted between October 2017 – January 2018 with the assistance of Acuere Consulting Ltd.

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\(^1\) In this report, ‘member jurisdictions’ refer to municipal governments and First Nations jurisdictions.
2. Study Context
This section outlines the policy and planning context for the 2018 Regional Parking Study, and looks back at what was learned in the 2012 Apartment Parking Study.

2.1 Regional Planning and Policy Context
Encouraging compact and complete communities, sustainable transportation choices, and increasing housing affordability are keys to enhancing the economic, environmental, and social sustainability of the region. These objectives are embedded in regional plans and policies. Multi-residential parking is often situated at the intersection of these issues.

Metro 2040: Shaping Our Future
Metro Vancouver 2040: Shaping Our Future (Metro 2040), the regional growth strategy, envisions a transit-oriented region arranged in an interconnected network of Urban Centres and Frequent Transit Development Areas, complemented by viable industrial and agricultural lands, and protected conservation / recreational areas. The majority of the residential growth, a projected additional one million new residents over the next 30 years, will be accommodated primarily in the form of redevelopment within these Urban Centres and Frequent Transit Development Areas.

As the development areas of the region densify, the majority of new residential development will increasingly be in the form of apartments, and less as ground-oriented housing (i.e. single-detached housing forms). Between 2014 and 2018, 59 percent of the housing unit starts in the region were apartments, followed by 20 percent as single-detached dwellings, 13 percent townhouse/duplex/triplex, and 7 percent as secondary suites.

Metro 2040 encourages municipalities to set out policies in their respective Official Community Plans and Regional Context Statements that establish or maintain reduced residential and commercial parking requirements in Urban Centres and Frequent Transit Development Areas, in coordination with the provision of transit, where appropriate.

Regional Transportation Strategy
TransLink’s Regional Transportation Strategy identifies parking management as an important way to shift some trips from single-occupancy vehicles and into transit and non-motorized modes. The Strategy also recognizes that parking management is largely a role of local governments. A coordinated effort between local actions and regional objectives is required to achieve the Strategy’s targets of having a majority of trips by transit, walking, and cycling, and reducing vehicle kilometres travelled per capita by one-third.

Regional Affordable Housing Strategy
Housing affordability is one of the greatest challenges facing the Metro Vancouver region today. Metro Vancouver’s Regional Affordable Housing Strategy recognizes that a broader range of housing choices near transit will contribute to more complete, inclusive and healthier communities and expand opportunities for more people to benefit from regional transit investments. A well-housed population is also fundamental to the functioning of the region’s economy.
The *Regional Affordable Housing Strategy* identifies parking reduction, in combination with other incentives and policies, as a means of reducing the cost of developing purpose-built rental housing, whether market or non-market, and strata apartments.

### 2.2 Key Findings from the 2012 Apartment Parking Study

The 2018 Regional Parking Study builds on the 2012 Apartment Parking Study. In the Fall of 2011, Metro Vancouver carried out two regional surveys. In the Parking Facility Survey, the number of parking stalls and parked vehicles in 80 participating apartment sites were counted on weeknights. In the Household Survey component, Metro Vancouver distributed surveys to apartment households to obtain more information about parking habits and preferences. Over 1,500 apartment households responded.

The 2012 key findings were:

- Residential parking supply in strata apartments generally exceed parking demand an average of 18-35 percent across the region.
- Residential parking demand is lower near TransLink’s Frequent Transit Network\(^2\). For apartments near the Frequent Transit Network, the parking demand range was 0.89 – 1.06 vehicles per apartment unit, whereas for apartments further away from the Frequent Transit Network, the parking demand range was 1.10 – 1.25 vehicles per apartment unit.
- Residential parking demand near the Frequent Transit Network bus stops were similar to the demand seen near SkyTrain / SeaBus stations, but the parking supply was higher.
- Vehicle holdings and parking demand for apartment renters were much lower than for owners, consistent with the findings of prior research. In purpose-built market rental sites, the parking demand range was 0.58 - 0.72 vehicles per apartment unit.
- Visitor parking supply may be over supplied. Observed parking demand rates were below 0.1 stall per apartment unit, compared to the typical municipal requirement of 0.2 visitor stall per apartment unit.
- Participation in car share programs was highest in Vancouver (16 percent of surveyed households) and at UBC (15 percent of surveyed households), where car share programs predominantly operate. Households with car share memberships had fewer vehicles than do non-members.
- Proximity to transit was consistently cited by over half of the households surveyed as one of the top three factors when choosing their current home.

The 2012 Study drew out the implications for new apartment development near the Frequent Transit Network. The greatest opportunities for change are new apartment sites near the Frequent Transit Network (generally within 400 metres of a frequent bus stop and/or within 800 metres of a SkyTrain station). High density communities with a robust network of frequent transit services offer the best opportunities to put these findings into practice. For suburban communities lacking the coverage of frequent transit services, these opportunities may be treated as long-term goals.

In the long-run, the benefits of taking action will result in more efficient and livable neighbourhoods in Urban Centres and Frequent Transit Development Areas, improvements to housing affordability and housing choice, and greater use of sustainable transportation choices. The following ‘opportunities’ were

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\(^2\) The Frequent Transit Network is a network of corridors along which transit service (service could be provided by a single route or a combination of routes) is provided at least every 15 minutes in both directions throughout the day and into the evening, every day of the week.
identified and intended to be practical suggestions for local governments and the development community to consider:

1. **Treat On-Site and Street Parking as a System:** A more holistic approach toward parking supply and parking demand management for new apartment projects is warranted. Attention should be paid to the availability, type, and relative permanence of street parking (e.g. free, paid, permit-only, and/or time-limited) and surrounded land uses, in association with any reductions in on-site parking requirements.

2. **Encourage Parking Supply to Match Demand Near the Frequent Transit Network:** Parking requirements should be set based on actual or expected demands with further reductions based on transportation demand management measures or other site-specific conditions.

3. **Encourage Parking Unbundling / Opt-Out:** Selling parking stalls separate from apartments or allowing consumers to opt out of a parking stall will increase choice, and provide the opportunity for consumers without cars to realize some modest improvement in affordability.

4. **Encourage Rental Apartments Near the Frequent Transit Network:** Apartment renters generally have lower parking demands than do owners, and living close to the Frequent Transit Network provides an opportunity to be less reliant on a private vehicle. For these reasons, it makes sense to encourage the development of more rental apartment units close to the Frequent Transit Network.

5. **Encourage Expansion of Car Share Programs where Feasible:** Municipalities and developers should encourage car share providers to expand beyond current operating boundaries to such places as emerging Urban Centres and Frequent Transit Development Areas in suburban areas wherever practical and feasible.

6. **Consider Allowing Amendments to Parking Supply after Pre-Sales:** It is often only after apartment pre-sales that developers have better data to support modifications to residential parking supply. By adapting municipal processes to accommodate amendments before construction, the parking efficiency of new apartment developments can be improved.

7. **Conduct Regular Post-Occupancy Surveys:** Regular and frequent post-occupancy surveys of apartment projects should be conducted to provide timely information on parking demand in recently built and fully-occupied apartment developments. Industry groups, such as the Urban Development Institute and the Urban Land Institute, should be encouraged to contribute resources to these research efforts and support widespread dissemination of the findings.

8. **Coordinating Frequent Transit Network Expansion:** Uncertainties in the future stop or station locations of the Frequent Transit Network, and the staging of expansion, can be addressed effectively through enhanced collaboration and information sharing between TransLink and municipal partners.
2.3 Fall 2012 Supplemental Surveys
In the Fall of 2012, Metro Vancouver commissioned supplemental field surveys on about two dozen apartment sites around the region. Parking facility and street surveys were conducted in four different time periods on a weekday and a Saturday. The summary sheets will be posted on the Metro Vancouver website. Where appropriate, the supplemental surveys have been used to inform the 2018 Study’s methodology and analysis.

2.4 Updating the Apartment Parking Study
Since the completion of the 2012 Study, a number of new regional policies and milestones have been introduced. Together, these actions support creating a transit-oriented region through the intensification of land uses close to transit. An update to the regional parking study was warranted on the following grounds:

- Starting in 2012, the region saw a surge in new purpose-built rental completions, a large portion of which came in the form of apartments. Local governments identified a gap in parking data on rental apartment sites.

- In 2014, TransLink adopted the Regional Transportation Strategy which sets out ambitious targets to increase non-auto mode share and reduce driving per capita. The Strategy also highlights the role of parking management as a means to achieving the regional targets set out in the plan.

- In 2016, Metro Vancouver adopted an update to the Regional Affordable Housing Strategy, which also emphasizes the role of parking reductions to improve the financial viability of apartment development in general.

- In 2016, the Evergreen extension of the Millennium SkyTrain Line opened, thus creating new opportunities for transit-oriented development in the Northeast sector of the region.

- In 2017 and 2018, the Mayors’ Council on Regional Transportation approved the first two investment plans to implement the Mayors’ Vision for transit expansion in the region. The high level of investment in new rapid transit corridors and new frequent bus lines sets the stage for more transit-oriented development across the region.

- In 2018, the Metro Vancouver Board approved the Climate 2050 Strategic Framework, which reaffirms the crucial need to reduce greenhouse gas emissions from on-road vehicles. Transitioning to less carbon-intensive transportation choices will require a combination of actions, including changes to land use and parking policies.
3. Key Findings

Based on the body of analysis in this report, the following key findings have been identified. The key findings are intended to highlight patterns that show a relatively high degree of consistency with expectations, with the 2012 Study, and are generalizable regardless of geography or neighbourhood characteristics. At the same time, there may be other information presented in previous sections that may be useful to practitioners and policymakers, such as information about the few mixed-tenure, mixed rental, or non-market rental sites. Where appropriate, users of this report should supplement the findings with other local data, observations, and experience.

**Key Finding #1: For both rental and strata buildings, apartment parking supply exceeds use across the region.**

Supporting information:

Based on the Parking Facility Survey:
- For strata apartment buildings, parking supply exceeds utilization by 42 percent;
- For market rental apartment buildings, parking supply exceeds utilization by 35 percent;
- For mixed tenure and mixed rental apartment buildings, parking supply exceeds utilization by 41 percent;
- Parking supply exceeds utilization in strata and rental apartment buildings across the region.
- Parking supply appears to be declining for newer strata and market rental apartment buildings.

Based on the Household Survey:
- Small strata or market rental units (0 or 1 bedroom units, or unit less than 800 sq.ft.) tend to have at most 1 parked vehicle per unit;
- The smallest market rental units (0-bedroom units or units less than 600 sq.ft.) have the largest oversupply of parking.

**Key Finding #2: Apartment parking supply and use is lower for buildings closer to frequent transit.**

Supporting information:

Based on the Parking Facility Survey:
- For strata apartment buildings, parking utilization near frequent transit (bus or SkyTrain) ranges 0.86 – 0.97 vehicles per unit, compared to 1.09 for buildings further away.
- For market rental sites, parking utilization near transit (bus or SkyTrain) ranges 0.35 – 0.72, compared to 0.99 for sites further away from the FTN.
- Parking supply is lower in buildings close to frequent transit.

Based on the Household Survey:
- Small strata or rental units (0 or 1 bedroom units) tend to be most responsive to proximity to frequent transit, followed by 2 bedroom units.
Key Finding #3: Transit use is generally higher where apartment parking use is lower, especially for rental buildings.

Supporting information:

Based on the Parking Facility Survey and transit ridership data:
- Transit boardings (bus boardings within 400 metres of the apartments; SkyTrain/SeaBus boardings within 800 metres of the apartments) are higher when apartment residential parking utilization is lower.
- The relationship is stronger for rental apartment sites, than for strata sites.

Key Finding #4: Street parking is complex in mixed-use neighbourhoods. Some of the factors contributing to street parking use in mixed-use neighbourhoods include: visitors to non-residential land uses in the evenings; apartment visitors on weekends, holidays, and special occasions; and some apartment residents parking on a nearby street.

Supporting information:

Based on the Street Parking Survey:
- Generally, street parking utilization is higher in the evenings (weekday or Saturday) than on a weekday late night.
- Out of 65 surveyed street networks, 7 networks experienced high street parking utilization in at least two of the three surveyed time periods. The exceedances typically occur in the evenings. Nearby non-residential trip generators, such as parks, restaurants, and other commercial uses appear to be one factor.
- Apartment visitors typically encounter greater difficulty finding a parking space in the apartment parking facility or nearby street on weekends, holidays, and special occasions.
- Where households reported parking on a nearby street, they typically park within a five-minute of their apartment building.
- For rental sites where residential parking is not included in the rent, both apartment residential parking supply and utilization are lower compared to sites where parking is included in the rent. For the former, nearby street parking utilization is also higher, but does not exceed the 85 percent threshold.

Key Finding #5: The design and capacity of current bicycle parking facilities in apartment sites appear to discourage use by many residents.

Supporting information:

Based on the Household Survey:
- About one-third of bicycle-owning households do not use their building’s secured bicycle parking facility. The rate of usage is consistent across different building ages. The most frequently cited concerns were risk of damage to or loss of the bicycles, crowded facilities, and adverse perceptions of safety and convenience.
4. Study Methodology

4.1 Project Advisory Group
A Project Advisory Group was established as a means for planning and engineering staff from member jurisdictions to provide detailed input on the study scope, and to review the data analysis and findings. Since it is the role of member jurisdictions to review, implement and update development standards and requirements, it was deemed important to ensure that the final product was framed in a way that is meaningful and useful for practitioners. The Project Advisory Group comprised a mix of planners and transportation engineers representing nine member jurisdictions (a request was originally made to the Regional Planning Advisory Committee and Regional Transportation Advisory Committee for volunteers to participate on the advisory group). The multidisciplinary composition of the Project Advisory Group was aligned with the parking being a cross-cutting land use and transportation issue. The Project Advisory Group reviewed and provided feedback in the preparation of this technical report.

4.2 Apartment Site Selection
The survey sites were selected based on several criteria: representation from across the region; building age; building tenure; and, proximity to TransLink’s Frequent Transit Network. While about 200 apartment sites were contacted by project staff, 73 sites ultimately agreed to participate in the 2018 Study.

A concerted effort was made to increase the share and number of sites in the southern and eastern parts of the region in the Study in response to the fast pace of higher density development and improvements to the Frequent Transit Network in those areas. The South of Fraser had the most number of sites, doubling the number in the 2012 Study. The Northeast Sector and Pitt Meadows / Maple Ridge also saw an increase in the number of sites surveyed.

On account of building tenure, the majority of sites are strata ownership. However, many more non-strata buildings participated in the Study, including 12 market rental sites, 7 mixed tenure (strata and rental) sites, 3 mixed rental (market and non-market rental) sites, and 1 non-market rental site. In comparison, the 2012 Study consisted of only 13 non-strata sites. Please note that the three mixed rental sites surveyed in the Study are owned and managed by the Metro Vancouver Housing Corporation.

A balance was struck between studying sites built since the 2012 Study and older sites. Over one-half of the sites were built in 2010 or later. Some sites that are in the older vintage are: three Metro Vancouver Housing Corporation sites built in the 1970/80s, and one market rental site in downtown Vancouver built in the early 1990s (which was also included in the 2012 Study).
### Table 1. Apartment Sites by Subregion, Local Jurisdiction, and Tenure

<table>
<thead>
<tr>
<th>Subregion</th>
<th>Local Jurisdiction</th>
<th>Number of Sites</th>
<th>Strata</th>
<th>Market Rental</th>
<th>Mixed Tenure</th>
<th>Mixed Rental</th>
<th>Non-Market Rental</th>
</tr>
</thead>
<tbody>
<tr>
<td>South of Fraser</td>
<td>Delta</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Langley City</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Langley Township</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Surrey</td>
<td>11</td>
<td>10</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>White Rock</td>
<td>2</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Vancouver/UBC</td>
<td>UBC Point Grey</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Vancouver</td>
<td>14</td>
<td>1</td>
<td>4</td>
<td>7</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Northeast Sector+</td>
<td>Coquitlam</td>
<td>6</td>
<td>6</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Maple Ridge</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Pitt Meadows</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Port Coquitlam</td>
<td>3</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Port Moody</td>
<td>3</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Burnaby/New Westminster</td>
<td>Burnaby</td>
<td>7</td>
<td>7</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>New Westminster</td>
<td>3</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>North Shore</td>
<td>North Vancouver City</td>
<td>4</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>North Vancouver District</td>
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<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Richmond</td>
<td>Richmond</td>
<td>7</td>
<td>5</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>73</td>
<td>50</td>
<td>12</td>
<td>7</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>

### Table 2. Distribution of Apartment Sites by Year Built

<table>
<thead>
<tr>
<th>Year Built</th>
<th>Number of Sites</th>
<th>Strata</th>
<th>Market Rental</th>
<th>Mixed Tenure</th>
<th>Mixed Rental</th>
<th>Non-Market Rental</th>
</tr>
</thead>
<tbody>
<tr>
<td>1976-1993</td>
<td>4</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>2005-2009</td>
<td>22</td>
<td>19</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2010-2013</td>
<td>19</td>
<td>14</td>
<td>3</td>
<td>1</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>2014-2017</td>
<td>28</td>
<td>17</td>
<td>5</td>
<td>6</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

In keeping with the land use and transportation nexus, the vast majority of sites are located within walking distance to the Frequent Transit Network, whether rapid transit or frequent bus. For comparative analysis purposes, 15 sites were chosen further away from current frequent transit service.
Table 3. Distribution of Apartment Sites by Proximity to the Frequent Transit Network

<table>
<thead>
<tr>
<th>Proximity to Frequent Transit Network</th>
<th>Number of Sites</th>
<th>Strata</th>
<th>Market Rental</th>
<th>Mixed Tenure</th>
<th>Mixed Rental</th>
<th>Non-Market Rental</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within 800m of a rapid transit station</td>
<td>30</td>
<td>22</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Within 400m of a frequent bus corridor only</td>
<td>28</td>
<td>20</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Away from FTN</td>
<td>15</td>
<td>8</td>
<td>6</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
</tbody>
</table>
4.3 Parking Facility Survey Design and Conduct

The Parking Facility Survey component of the Study was conducted between October 2017 and January 2018 by Acuere Consulting Ltd. The purpose of the Survey was to measure the apartment parking supply and utilization at the selected sites. The surveyors initiated the surveys generally after 11:00PM on a weeknight, Monday through Thursday. Project staff provided Acuere with the appropriate contact person at each site, whether a strata council member, property manager, or on-site caretaker. Acuere was responsible for scheduling and assigning the surveyors. The survey data was transmitted to Metro Vancouver in the Spring of 2018. The data collected included:

Table 4. Parking Facility Survey Data Type

<table>
<thead>
<tr>
<th>Data</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parking Facility Type</td>
<td>• Residential (enclosed parking or surface parking)</td>
</tr>
<tr>
<td></td>
<td>• Visitor (enclosed parking or surface parking)</td>
</tr>
<tr>
<td></td>
<td>• Commercial (enclosed parking or surface parking); commercial parking</td>
</tr>
<tr>
<td></td>
<td>stalls and utilization were not counted.</td>
</tr>
<tr>
<td>Parking Stall Type</td>
<td>• Regular vehicle stall</td>
</tr>
<tr>
<td></td>
<td>• Tandem stall</td>
</tr>
<tr>
<td></td>
<td>• Electric vehicle stall</td>
</tr>
<tr>
<td></td>
<td>• Car Share vehicle stall</td>
</tr>
<tr>
<td></td>
<td>• Accessible stall</td>
</tr>
<tr>
<td></td>
<td>• Motorcycle stall</td>
</tr>
<tr>
<td></td>
<td>• Loading stall</td>
</tr>
<tr>
<td></td>
<td>• Unmarked space</td>
</tr>
<tr>
<td></td>
<td>• Other space</td>
</tr>
</tbody>
</table>

It should be noted that commercial parking stalls and utilization were not counted (and would not have been meaningful given the time period of the surveys). In a similar vein, apartment visitor parking is less meaningful given that ‘peak’ visitor demand is typically in the evenings.

In order to account for potentially unoccupied units during the period of the survey (and minimize the underestimation of parking utilization ratios), data from BC Hydro was obtained on the number of units at each site that consumed 100 kWh or less of electricity per month on average between September 1 – November 30, 2017; for comparative purposes, the threshold of 10 kWh is generally the amount of electricity consumed by a refrigerator. Unoccupied units may be empty for a number of reasons, such as newer buildings where residents have yet to move in, units that are bought as investments but not yet occupied out, or units undergoing renovations. Where data gaps remained, a generalized ‘vacancy’ factor was assumed.

4.4 Street Parking Survey Design and Conduct

The Street Parking Survey is a new component for the Study. One of the key opportunities identified in the 2012 Study was that a more holistic and systems-based approach toward apartment parking and street parking was warranted. While it may be reasonable to presume an interplay between the two, without survey data, our understanding of the relationship and other neighbourhood factors is limited.
The streets, generally within 200 metres of the selected apartment sites, were surveyed for their parking utilization and the available parking spaces estimated and inventoried. Street parking regulations were also recorded. The surveys were conducted during three time periods: i.e. weekday evening (6:30-8:30PM), weekday late night (11:00PM), and Saturday evening (6:30-8:30PM). These time periods were chosen based in part based on resource availability, the expectation that the evening periods were times when street parking utilization is high, and that the data would generate a clear picture of the interplay between apartment parking and street parking utilization.\(^3\) Approximately 94 percent of the nearly 16,400 parked vehicles were passenger vehicles. The data collected included:

### Table 5. Street Parking Survey Data Type

<table>
<thead>
<tr>
<th>Data</th>
<th>Values</th>
</tr>
</thead>
</table>
| **Vehicle Type**            | • Passenger auto/truck/van (94% of observed parked vehicles)  
• Motorcycle/scooter, oversized truck/van too large to enter the parking facility, commercial trucks (cube truck, heavy trucks), car share vehicles, RV campers, taxi, police vehicle, ambulance, construction vehicle or equipment, other |
| **Parking Regulation Type** | • No restriction  
• Time-restricted no parking: Red circle crossed P (time/day specific)  
• Time-restricted parking: Green circle P (time/day specific)  
• Meter  
• Resident Only  
• Resident Permit  
• Miscellaneous:  
  o Loading/passenger only  
  o Commercial zone  
  o School zone  
  o Car share parking only  
  o Accessible vehicles only  
  o Taxi only  
  o Police only  
  o Motorcycles only  
  o Electric vehicles only |
| **Illegal Parking Type**    | • Parked in no stopping zone  
• Parked at bus stop or fire hydrant  
• Parked too close to stop sign  
• Parked vehicle extends into driveway/alley  
• Other |

The supply of parking spaces on each street segment was estimated using online aerial photos and validated with select field visits. In total, about 9,300 street parking spaces were estimated, of which 4,300 spaces were designated with some form of parking restriction, and about 5,000 without any parking.

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\(^3\) In Fall 2012, Metro Vancouver completed supplemental surveys of streets around two dozen apartment sites. Surveys were completed on a weekday and Saturday in four time periods: late morning (11:00AM), afternoon (3:00PM), evening (6:00PM), and late night (11:00PM). Generally, the evening periods saw the highest street parking utilization. The survey consultant was Opus International Consultants.
restrictions. Approximately, 160 kilometres of curbside street segments were surveyed in each of the three time periods.

4.5 Household Survey Design and Conduct

The Household Survey provides supplemental information about the residents who live in the participating apartment sites, such as vehicle ownership, whether they own or rent their unit and parking stall(s), apartment visitor parking patterns, basic demographic information, and other attributes (see Appendix X for the complete survey form). The surveys were mailed out in mid-December 2017 and closed in February 2018.

The survey questions closely mirrored those in the 2012 Study, with several modifications based on input from the Project Advisory Group and others. Invitation letters were individually mailed to all apartment units in the participating buildings. In total, 1,567 responses were received and deemed sufficiently complete to use for data analysis. Respondents were provided with the option of completing the survey online, or completing the paper survey and returning it using an included postage-paid envelope. Nearly two out of three responses originated from residents of Vancouver, Burnaby, Surrey, Coquitlam, and Port Moody.

Table 6. Geographic Distribution of Household Survey Responses

<table>
<thead>
<tr>
<th>Member Jurisdiction</th>
<th>Completed Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vancouver</td>
<td>368</td>
</tr>
<tr>
<td>Burnaby</td>
<td>211</td>
</tr>
<tr>
<td>Surrey</td>
<td>202</td>
</tr>
<tr>
<td>Coquitlam</td>
<td>147</td>
</tr>
<tr>
<td>Port Moody</td>
<td>102</td>
</tr>
<tr>
<td>North Vancouver City</td>
<td>99</td>
</tr>
<tr>
<td>Richmond</td>
<td>89</td>
</tr>
<tr>
<td>North Vancouver District</td>
<td>77</td>
</tr>
<tr>
<td>New Westminster</td>
<td>54</td>
</tr>
<tr>
<td>White Rock</td>
<td>49</td>
</tr>
<tr>
<td>Langley Township</td>
<td>46</td>
</tr>
<tr>
<td>Port Coquitlam</td>
<td>44</td>
</tr>
<tr>
<td>Delta</td>
<td>31</td>
</tr>
<tr>
<td>Maple Ridge</td>
<td>24</td>
</tr>
<tr>
<td>Pitt Meadows</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,567</strong></td>
</tr>
</tbody>
</table>

The mailing addresses used to distribute the survey were assembled through the BC Assessment Authority’s website and from property managers, as appropriate. To limit responses to one per apartment unit, each mail-out contained a unique code that was required to submit the survey form. The consultant was responsible for administering the survey and providing an anonymized dataset to project staff.

As with the 2012 Study, the Household Survey dataset was not weighted to match the demographics of the region. As with all surveys, a self-selection bias is a factor that must be considered when interpreting
the data (e.g. residents with a particular interest in parking may be more inclined to complete the survey). The value of the household survey is in supplementing the broad regional or subregional patterns that emerge from the other two survey datasets. The following tables are useful to understand the characteristics of the survey respondent households. Where appropriate, comparative values from the 2012 Study are shown.

**Apartment Unit Size Distribution**
Households residing in apartment units with two or fewer bedrooms made up 93 percent of the respondents. This proportion is consistent with apartment development trends: between 2001 and 2016, 90 percent of apartment units built had two or fewer bedrooms. In terms of floor area, there is a more even distribution for units at least 600 sq.ft. of floor area. This implies that one-bedroom units come in a variety of sizes, as do two-bedroom units.

**Table 7. Apartment Unit Size (Bedrooms) Distribution**

<table>
<thead>
<tr>
<th>Unit Size (Bedrooms)</th>
<th>Responses</th>
<th>2012 Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-bedroom units</td>
<td>39 (2%)</td>
<td>4%</td>
</tr>
<tr>
<td>1-bedroom units</td>
<td>493 (32%)</td>
<td>30%</td>
</tr>
<tr>
<td>2-bedroom units</td>
<td>924 (59%)</td>
<td>57%</td>
</tr>
<tr>
<td>3 plus-bedroom units</td>
<td>111 (7%)</td>
<td>8%</td>
</tr>
<tr>
<td>Total</td>
<td>1,567</td>
<td>100%</td>
</tr>
</tbody>
</table>

**Table 8. Apartment Unit Size Distribution**

<table>
<thead>
<tr>
<th>Unit Size (in Square Feet)</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 600 sq.ft.</td>
<td>256 (16%)</td>
</tr>
<tr>
<td>600 – 799 sq.ft.</td>
<td>428 (29%)</td>
</tr>
<tr>
<td>800 – 999 sq.ft.</td>
<td>489 (31%)</td>
</tr>
<tr>
<td>1000+ sq.ft.</td>
<td>358 (23%)</td>
</tr>
<tr>
<td>Unsure</td>
<td>36 (2%)</td>
</tr>
<tr>
<td>Total</td>
<td>1,567</td>
</tr>
</tbody>
</table>

**Household Size Distribution**
The average household size of the survey sample is about 2 persons. According to the 2016 Census, the average household size in apartments of five storeys or higher was 1.7 persons, and in other apartment buildings the household size was 1.9 persons.

**Table 9. Household Size Distribution**

<table>
<thead>
<tr>
<th>Household Size</th>
<th>Responses</th>
<th>2012 Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 person</td>
<td>492 (31%)</td>
<td>32%</td>
</tr>
<tr>
<td>2 persons</td>
<td>751 (48%)</td>
<td>46%</td>
</tr>
<tr>
<td>3 persons</td>
<td>214 (14%)</td>
<td>16%</td>
</tr>
<tr>
<td>4 or more persons</td>
<td>103 (7%)</td>
<td>7%</td>
</tr>
<tr>
<td>No Data</td>
<td>7 (0%)</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>1,567</td>
<td>100%</td>
</tr>
</tbody>
</table>
Tenure Distribution
Owner-occupied households made up two out of three survey responses. This ratio is consistent with the vast majority of apartment sites in the Study being condominiums. For comparison, the 2016 Census counted that 56 percent of apartment dwellers (in buildings built 2011-2016) were owners and 44 percent were renters.

Table 10. Household Tenure Distribution

<table>
<thead>
<tr>
<th>Household Tenure</th>
<th>Responses</th>
<th>2012 Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner</td>
<td>1,071 (68%)</td>
<td>68%</td>
</tr>
<tr>
<td>Renter</td>
<td>464 (30%)</td>
<td>32%</td>
</tr>
<tr>
<td>No Data</td>
<td>32 (2%)</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>1,567</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 11. Building Tenure Distribution

<table>
<thead>
<tr>
<th>Building Tenure</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strata</td>
<td>1,185 (76%)</td>
</tr>
<tr>
<td>Market Rental</td>
<td>133 (9%)</td>
</tr>
<tr>
<td>Mixed Tenure</td>
<td>186 (12%)</td>
</tr>
<tr>
<td>Mixed Rental</td>
<td>35 (2%)</td>
</tr>
<tr>
<td>Non-Market Rental</td>
<td>28 (1%)</td>
</tr>
<tr>
<td>Total</td>
<td>1,567</td>
</tr>
</tbody>
</table>

Proximity to Transit Distribution
The survey sample provides coverage of households residing near the Frequent Transit Network and households who live further away.

Table 12. Frequent Transit Network Proximity Distribution

<table>
<thead>
<tr>
<th>FTN Proximity</th>
<th>Responses</th>
<th>2012 Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within 800m of rapid transit</td>
<td>827 (52%)</td>
<td>51%</td>
</tr>
<tr>
<td>Within 400m of frequent bus only</td>
<td>535 (35%)</td>
<td>30%</td>
</tr>
<tr>
<td>Away from FTN</td>
<td>205 (13%)</td>
<td>20%</td>
</tr>
<tr>
<td>Total</td>
<td>1,567</td>
<td>100%</td>
</tr>
</tbody>
</table>
Vehicles per Household
Generally, the average number of vehicles per household increases with household size and apartment unit size. In addition, vehicle ownership is higher for owners and households residing in strata sites.  

Table 13. Vehicle Holdings by Household Size

<table>
<thead>
<tr>
<th>Household Size</th>
<th>Vehicles</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 person</td>
<td>0.88</td>
</tr>
<tr>
<td>2 persons</td>
<td>1.36</td>
</tr>
<tr>
<td>3 persons</td>
<td>1.49</td>
</tr>
<tr>
<td>4 or more persons</td>
<td>1.49</td>
</tr>
</tbody>
</table>

Table 14. Vehicle Holdings by Unit Size (Bedrooms)

<table>
<thead>
<tr>
<th>Unit Size (Bedrooms)</th>
<th>Vehicles</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-bedroom units</td>
<td>0.64</td>
</tr>
<tr>
<td>1-bedroom units</td>
<td>0.98</td>
</tr>
<tr>
<td>2-bedroom units</td>
<td>1.35</td>
</tr>
<tr>
<td>3 plus-bedroom units</td>
<td>1.66</td>
</tr>
</tbody>
</table>

Table 15. Vehicle Holdings by Unit Size (Floor Area)

<table>
<thead>
<tr>
<th>Unit Type</th>
<th>Vehicles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 600 sq.ft.</td>
<td>0.79</td>
</tr>
<tr>
<td>600 – 799 sq.ft.</td>
<td>0.98</td>
</tr>
<tr>
<td>800 – 999 sq.ft.</td>
<td>1.18</td>
</tr>
<tr>
<td>1000+ sq.ft.</td>
<td>1.39</td>
</tr>
</tbody>
</table>

Table 16. Vehicle Holdings by Household Tenure

<table>
<thead>
<tr>
<th>Household Tenure</th>
<th>Vehicles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner</td>
<td>1.32</td>
</tr>
<tr>
<td>Renter</td>
<td>1.10</td>
</tr>
</tbody>
</table>

Table 17. Vehicle Holdings by Building Tenure

<table>
<thead>
<tr>
<th>Building Tenure</th>
<th>Vehicles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strata</td>
<td>1.30</td>
</tr>
<tr>
<td>Market Rental</td>
<td>1.07</td>
</tr>
<tr>
<td>Mixed Tenure</td>
<td>1.07</td>
</tr>
<tr>
<td>Mixed Rental</td>
<td>1.23</td>
</tr>
<tr>
<td>Non-Market Rental</td>
<td>0.54</td>
</tr>
</tbody>
</table>

The lone outlier is the average vehicle holdings in the three mixed rental sites. The three sites are older Metro Vancouver Housing Corporation sites with long-term tenants.
5. Apartment Residential Parking Supply and Utilization Analysis

The following analysis combines the Parking Facility Survey and Household Survey where appropriate. Sample sizes should be taken into consideration when reviewing the information.

5.1 Apartment Residential Parking Supply and Utilization

Broadly, the estimates of apartment parking supply and utilization ratios are consistent with those found in the 2012 Apartment Parking Study. Residential parking supply ratios exceed observed and reported utilization by a measurable amount. For strata sites, the oversupply of parking ranges from 19 percent to 42 percent depending on the survey. For market rental sites, the oversupply ranges from 23 percent to 35 percent. It should be noted that the timing of the parking facility survey may not have captured residents who may be shift workers or temporarily absent from the building. Please see Appendix 5 for supplemental information derived from the Household Survey.

Table 18. Resident Parking by Tenure

<table>
<thead>
<tr>
<th>Building Tenure (# sites in PFS)</th>
<th>Parking Facility Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Stalls per DU (PFS)</td>
</tr>
<tr>
<td>Strata (n=50)</td>
<td>1.31</td>
</tr>
<tr>
<td>Market Rental (n=12)</td>
<td>0.97</td>
</tr>
<tr>
<td>Mixed Tenure (n=7)</td>
<td>0.89</td>
</tr>
<tr>
<td>Mixed Rental (n=3)</td>
<td>1.47</td>
</tr>
<tr>
<td>Non-Market Rental (n=1)</td>
<td>0.33</td>
</tr>
</tbody>
</table>

Looking at strata sites only, the level of residential parking oversupply is fairly consistent across the region. According to the Parking Facility Survey, the oversupply of parking ranges from 32 percent in the North Shore sites to 58 percent in the Richmond sites.

Table 19. Resident Parking in Strata Sites by Subregion

<table>
<thead>
<tr>
<th>Strata Sites by Subregion (# sites in PFS)</th>
<th>Parking Facility Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Stalls per DU (PFS)</td>
</tr>
<tr>
<td>Burnaby/NW (n=10)</td>
<td>1.18</td>
</tr>
<tr>
<td>North Shore (n=6)</td>
<td>1.28</td>
</tr>
<tr>
<td>Northeast Sector+ (n=13)</td>
<td>1.33</td>
</tr>
<tr>
<td>Richmond (n=5)</td>
<td>1.29</td>
</tr>
<tr>
<td>South of Fraser (n=14)</td>
<td>1.46</td>
</tr>
<tr>
<td>Vancouver/UBC (n=2)</td>
<td>1.15</td>
</tr>
</tbody>
</table>

For the combined rental sites, the residential parking is oversupplied across the region.
### Table 20. Resident Parking in Rental Sites by Subregion

<table>
<thead>
<tr>
<th>Rental Sites by Subregion (# sites in PFS)</th>
<th>Parking Facility Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Stalls per DU (PFS)</td>
</tr>
<tr>
<td>North Shore (n=2)</td>
<td>0.87</td>
</tr>
<tr>
<td>Northeast Sector+ (n=1)</td>
<td>1.47</td>
</tr>
<tr>
<td>Richmond (n=2)</td>
<td>1.07</td>
</tr>
<tr>
<td>South of Fraser (n=5)</td>
<td>1.51</td>
</tr>
<tr>
<td>Vancouver/UBC (n=13)</td>
<td>0.85</td>
</tr>
</tbody>
</table>

### 5.2 Relationship with Apartment Unit Size

At the apartment unit level, using data from the Household Survey, households in strata units and market rental units with 0 or 1 bedroom, or units less than 800 sq.ft., have at most one vehicle to park.

### Table 21. Resident Parking in Strata Sites by Unit Size (bedrooms)

<table>
<thead>
<tr>
<th>Strata Sites (HHS responses)</th>
<th>Stalls per DU (HS)</th>
<th>Parked Vehicles per DU (HS)</th>
<th>Vehicles per DU (HS)</th>
<th>Parking Oversupply Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-bedroom (n=17)</td>
<td>1.00</td>
<td>0.88</td>
<td>0.88</td>
<td>+14%</td>
</tr>
<tr>
<td>1-bedroom (n=320)</td>
<td>1.16</td>
<td>0.94</td>
<td>1.05</td>
<td>+23%</td>
</tr>
<tr>
<td>2-bedroom (n=761)</td>
<td>1.44</td>
<td>1.24</td>
<td>1.37</td>
<td>+16%</td>
</tr>
<tr>
<td>3 plus-bedroom (n=86)</td>
<td>1.90</td>
<td>1.55</td>
<td>1.69</td>
<td>+23%</td>
</tr>
</tbody>
</table>

### Table 22. Resident Parking in Strata Sites by Unit Size (floorspace)

<table>
<thead>
<tr>
<th>Strata Sites (HHS responses)</th>
<th>Stalls per DU (HS)</th>
<th>Parked Vehicles per DU (HS)</th>
<th>Vehicles per DU (HS)</th>
<th>Parking Oversupply Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 600 sqft (n=126)</td>
<td>1.18</td>
<td>0.96</td>
<td>1.02</td>
<td>+23%</td>
</tr>
<tr>
<td>600-799 sqft (n=318)</td>
<td>1.23</td>
<td>1.03</td>
<td>1.16</td>
<td>+19%</td>
</tr>
<tr>
<td>800-900 sqft (n=409)</td>
<td>1.37</td>
<td>1.19</td>
<td>1.34</td>
<td>+15%</td>
</tr>
<tr>
<td>1000+ sqft (n=314)</td>
<td>1.67</td>
<td>1.39</td>
<td>1.51</td>
<td>+20%</td>
</tr>
</tbody>
</table>

### Table 23. Resident Parking in Market Rental Sites by Unit Size (bedrooms)

<table>
<thead>
<tr>
<th>Market Rental Sites (HHS responses)</th>
<th>Stalls per DU (HS)</th>
<th>Parked Vehicles per DU (HS)</th>
<th>Vehicles per DU (HS)</th>
<th>Parking Oversupply Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-bedroom (n=15)</td>
<td>0.85</td>
<td>0.47</td>
<td>0.47</td>
<td>+81%</td>
</tr>
<tr>
<td>1-bedroom (n=66)</td>
<td>1.02</td>
<td>0.79</td>
<td>1.02</td>
<td>+29%</td>
</tr>
<tr>
<td>2-bedroom (n=50)</td>
<td>1.23</td>
<td>1.12</td>
<td>1.26</td>
<td>+10%</td>
</tr>
</tbody>
</table>
Table 24. Resident Parking in Market Rental Sites by Unit Size (floorspace)

<table>
<thead>
<tr>
<th>Market Rental Sites (HHS responses)</th>
<th>Stalls per DU (HS)</th>
<th>Parked Vehicles per DU (HS)</th>
<th>Vehicles per DU (HS)</th>
<th>Parking Oversupply Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 600 sq.ft. (n=45)</td>
<td>0.95</td>
<td>0.64</td>
<td>0.78</td>
<td>+48%</td>
</tr>
<tr>
<td>600-799 sq.ft. (n=35)</td>
<td>0.93</td>
<td>0.77</td>
<td>1.03</td>
<td>+21%</td>
</tr>
<tr>
<td>800-999 sq.ft. (n=38)</td>
<td>1.31</td>
<td>1.16</td>
<td>1.32</td>
<td>+13%</td>
</tr>
</tbody>
</table>

5.3 Relationship with Year Built
Parking supply in strata and rental apartment buildings appear to be declining for newer buildings.

Table 25. Resident Parking in Strata Sites by Year Built

<table>
<thead>
<tr>
<th>Strata Sites (n=50)</th>
<th>Stalls per DU (PFS)</th>
<th>Parked Vehicles per DU (PFS)</th>
<th>Parking Oversupply Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005-2009 (n=19)</td>
<td>1.31</td>
<td>0.92</td>
<td>+42%</td>
</tr>
<tr>
<td>2010-2013 (n=14)</td>
<td>1.43</td>
<td>1.04</td>
<td>+37%</td>
</tr>
<tr>
<td>2014-2017 (n=17)</td>
<td>1.26</td>
<td>0.87</td>
<td>+45%</td>
</tr>
</tbody>
</table>

Table 26. Resident Parking in Rental Sites by Year Built

<table>
<thead>
<tr>
<th>All Rental Sites (n=23)</th>
<th>Stalls per DU (PFS)</th>
<th>Parked Vehicles per DU (PFS)</th>
<th>Parking Oversupply Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005-2009 (n=3)</td>
<td>1.18</td>
<td>0.82</td>
<td>+44%</td>
</tr>
<tr>
<td>2010-2013 (n=5)</td>
<td>0.91</td>
<td>0.64</td>
<td>+42%</td>
</tr>
<tr>
<td>2014-2017 (n=11)</td>
<td>0.91</td>
<td>0.66</td>
<td>+38%</td>
</tr>
</tbody>
</table>

Table 27. Resident Parking in Market Rental Sites by Year Built

<table>
<thead>
<tr>
<th>Market Rental Sites (n=11)</th>
<th>Stalls per DU (PFS)</th>
<th>Parked Vehicles per DU (PFS)</th>
<th>Parking Oversupply Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005-2009 (n=3)</td>
<td>1.18</td>
<td>0.82</td>
<td>+44%</td>
</tr>
<tr>
<td>2010-2013 (n=3)</td>
<td>0.80</td>
<td>0.55</td>
<td>+46%</td>
</tr>
<tr>
<td>2014-2017 (n=5)</td>
<td>1.07</td>
<td>0.84</td>
<td>+27%</td>
</tr>
</tbody>
</table>

Table 28. Resident Parking in Market Rental Sites by Year Built (Excluding Vancouver)

<table>
<thead>
<tr>
<th>Market Rental Sites, Excluding Vancouver (n=8)</th>
<th>Stalls per DU (PFS)</th>
<th>Parked Vehicles per DU (PFS)</th>
<th>Parking Oversupply Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005-2009 (n=1)</td>
<td>1.54</td>
<td>1.10</td>
<td>+40%</td>
</tr>
<tr>
<td>2010-2013 (n=2)</td>
<td>1.27</td>
<td>0.90</td>
<td>+40%</td>
</tr>
<tr>
<td>2014-2017 (n=5)</td>
<td>1.07</td>
<td>0.84</td>
<td>+27%</td>
</tr>
</tbody>
</table>
5.4 Relationship with Transit Proximity

Apartment residential parking supply and utilization ratios are inversely related to the level of transit service. As transit service level declines, parking supply and utilization increase (however, parking utilization is at most 1 vehicle per unit as per the Parking Facility Survey).

**Table 29. Resident Parking in Strata Sites by Transit**

<table>
<thead>
<tr>
<th>Strata Sites by Proximity to FTN</th>
<th>Parking Facility Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Stalls per DU (PFS)</td>
</tr>
<tr>
<td>Within 800m of rapid transit (n=22)</td>
<td>1.21</td>
</tr>
<tr>
<td>Within 400m of frequent bus only (n=20)</td>
<td>1.40</td>
</tr>
<tr>
<td>Away from FTN (n=8)</td>
<td>1.54</td>
</tr>
</tbody>
</table>

**Table 30. Resident Parking in Market Rental sites by Transit**

<table>
<thead>
<tr>
<th>Market Rental Sites by Proximity to FTN</th>
<th>Parking Facility Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Stalls per DU (PFS)</td>
</tr>
<tr>
<td>Within 800m of rapid transit (n=3)</td>
<td>0.62</td>
</tr>
<tr>
<td>Within 400m of frequent bus only (n=3)</td>
<td>0.90</td>
</tr>
<tr>
<td>Away from FTN (n=6)</td>
<td>1.31</td>
</tr>
</tbody>
</table>

**Table 31. Resident Parking in Mixed Tenure Sites by Transit**

<table>
<thead>
<tr>
<th>Mixed Tenure Sites by Proximity to FTN</th>
<th>Parking Facility Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Stalls per DU (PFS)</td>
</tr>
<tr>
<td>Within 800m of rapid transit (n=4)</td>
<td>0.80</td>
</tr>
<tr>
<td>Within 400m of frequent bus only (n=3)</td>
<td>1.09</td>
</tr>
</tbody>
</table>

5.5 Relationship with Transit Proximity and Unit Size

The results of the Household Survey allow for an analysis of the relationship between parking utilization and proximity to the Frequent Transit Network as a function of apartment unit size. Generally, whether for strata or rental apartment sites, the ratio of parked vehicles to dwelling unit is the lowest for 0 or 1 bedroom units and the largest incremental increase in parking utilization occurs when these apartment units are located further away from the Frequent Transit Network. Strata units with more than two bedrooms appear to be less influenced by proximity to frequent transit. Rental units appear to be more influenced by proximity to rapid transit than to frequent bus. Due to small sample sizes, households in 3-bedroom rental units were excluded from the analysis.
A recurring interest is the potential impact that sites in the City of Vancouver may have on these patterns. The following charts replicate the charts above but exclude sites in Vancouver and UBC. The charts below indicate that the patterns observed earlier remain intact. Please note that due to small sample sizes,
households in rental units near rapid transit stations, and households in 3-bedroom rental units were excluded from the charts.

Figure 5. Parking and Vehicle Holdings for Strata Sites (Excluding Vancouver/UBC)

Figure 6. Parking and Vehicle Holdings for Market Rental Sites (Excluding Vancouver)

Figure 7. Parking and Vehicle Holdings for Rental Sites (Excluding Vancouver)
5.6 Relationship with Transit Boardings

Lower observed rates of resident parking utilization are generally correlated with higher rates of transit usage as measured by the number of bus boardings within 400 metres and number of SkyTrain and SeaBus boardings within 800 metres of the surveyed apartment sites. The R² value of 0.25 suggests that 25 percent of the variance in transit boardings can be explained by apartment parking utilization (the correlation R is 0.50). The strength of the correlation is notable given that other land use and socio-economic variables have not been factored into this analysis.

The ‘inverse’ relationship is much stronger for rental sites compared to strata sites (Figures 9 and 10). In this case, the correlation of apartment utilization and transit boardings for the rental sites is three times stronger than for the strata sites. The patterns complement the transit ridership analysis in the *Transit-Oriented Affordable Housing Study* which showed renters have higher transit usage rates than do homeowners even after accounting for household income.

To examine the rental sites further, the dataset was split into sites located outside of Vancouver and sites within Vancouver (Figures 11 and 12). While the sample sizes are small, three patterns can be observed. Transit ridership is measurably higher amongst the Vancouver sites and that reflects the greater availability of transit service within the city. Parking utilization is higher outside of Vancouver. And, the

---

5 Transit boardings data were not available for bus stops within 400 metres of two strata apartment sites in White Rock; there were no bus stops within 400 metres of one strata site in Richmond.

6 If the lone non-market rental site in Vancouver was removed from the dataset, then the R² value increased to 0.53, indicating that 53 percent of the variance in transit ridership relative to the trendline could be attributed to the parking utilization in the rental sites in the dataset.
charts suggest that the Vancouver sites are likely not inflating the strength of the correlation seen in Figure 9 (rental sites).

Figure 9. Apartment Parking Utilization for Rental Sites and Nearby Transit Boardings

Figure 10. Apartment Parking Utilization for Strata Sites and Nearby Transit Boardings
Figure 11. Apartment Parking for Rental Sites (Excluding Vancouver) and Nearby Transit Boardings

Figure 12. Apartment Parking Utilization for Rental Sites (Vancouver) and Nearby Transit Boardings
6. Street Parking Analysis
The analysis of the Street Parking Survey data was framed around the following questions:

- How does street parking utilization vary by time period?
- What is the relationship between street parking utilization and regulations?
- When do the surveyed street networks experience high street parking utilization?
- What are the potential factors affecting or associated with high street parking utilization?
- What is the relationship between street parking utilization and apartment parking utilization associated with the surveyed street networks?
- What is the relationship between rental apartment sites with optional resident parking and street parking utilization?

It should be noted that the analysis pertains to data collected on 65 street networks associated with the surveyed apartment sites. The patterns that emerged should not be extrapolated to neighbourhoods that are predominantly single-detached neighbourhoods, for example.

6.1 Street Parking Utilization Patterns
Overall, street parking utilization is higher on Saturday evenings than on weekday evenings. This finding is consistent with the expectation that during these time periods, there would typically be more visitors to apartment residents and nearby non-residential land uses. Street parking utilization on weekday late nights was the lowest at 52 percent. This finding is consistent with the expectation that visitors generally vacate these parking spaces to go home as late night approaches.

Table 32. Aggregate Street Parking Utilization by Time Period

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Total Street Parking Utilization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weekday Evening</td>
<td>59%</td>
</tr>
<tr>
<td>Weekday Late Night</td>
<td>52%</td>
</tr>
<tr>
<td>Saturday Evening</td>
<td>65%</td>
</tr>
</tbody>
</table>

The effect of street parking regulations is seen when comparing utilization on weekday evenings and Saturday evenings. Utilization increases the most for parking spaces with no restrictions (for the classification of street parking restrictions, please refer to Section 4.4, Table 5). The higher utilization on streets with restrictions is consistent with municipal practice to respond to relatively high observed parking demand with appropriate street parking restrictions to manage the demand.

Table 33. Aggregate Street Parking Utilization by Presence of Parking Restrictions and Time Period

<table>
<thead>
<tr>
<th>Street Parking</th>
<th>Weekday Evening</th>
<th>Saturday Evening</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>No restrictions</td>
<td>56%</td>
<td>63%</td>
<td>+7%</td>
</tr>
<tr>
<td>Restrictions</td>
<td>63%</td>
<td>67%</td>
<td>+4%</td>
</tr>
</tbody>
</table>

7 Because some street parking restrictions are not applicable in the late night period, only the weekday evening and Saturday evening periods were compared.
6.2 High Street Parking Utilization (85% or Higher)

An oft-cited threshold for determining whether street parking spaces are being used optimally is 85 percent. Donald Shoup, a planning professor at UCLA, popularized this threshold in his 2005 book, aptly named, “The High Cost of Free Parking”\(^8\). The premise is that parking, like any scarce resource, should be regulated and/or priced to ensure that 15 percent of the total parking spaces in a given area are available for parking at any given time. By controlling for the level of parking, excessive congestion and frustration (on the part of drivers looking for parking) can be mitigated.\(^9\) In the Study, street parking utilization was considered ‘high’ when utilization is at least 85 percent.

In each time period surveyed (i.e. weekday evening, weekday late night, and Saturday evening), the vast majority of street networks experienced less than 85 percent utilization. In fact, Saturday evening saw the largest number of high street parking networks (i.e. 11 out of 65 street networks), followed by the weekday evening (at 7), and weekday late night (at 2).

Figure 13. Occurrences and Degree of High Street Parking Utilization


\(^9\) As another example of the use of the 85 percent threshold, the Port of Vancouver uses the threshold when monitoring container throughput and terminal capacity. When throughput exceeds 85 percent, then system efficiency deteriorates exponentially. When throughput approaches 85 percent, capacity expansion of a marine terminal may be warranted.
Looking deeper at the 12 street networks that exceeded 85 percent utilization once only, four street networks saw exceedances on Saturdays only, and one network saw an exceedance on a weekday evening only. Seven street networks experienced high parking utilization on two or three surveyed periods with six exceedances on a weekday evening, two exceedances on a weekday late night, and seven exceedances on a Saturday evening.

These 7 outliers, contrary to initial expectations, are located throughout the region. Based on a high-level qualitative analysis (using orthophotos) of the neighbourhood characteristics of these outliers, non-residential trip generators (e.g. restaurants, retail, parks) appear to be a common land use in these neighbourhoods; and, the overall supply of street parking may be another contributing factor. Further neighbourhood-scale analysis is warranted to develop a detailed understanding of the land use ‘drivers’ of street parking utilization in these affected areas, the origins of these vehicles, the trip purposes, and the parking duration.

Table 34. Street Networks Parking Exceedances

<table>
<thead>
<tr>
<th>Exceedance Criteria (85% or higher)</th>
<th>Total Street Networks</th>
<th>Weekday Evening</th>
<th>Weekday Late Night</th>
<th>Saturday Evening</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exceedance in at least one surveyed time period</td>
<td>12</td>
<td>7</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>• Exceedance in 2 or 3 surveyed time periods</td>
<td>7</td>
<td>6</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>• Exceedance in 1 surveyed time period only</td>
<td>5</td>
<td>1</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Less than 85% in all 3 surveyed time periods</td>
<td>53</td>
<td>58</td>
<td>63</td>
<td>54</td>
</tr>
</tbody>
</table>

Figure 14. Street Networks with High Parking Use in Two or Three Surveyed Periods
6.3 Street Parking and Apartment Parking Utilization

The surveys did not present any clear patterns between street parking utilization and apartment parking utilization. The majority of surveyed street networks did not exceed 85 percent in any of the three surveyed time periods. For the associated apartment sites, the apartment parking utilization ranged from 39 percent to 84 percent. Five street networks exceeded 85 percent once only, and the associated apartment parking utilization ranged from 51 percent to 79 percent. Finally, seven street networks experienced persistently high utilization, and the associated apartment parking utilization ranged from 60 percent to 81 percent.

Table 35. Street Parking Utilization and Apartment Parking Utilization

<table>
<thead>
<tr>
<th>Street Parking Utilization</th>
<th>Affected Street Networks</th>
<th>Apartment Parking Utilization Range</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>High Utilization</strong></td>
<td>7</td>
<td>60% - 81%</td>
</tr>
<tr>
<td>85% or higher in two or three surveyed periods</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Medium Utilization</strong></td>
<td>5</td>
<td>51% - 79%</td>
</tr>
<tr>
<td>85% or higher in one surveyed time period only</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Low Utilization</strong></td>
<td>53</td>
<td>39% - 84%</td>
</tr>
<tr>
<td>Less than 85% in three surveyed time periods</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Three street networks had full restrictions; no parking was allowed and no parked vehicles were observed. The three associated apartment sites are located in Langley Township (strata), Port Coquitlam (strata), and Vancouver (market rental). The apartment parking utilization for these sites ranged from 73 percent to 80 percent, situating them towards the upper range of parking utilization relative to the apartment sites surveyed. Further research is warranted.

6.4 Apartment Residents and Visitors Parking on the Street

The potential impact of apartment buildings on nearby street parking is a frequently cited concern. The Household Survey provides some insights. Out of the 1,400 households that reported owning at least one vehicle, just under 300 households indicated that they usually parked on a nearby street, with the vast majority reporting they parked within a five-minute walk from their apartment building (it should be noted once again that the Household Survey does not purport to be a statistical representation of all apartment households in the region).

Table 36. Apartment Residents Parking on the Street

<table>
<thead>
<tr>
<th>If you usually park on the street, typically how far do you park from your apartment building?</th>
<th>Number of Responses (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than a 5 minute walk</td>
<td>198 (13%)</td>
</tr>
<tr>
<td>Between 5 and 10 minute walk</td>
<td>73 (5%)</td>
</tr>
<tr>
<td>More than 10 minute walk</td>
<td>9 (&lt;1%)</td>
</tr>
<tr>
<td>N/A</td>
<td>1,149 (81%)</td>
</tr>
<tr>
<td>Total</td>
<td>1,429</td>
</tr>
</tbody>
</table>
Apartment visitors typically encounter difficulty finding a parking space in the building’s parking facility on weekends, holidays, and special occasions (Figure 15). On these days, there is much more activity in terms of people visiting friends and family living in apartment buildings and people visiting in the vicinity of these apartment sites to patronize restaurants, parks, or other activities. As shown in Figure 16, some apartment visitors end up parking on a nearby street. Further work is warranted to survey apartment visitor parking utilization on weekends and holidays.

Figure 15. Difficulty Finding Visitor Parking in the Building’s Parking Facility

![Graph showing visitor parking difficulty]

Figure 16. Typical Parking Locations for Apartment Visitors

![Graph showing visitor parking preferences]

6.5 Street Parking and Optional Parking in Rental Apartment Sites

The findings of the 2012 Study, and the analysis from the 2018 Study, consistently showed that lower residential parking utilization and vehicle ownership are associated with rental apartment sites and smaller apartment unit sizes. However, an oft-cited interest is understanding the actual behaviour should a parking stall be available for an additional charge only. Do the residents end up parking on nearby streets?

---

10 The visitor parking questions were multiple-choice questions; respondents could select all the choices that applied.
First, looking at all rental apartment types in the Parking Facility Survey dataset, both residential parking supply and utilization are consistent with expectations. Where a parking stall is not included in the rent, the apartment sites on average have a lower parking supply ratio and utilization ratio. The pattern is the same for market rental sites only.

![Surveyed Rental Sites, Market Rental, Mixed Tenure, Mixed Market, NMR (n=22)](image1)

**Figure 17. Comparison of Parking Supply and Utilization in Rental Sites**

![Market Rental Sites (n=12)](image2)

**Figure 18. Comparison of Parking Supply and Utilization in Market Rental Sites**

The evidence for resident spillover parking is mixed. For non-Vancouver street networks associated with rental sites where resident parking is not included in the rent, the street parking utilization is higher. Regardless, the street parking utilization on average does not approach 85 percent.

For Vancouver street networks associated with rental sites where resident parking is not included in the rent, the street parking utilization differential range is minimal. Interestingly, the relatively higher street parking utilization in Vancouver in the evening is consistent with the relatively higher number of non-residential land uses that generate visitor trips in the city relative to other suburban contexts.
Anecdotal observations from several peer municipal staff in Metro Vancouver suggest that there is a correlation between on-site visitor parking utilization and whether or not the nearby streets have regulations (i.e. where apartment sites tend to have lower facility utilization if the nearby streets are unregulated).

### Table 37. Street Parking Utilization Associated with Rental Sites (Excluding Vancouver)

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Non-Vancouver street networks associated with rental apartments where...</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Parking is NOT included in rent</td>
</tr>
<tr>
<td>Weekday Evening</td>
<td>44%</td>
</tr>
<tr>
<td>Weekday Late Night</td>
<td>49%</td>
</tr>
<tr>
<td>Saturday Evening</td>
<td>48%</td>
</tr>
</tbody>
</table>

### Table 38. Street Parking Utilization Associated with Rental Sites (Vancouver Only)

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Vancouver street networks associated with rental apartments where...</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Parking NOT included in rent</td>
</tr>
<tr>
<td>Weekday Evening</td>
<td>72%</td>
</tr>
<tr>
<td>Weekday Late Night</td>
<td>55%</td>
</tr>
<tr>
<td>Saturday Evening</td>
<td>68%</td>
</tr>
</tbody>
</table>

The following tables show the same information but disaggregated by municipality and time period.

### Table 39. Municipal-Level Street Parking Utilization Associated with Rental Sites (Weekday Evening)

<table>
<thead>
<tr>
<th>All Rental Types</th>
<th>Weekday Evening, Street Parking Average Utilization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Municipality</td>
<td>Parking NOT included in rent</td>
</tr>
<tr>
<td>Langley City (1)</td>
<td>-</td>
</tr>
<tr>
<td>Langley Township (2)</td>
<td>-</td>
</tr>
<tr>
<td>North Vancouver District (2)</td>
<td>51%</td>
</tr>
<tr>
<td>Port Coquitlam (1)</td>
<td>-</td>
</tr>
<tr>
<td>Richmond (2)</td>
<td>26%</td>
</tr>
<tr>
<td>Surrey (1)</td>
<td>-</td>
</tr>
<tr>
<td>Vancouver (13)</td>
<td>72%</td>
</tr>
<tr>
<td>Total (22)</td>
<td>68%</td>
</tr>
</tbody>
</table>
Table 40. Municipal-Level Street Parking Utilization Associated with Rental Sites (Weekday Late Night)

<table>
<thead>
<tr>
<th>Municipality (# street networks)</th>
<th>Weekday Late Night, Street Parking Average Utilization</th>
<th>Parking NOT included in rent</th>
<th>Parking included in rent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Langley City (1)</td>
<td></td>
<td>-</td>
<td>65%</td>
</tr>
<tr>
<td>Langley Township (2)</td>
<td></td>
<td>-</td>
<td>41%</td>
</tr>
<tr>
<td>North Vancouver District (2)</td>
<td></td>
<td>61%</td>
<td>-</td>
</tr>
<tr>
<td>Port Coquitlam (1)</td>
<td></td>
<td>-</td>
<td>41%</td>
</tr>
<tr>
<td>Richmond (2)</td>
<td></td>
<td>18%</td>
<td>-</td>
</tr>
<tr>
<td>Surrey (1)</td>
<td></td>
<td>-</td>
<td>16%</td>
</tr>
<tr>
<td>Vancouver (13)</td>
<td></td>
<td>55%</td>
<td>55%</td>
</tr>
<tr>
<td>Total (22)</td>
<td></td>
<td>55%</td>
<td>47%</td>
</tr>
</tbody>
</table>

Table 41. Municipal-Level Street Parking Utilization Associated with Rental Sites (Saturday Evening)

<table>
<thead>
<tr>
<th>Municipality (# street networks)</th>
<th>Saturday Evening, Street Parking Average Utilization</th>
<th>Parking NOT included in rent</th>
<th>Parking included in rent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Langley City (1)</td>
<td></td>
<td>-</td>
<td>67%</td>
</tr>
<tr>
<td>Langley Township (2)</td>
<td></td>
<td>-</td>
<td>40%</td>
</tr>
<tr>
<td>North Vancouver District (2)</td>
<td></td>
<td>59%</td>
<td>-</td>
</tr>
<tr>
<td>Port Coquitlam (1)</td>
<td></td>
<td>-</td>
<td>37%</td>
</tr>
<tr>
<td>Richmond (2)</td>
<td></td>
<td>21%</td>
<td>-</td>
</tr>
<tr>
<td>Surrey (1)</td>
<td></td>
<td>-</td>
<td>15%</td>
</tr>
<tr>
<td>Vancouver (13)</td>
<td></td>
<td>68%</td>
<td>76%</td>
</tr>
<tr>
<td>Total (22)</td>
<td></td>
<td>66%</td>
<td>53%</td>
</tr>
</tbody>
</table>
7. Other Analysis

The Household Survey provides additional information about issues pertinent to apartment residents, such as bicycle parking, interest in plug-in electric vehicles, and willingness to forgo a parking stall.

7.1 Bicycle Parking

For households with bicycles, about one-third do not use their building’s secured bicycle parking facility. The rate of usage is consistent across different building ages. The top reasons reported were concerns about the potential for the bicycles to be stolen or damaged, that the bicycle parking facility was too crowded, and adverse perceptions of safety and convenience. These sentiments are consistent with those expressed in the 2012 Study.

![Figure 19. Use the Building's Bicycle Parking Facility by Year Built of Building](image)

One way of understanding and appreciating these sentiments is to consider a counterfactual scenario: i.e. what if one in three households in an apartment building chose not to park their car or truck in the building’s parking facility for the same reasons. A scenario like this would never become a recurring problem, otherwise the entire apartment development industry would suffer public outrage. These design problems would be mitigated during the planning stage of an apartment project. From a policy and practice perspective, the same care and attention that is paid to accommodating cars and trucks could easily be applied to the provision of convenient, capacious, and secure bicycle parking facilities in new apartment developments.
7.2 Presence of Electric Vehicle Charging Infrastructure

The provision of public electric vehicle charging infrastructure around the region has been increasing steadily. Some municipalities in the region are now requiring new apartment projects to have the electrical infrastructure in place to facilitate installation of charging equipment by building occupants. Other apartment sites are retrofitting their buildings with appropriate electricity capacity and the parking stalls with charging equipment.

The Household Survey shows that the presence of electric vehicle charging appears to be associated with a slightly higher share of residents expressing a likelihood to consider buying a plug-in electric vehicle within the next five years.¹¹ This is potential evidence that is consistent with prior research indicating that investments or requirements aimed at increasing the availability of home charging infrastructure could have a greater impact on plug-in electric vehicle adoption than those that focus on public charging infrastructure.¹² It should be noted that the effect of self-selection cannot be ruled out – i.e. residents who may already have an interest in buying a plug-in electric vehicle may have chosen an apartment building because of the presence of charging infrastructure.

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¹¹ Statistical significance was not evaluated.

7.3 Willingness to Forgo a Parking Stall

The Household Survey asks residents if provided the opportunity, would they have purchased or rented their current apartment without a parking stall, if it meant having a lower purchase price or rent. For zero vehicle households, 34 percent would not be willing to make that trade-off. A sizable portion (42 percent) was unsure and 25 percent responded in the positive. Compared to the 2012 Study, there is a decrease in the affirmative (from 36 percent) and increase in the uncertainty (from 30 percent) in the results of the 2018 Study.

For households having at least one vehicle, the response was consistent with the 2012 Study: i.e. a vast majority (83 percent) would not forgo a parking stall.

Table 42. Strata Households and Willingness to Forego Parking Stalls

<table>
<thead>
<tr>
<th>Household Type (Strata Sites)</th>
<th>Willingness to Forego Parking Stalls</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Zero vehicles (n=65)</td>
<td>34%</td>
</tr>
<tr>
<td>1 or more vehicles (n=1,120)</td>
<td>83%</td>
</tr>
</tbody>
</table>

For households in other building tenures, the responses were consistent with expectation. Generally, a simple majority of zero vehicle households would be willing to forgo a parking stall. For households with vehicles, a majority answered in the negative.

Table 43. Non-Strata Households and Willingness to Forego Parking Stalls

<table>
<thead>
<tr>
<th>Household Type (Market Rental, Mixed Tenure, Mixed Rental, Non-Market Rental Sites)</th>
<th>Willingness to Forego Parking Stalls</th>
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<tbody>
<tr>
<td></td>
<td>No</td>
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<tr>
<td>Zero vehicles (n=68)</td>
<td>21%</td>
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<tr>
<td>1 or more vehicles (n=314)</td>
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8. Looking Ahead

Through this Study, a number of opportunities have arisen to expand regional efforts to investigate parking-related matters. These and other opportunities can be expanded and refined. TransLink and Metro Vancouver staff can offer research support as appropriate.

8.1 Shared Use Parking Opportunities

While the opportunities to consolidate parking supplies may face near-term security, wayfinding, and legal difficulties, local governments can explore opportunities to encourage the shared-use of parking. Local governments can explore ways to help building managers make sharing easier and address security (like with third-party apps and security audits). Similarly, local governments, in collaboration with professional architecture, development, and parking associations, can explore how to design ‘shared-use’ access controls into future parking facilities. These access controls can enable nearby parking demands to be accommodated. The value proposition could be the potential revenue-generating potential for an apartment building’s strata or property manager, or group of nearby apartment buildings, for example.

8.2 Mobility Trends, Consumer Preferences, and an Aging Population

Mobility trends can be difficult to forecast. At the top of many people’s minds is autonomous vehicles and the implications for vehicle ownership, congestion, and parking demand. Since the impact of self-driving passenger and commercial vehicles may not be witnessed for a number of years, it is worth spending time to think about those transportation services and technology on the road today, such as car sharing and bike sharing. A better understanding of broader transportation demand management provisions on parking utilization and vehicle ownership can help improve or validate parking requirements in new residential or commercial developments (see, for example, the 2014 Metro Vancouver Car Share Study).

Also, in the near term, the introduction of ride-hailing as a long-term transportation option will necessitate a different approach to allocating, regulating, and managing curb parking spaces, especially in busy corridors where a compendium of transportation modes may converge and create congestion and safety hotspots.

Consumer preference is equally difficult to forecast. Despite greater attention to fluctuating gasoline prices, larger passenger vehicles (i.e. sport utility vehicles and trucks) are increasingly popular with Canadian consumers. With the acceleration of electric vehicle production in recent years, including e-SUVs and up-and-coming e-trucks, the interest and preference for these larger passenger vehicles may increase. Further investigation towards larger parking standard dimensions for these vehicles may be warranted. Similarly, an aging population will necessitate reviews of how accessibility can be better accommodated in new and existing developments.

Local governments may need to investigate the street parking supply and management implications of not only larger passenger vehicles, but also large commercial vehicles owned or operated by apartment residents that cannot be readily accommodated in parking facilities.

Should vehicle ownership decline in absolute terms, the adaptive reuse of parking facilities could be an opportunity for local governments to explore. For example, the reallocation of space to expand and improve bicycle parking facilities can increase resident usage and satisfaction.
8.3 Monitoring and Managing Street Parking Supply and Utilization

The deployment of automated licence plate reading technology is an emerging tool to inventory street parking utilization. Several local governments in the region have deployed the technology. The data can be useful to support local government understanding of the magnitude of parking utilization, and the nature of utilization – whether vehicles are being parked for excessively long periods of time, and whether parked vehicles originate from a nearby home, within the neighbourhood, or elsewhere. The large-scale deployment of this technology may be warranted in order to create an inventory of on-street utilization, various parking regulations across the region, and origin-destination data of parked vehicles when cross-referenced with ICBC vehicle licensing data.

Associated with street parking monitoring is the management of the demand through dynamic pricing. Dynamic street parking pricing based on congestion levels or other criteria may be an opportunity to shape driving demand, but also to promote fair access to a scarce resource (parking) in popular destinations.

8.4 Commercial and Institutional Parking

Commercial and Institutional parking issues (i.e. hospital precincts, place of worship, etc.) remain a consistent interest of local governments. Given the significant trip-attraction that commercial and institutions (e.g. universities, hospitals) create between staff and visitors, it is appropriate to venture further into the utilization of these non-residential (but often mixed-use) land use contexts.
9. Conclusions

The findings of the 2018 Regional Parking Study largely corroborate those in the 2012 Apartment Parking Study, and includes new insights about street parking supply and utilization. Apartment parking supply remains excessive relative to observed utilization. Apartment buildings close to frequent transit, whether or bus or SkyTrain, appear to have lower parking supply and utilization. The lower rates of parking utilization are associated with higher transit use as measured by the number of transit boardings near the buildings, and this relationship is stronger for rental apartment sites.

Street parking is inherently complex. Some of the factors contributing to street parking use include visitors to non-residential land uses, such as restaurants, shops, and parks; apartment visitors on weekends, holidays, and special occasions; and some apartment residents parking on the street. Even with these factors, only a handful of surveyed street networks experienced persistently high street parking utilization (exceeding 85 percent utilization on two or three of the surveyed time periods).

Finally, the 2018 Regional Parking Study highlights a challenge that remains unchanged from the 2012 Study. The design and capacity of current bicycle parking facilities in apartment buildings are discouraging their use by many residents.

The findings reveal opportunities to ‘right size’ the amount of parking in apartment buildings for both motorized vehicles and bicycles, and highlight the opportunity to treat on-site and on-street parking as a system.

Looking ahead, practitioners and policymakers should be mindful of evolving mobility choices, technology, and consumer preferences, and the potential implications for vehicle ownership, parking demand, and parking requirements in apartment buildings, on streets, and in other building structures. TransLink and Metro Vancouver will continue to look for opportunities to undertake and support research related to parking in accordance with regional policies, and to support the efforts of member jurisdictions to coordinate land use and transportation decisions.
## Appendix 1: Apartment Sites

<table>
<thead>
<tr>
<th>Local Jurisdiction</th>
<th>Building Name</th>
<th>Building Address</th>
<th>Included in Parking Facility Survey</th>
<th>Included in Household Survey</th>
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<tbody>
<tr>
<td>Burnaby</td>
<td>Jewel I</td>
<td>6188 Wilson Ave</td>
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<tr>
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<td>Jewel II</td>
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<td>MacPherson Walk North</td>
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<td>6461 Telford Ave</td>
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<td>Burnaby</td>
<td>Stratus at Solo District</td>
<td>2008 Rosser Ave</td>
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<td>Celadon</td>
<td>3102 Windsor Gate</td>
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<td>555 Delestre Ave</td>
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<tr>
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<td>Encore</td>
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<td>215 Brookes St</td>
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<td>Camellia at the Gardens</td>
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<td>Yes</td>
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<td>6600 COONEY RD</td>
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<td>Yes</td>
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<td>Richmond</td>
<td>Modena - 6611 Eckersley</td>
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<td>Richmond</td>
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<td>Quintet Tower A</td>
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Regional Planning Advisory Committee
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<th>Local Jurisdiction</th>
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<th>Building Address</th>
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<th>Included in Household Survey</th>
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Appendix 2: Household Survey Form

Metro Vancouver 2017 Regional Parking Study

Metro Vancouver (the Metro Vancouver Regional District) in partnership with TransLink are conducting a study of multi-unit residential buildings regarding vehicle and bike parking usage. Your household has been selected to be part of this important study. The study will provide information to municipalities and developers on the appropriate amount of vehicle and bike parking supply for new multi-unit residential developments. We appreciate your participation, and all responses will be kept confidential. Please complete by January 31, 2018.

We recommend completing this questionnaire online at: www.MVParking.ca/survey

If you wish to complete the paper questionnaire, please mail the questionnaire to:
Ankasa Consulting
Suite 301 – 4475 Wayburne Drive
Burnaby, BC, V5G 4X4
Attention: “Parking Study”

i. ACCESS CODE (see introductory letter) ____________ ____________ ____________ ____________ ____________

ii. Building Name & Address: ____________________________ Unit #: ____________

RESIDENT VEHICLE PARKING

1. How many vehicles does your household own or lease (not including car share program)? [ ]
   (Please include all cars, vans or light trucks that are brought home and parked overnight, but not motorcycles, scooters, or bicycles.)

2. Where do you usually park your vehicle(s) overnight? Please note number of vehicles:
   - Vehicles in my building’s parking facility (parking lot or garage).
   - Vehicles in a nearby off-street parking facility (parking lot or garage).
   - Number of vehicles I park on the street near my building.
   - If you usually park on the street, typically how far do you park from your building?
     [ ] Less than a 5 min walk [ ] Between 5 and 10 min walk [ ] More than 10 min walk

3. If you OWN your apartment/townhouse, how many of your parking space(s) in the building are:
   [ ] Included in the unit rent
   [ ] Purchased for an extra fee
   [ ] I don’t have any parking space
   [ ] Cost per month?

4. If you RENT your apartment/townhouse, how many of your parking space(s) in the building are:
   [ ] Included in the unit rent
   [ ] Purchased for an extra fee
   [ ] I don’t have any parking space
   [ ] Cost per month?

5. How many of your parking spaces in the building do you rent out to other people? [ ]
   How much do you charge per month? ____________

6. If provided the opportunity, would you have purchased/rented your current apartment/townhouse without a parking stall, if it meant having a lower purchase/rental price for your unit?
   [ ] Yes [ ] Maybe/unsure [ ] No

Page 1 of 2
VISITOR VEHICLE PARKING

7. A. Typically, where do your visitors park? (Select all that apply)
   - In my building's designated visitor parking area
   - In one of the stalls I own/rent in my building
   - On the street near building (paid)
   - On the street near building (free)
   - Nearby parking facility
   - Not applicable – I don't have visitors who need to park at my building (skip to question 8)

B. Typically, when is it difficult for your visitors to find parking in your building's parking facility? (Check all that apply)
   - Weekdays
   - Weekends
   - Holidays and Special Occasions
   - Never
   - Not applicable

BICYCLE PARKING

8. Does your building have secure bike parking? (i.e.: bike racks in a locked room/cage or bike racks in a designated parking stall)
   - Yes
   - No
   - I don't know

9. A. How many bicycles does your household own? If you do not have any bicycles skip to question 10.

B. Does your household use the building's bicycle parking facility?
   - Yes
   - No (select all that apply)
     - Because it's a good facility
     - Because the strata requires me to
     - Too crowded or full
     - I'm afraid the bike will be stolen or damaged
     - I feel uncomfortable or unsafe in the building's bike parking facility
     - It's inconvenient
     - Other, please specify:

HOUSEHOLD INFORMATION

10. How many bedrooms are in your apartment/townhouse?
    - 0 (bachelor/studio)
    - 1
    - 2
    - 3
    - 4 or more

11. How large is your apartment/townhouse (excluding balcony/patio)?
    - Under 400 sq ft
    - 400-499 sq ft
    - 500-599 sq ft
    - 600-699 sq ft
    - 700-799 sq ft
    - 800-899 sq ft
    - 900-999 sq ft
    - 1,000-1,099 sq ft
    - 1,100-1,199 sq ft
    - 1,200-1,299 sq ft
    - 1,300 and higher sq ft
    - Unsure

12. How many people in your household are within the following groups (note numbers)?
    - Ages 0-5 years
    - Ages 6-18
    - Ages 19-64
    - Ages 65+

13. Metro Vancouver and TransLink are conducting research to better understand the demand for electric vehicles. How likely are you to consider buying a plug-in electric vehicle within the next five years?
    - Very Unlikely
    - Somewhat unlikely
    - Undecided/neutral
    - Somewhat likely
    - Very likely

14. Any additional comments:

THANK YOU FOR COMPLETING THE QUESTIONNAIRE!
### Appendix 3: Current Municipal Apartment Parking Requirements

Updated September 2018

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<td>2.0</td>
<td>0.2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Apartment greater than 6 storeys</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.6</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.0</td>
<td></td>
<td></td>
<td></td>
<td>0.6</td>
<td></td>
</tr>
<tr>
<td>Port Moody</td>
<td>Apartment Market Ownership</td>
<td>1.0</td>
<td></td>
<td>1.5</td>
<td></td>
<td>0.2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Market Rental</td>
<td></td>
<td>1.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Below Market Rental</td>
<td></td>
<td>0.9</td>
<td></td>
<td></td>
<td>0.2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TOD Areas (Moody Centre and Inlet Centre)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Market Ownership</td>
<td>1.0</td>
<td></td>
<td>1.35</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Market Rental</td>
<td></td>
<td></td>
<td>1.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Below Market Rental</td>
<td></td>
<td>0.8</td>
<td></td>
<td></td>
<td>0.2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Richmond</td>
<td>Apartment Housing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Affordable Housing Unit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Zone 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.2</td>
<td></td>
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<tr>
<td></td>
<td>Zone 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.2</td>
<td></td>
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<tr>
<td></td>
<td>Zone 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Affordable Housing Unit – City Centre</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.2</td>
<td></td>
</tr>
</tbody>
</table>

2018 Regional Parking Study Technical Report
<table>
<thead>
<tr>
<th>Municipality</th>
<th>Notes</th>
<th>Residential Parking Requirements (Stalls per Dwelling Unit)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Surrey</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>City Centre</strong></td>
<td>Multi-Unit Residential Dwelling – Ground Oriented</td>
<td>1.6</td>
</tr>
<tr>
<td></td>
<td>Multi-Unit Residential Dwelling – Non Ground Oriented</td>
<td>0.9 minimum, 1.1 maximum</td>
</tr>
<tr>
<td></td>
<td>Multi-Unit Residential Dwelling – Ground Oriented</td>
<td>2.0</td>
</tr>
<tr>
<td></td>
<td>Multi-Unit Residential Dwelling – Non Ground Oriented</td>
<td>1.3</td>
</tr>
<tr>
<td><strong>Vancouver</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Downtown</td>
<td>0.0 [Except in the West end and Robson North Permit Area (WERNPA)]</td>
<td>The lesser of:</td>
</tr>
<tr>
<td></td>
<td>WERNPA sub-area of, parking for multiple dwellings adheres to City-wide rates.</td>
<td>a) 5% of total residential spaces; and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b) 0.05 spaces per dwelling unit, to a maximum of 0.1</td>
</tr>
<tr>
<td>City-Wide - Strata</td>
<td>0.5 / unit with less than 50m² GFA</td>
<td>0.05 per unit to a max of 0.1</td>
</tr>
<tr>
<td></td>
<td>0.6 / unit with greater than 50m² plus 1 for each additional 200m² GFA</td>
<td></td>
</tr>
<tr>
<td></td>
<td>No more than 1.5 per unit with greater than 180m²</td>
<td></td>
</tr>
<tr>
<td>City-Wide – Secured Market Rental</td>
<td>Min per 125m² GFA Max space equal to the total number of min number of spaces plus 0.5</td>
<td>0.05 to a max of 0.1</td>
</tr>
<tr>
<td>West Vancouver</td>
<td>Apartment</td>
<td>N/A</td>
</tr>
<tr>
<td>White Rock</td>
<td>Apartment</td>
<td>1.2</td>
</tr>
<tr>
<td><strong>UBC Campus</strong></td>
<td>Market Housing</td>
<td>A maximum of the lesser of 1.0 per 70m² of building areas of 1.8 spaces per dwelling unit</td>
</tr>
<tr>
<td><strong>UBC Endowment Lands</strong></td>
<td>Apartment</td>
<td>1.6</td>
</tr>
</tbody>
</table>

2018 Regional Parking Study Technical Report

Regional Planning Advisory Committee
Appendix 4: Key Informant Interviews on Treating On-Site and Street Parking as a System

Project staff interviewed municipal staff to gather current insights, experience, and tactics to manage and monitor street parking in more systematic ways. It can be difficult finding the right balance between on-site facility and on-street parking for both residents and visitors for apartment buildings and adjacent land uses. Surrounding land uses, such as commercial retail, can generate trips that increase the demand for on-street visitor parking. This can often be in conflict with the demand for residential visitor parking when on-site visitor parking is limited.

Coordinated parking strategies can help mitigate negative outcomes of limited parking supplies through the appropriate use of on-street parking restrictions. By considering both on-site and nearby on-street residential and visitor parking as a system, parking supplies can be controlled for the net benefit of an area and help alleviate the difficulties of finding parking.

Nearby Street Parking
The use of parking policies and regulation, such as pricing, can be adjusted to ensure that there is street curb parking available for businesses, customers and residents in popular areas where current parking utilization is high during most days and times of the week.

Anecdotal observations from several peer municipal staff in Metro Vancouver suggest that there is a correlation between on-site visitor parking utilization and whether or not the nearby streets have regulations (i.e. where apartment sites tend to have lower facility utilization if the nearby streets are unregulated).

By regulating street parking to restrict nearby street parking through a combination of pricing, time limits, on-site parking facility utilization of both residential and visitor parking may increase. Similarly, parking regulations that allow for shared-used of on-street visitor and residential spaces, particularly in periods when residential spaces are underutilized, can support apartment visitors as well as nearby businesses customers to park in residential permit spaces.

Consolidated Parking
The consistent observation of parking supplies exceeding demand by a wide margin illustrates that many apartment buildings across the region have abundant unused supplies, sometimes in areas experiencing consistently high utilization of street parking. By considering ways to consolidate parking by opening up the unused parking spaces for nearby business and commercial uses can free up space on the street. Cities can also explore with developers if required parking ratios can be met through shared-use parking supplies with adjacent land uses and their existing or new development’s parking supply.

Nearby Frequent Transit Services
Across the region, a trends that has continued since the 2012 Apartment Parking Study is the consistent observation that not only does parking supply in apartments exceed parking demand by a wide margin, but that this over supply is further pronounced for locations close to transit than further abroad.

13 Interviews were conducted in January/February 2019 with staff at Coquitlam, New Westminster, City of North Vancouver, Surrey, and Vancouver.
While many municipal parking policies consider possible reduced residential parking requirements based on proximity to transit, they are currently focused on new apartment developments close to existing and new SkyTrain stations. This study suggests that apartment parking ratios can take into account a development’s proximity to frequent bus routes.

Parking Monitoring and Spatial-Temporal Data Analysis
Monitoring parking behaviour and utilization is an important component to understanding parking supplies and demand by time period, particularly in areas where parking supplies are limited. Municipalities report deploying monitoring strategies and techniques on an upon-request basis, usually where there are residential complaints around on-street parking constraints. Using digital monitoring techniques, such as Parking App and digital parking meters, as well as Automated License Plate Reading technology, can provide powerful insights without the need for manual monitoring or surveys. These technologies will often capture a vehicle’s license plate number, which can be cross-referenced with ICBC data. By proactively monitoring on-street parking supplies throughout a city, and cross-referencing vehicle’s registration addresses, municipalities can proactively assign parking regulations in a given area by understanding if local residents are using on-street parking for their parking needs.
Appendix 5: Additional Household Survey Analysis

The following tables, based on the Household Survey, provide supplemental information to Section 5.1 ‘Apartment Residential Parking Supply and Utilization’ and Section 5.4 ‘Relationship with Transit Proximity’.

### Table 44. Resident Parking by Tenure

<table>
<thead>
<tr>
<th>Building Tenure (# responses)</th>
<th>Household Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Stalls per DU (HS)</td>
</tr>
<tr>
<td>Strata (n=1,185)</td>
<td>1.39</td>
</tr>
<tr>
<td>Market Rental (n=133)</td>
<td>1.10</td>
</tr>
<tr>
<td>Mixed Tenure (n=186)</td>
<td>1.24</td>
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<tr>
<td>Mixed Rental (n=35)</td>
<td>1.49</td>
</tr>
<tr>
<td>Non-Market Rental (n=28)</td>
<td>0.90</td>
</tr>
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</table>

### Table 45. Resident Parking in Strata Sites by Subregion

<table>
<thead>
<tr>
<th>Strata Sites by Subregion (# responses)</th>
<th>Household Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Stalls per DU (HS)</td>
</tr>
<tr>
<td>Burnaby/NW (n=265)</td>
<td>1.32</td>
</tr>
<tr>
<td>North Shore (n=151)</td>
<td>1.42</td>
</tr>
<tr>
<td>Northeast Sector+ (n=317)</td>
<td>1.34</td>
</tr>
<tr>
<td>Richmond (n=72)</td>
<td>1.25</td>
</tr>
<tr>
<td>South of Fraser (n=279)</td>
<td>1.31</td>
</tr>
<tr>
<td>Vancouver/UBC (n=101)</td>
<td>1.38</td>
</tr>
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</table>

### Table 46. Resident Parking in Rental Sites by Subregion

<table>
<thead>
<tr>
<th>Rental Sites by Subregion (# responses)</th>
<th>Household Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Stalls per DU (HS)</td>
</tr>
<tr>
<td>North Shore (n=25)</td>
<td>1.05</td>
</tr>
<tr>
<td>Northeast Sector+ (n=9)</td>
<td>2.44</td>
</tr>
<tr>
<td>Richmond (n=17)</td>
<td>1.13</td>
</tr>
<tr>
<td>South of Fraser (n=49)</td>
<td>1.33</td>
</tr>
<tr>
<td>Vancouver/UBC (n=282)</td>
<td>1.14</td>
</tr>
</tbody>
</table>
### Table 47. Resident Parking in Strata Sites by Transit

<table>
<thead>
<tr>
<th>Strata Sites by Proximity to FTN (# responses)</th>
<th>Household Survey</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Stalls per DU (HS)</td>
<td>Parked Vehicles per DU (HS)</td>
<td>Parking Oversupply Estimate 2</td>
</tr>
<tr>
<td>Within 800m of rapid transit (n=633)</td>
<td>1.26</td>
<td>1.14</td>
<td>+11%</td>
</tr>
<tr>
<td>Within 400m of frequent bus only (n=408)</td>
<td>1.33</td>
<td>1.19</td>
<td>+12%</td>
</tr>
<tr>
<td>Away from FTN (n=144)</td>
<td>1.36</td>
<td>1.29</td>
<td>+5%</td>
</tr>
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</table>

### Table 48. Resident Parking in Market Rental sites by Transit

<table>
<thead>
<tr>
<th>Market Rental Sites by Proximity to FTN (# responses)</th>
<th>Household Survey</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Stalls per DU (HS)</td>
<td>Parked Vehicles per DU (HS)</td>
<td>Parking Oversupply Estimate 2</td>
</tr>
<tr>
<td>Within 800m of rapid transit (n=32)</td>
<td>0.59</td>
<td>0.53</td>
<td>+11%</td>
</tr>
<tr>
<td>Within 400m of frequent bus only (n=49)</td>
<td>1.08</td>
<td>0.80</td>
<td>+35%</td>
</tr>
<tr>
<td>Away from FTN (n=52)</td>
<td>1.35</td>
<td>1.21</td>
<td>+12%</td>
</tr>
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</table>

### Table 49. Resident Parking in Mixed Tenure Sites by Transit

<table>
<thead>
<tr>
<th>Mixed Tenure Sites by Proximity to FTN (# responses)</th>
<th>Household Survey</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Stalls per DU (HS)</td>
<td>Parked Vehicles per DU (HS)</td>
<td>Parking Oversupply Estimate 2</td>
</tr>
<tr>
<td>Within 800m of rapid transit (n=126)</td>
<td>0.99</td>
<td>0.83</td>
<td>+19%</td>
</tr>
<tr>
<td>Within 400m of frequent bus only (n=60)</td>
<td>1.23</td>
<td>1.15</td>
<td>+7%</td>
</tr>
</tbody>
</table>
To: Regional Planning Committee

From: James Stiver, Division Manager of Growth Management and Transportation
Gord Tycho, Senior Planner, Regional Planning

Date: March 4, 2019
Meeting Date: April 5, 2019

Subject: Metro 2040 Land Use Designation Amendment Request from the City of Delta – MK Delta Lands

RECOMMENDATION
That the MVRD Board:

PURPOSE
To provide, for Regional Planning Committee and MVRD Board consideration, Metro Vancouver staff’s analysis and recommendations regarding the City of Delta’s proposed Type 3 Land Use Designation amendment to Metro Vancouver 2040: Shaping our Future (Metro 2040), the regional growth strategy, for the MK Delta Lands (Attachment 1).

BACKGROUND
On February 12, 2019, the City of Delta submitted a proposed Metro 2040 amendment to Metro Vancouver for the property located at 7969 Highway 91 Connector (Attachment 2). The proposed amendment is to change the regional land use designation of the subject property from Agricultural to Industrial, and to include the lands within the Urban Containment Boundary.

On June 10, 2016, Delta Council gave 1st reading to Official Community Plan Amendment Bylaw No. 7505, and 2nd reading was given on July 5, 2016. A local public hearing was held on July 26, 2016 and the Bylaw was subsequently given 3rd reading. The application was then referred to the Agricultural Land Commission, seeking exclusion of the subject property from the Agricultural Land Reserve (ALR), complemented by a proposal to add a second parcel to the ALR. In September of 2018, the Agricultural Land Commission conditionally approved the exclusion of the subject property and inclusion of the second parcel.

SITE DESCRIPTION
The subject property is a 62.7 ha (155 ac) undeveloped site located at 7969 Highway 91 Connector, just south of Highway 17 (South Fraser Perimeter Road) and adjacent to the Burns Bog Ecological Conservancy Area (BBECA) (Figure 1). The subject property is owned by MK Delta Lands Group. It is located in the ALR, but the owner is currently satisfying exclusion conditions with the Agricultural Land Commission. To the east are privately-owned undeveloped lands located in the ALR, a provincial
highway maintenance area and Highway 91. Industrial uses are located to the north and east in the Sunbury industrial business area across the Highway 91 Connector and Highway 17 along Nordel Way and River Road. To the south are Lots A, B, and C (also owned by MK Delta Lands Group), and the BBEC to the south and west.

**Figure 1: Subject Property Map**

In addition to the proposed regional land use redesignation of Lot 4, the three additional parcels noted are part of the overall proposal. The property owner has committed to transfer Lots A, B, and C to the City of Delta for protection from future development, and include Lot B in the ALR. Lots A, B, and C are located adjacent to the BBEC and Lots B and C are wooded.

**Burns Bog Ecological Conservancy Area**

Burns Bog is a raised bog ecosystem covering approximately 3,000 ha (7,413 ac) of the Fraser River delta between the south arm of the Fraser River and Boundary Bay. The largest undeveloped urban landmass in North America, Burns Bog is globally unique because of its chemistry, form, flora and size. The BBEC consists of approximately 2,000 ha (5,000 ac) of land that was purchased in 2004 in an agreement between senior levels of government, Metro Vancouver and the City of Delta. As part of this agreement, a conservation covenant was registered on title of these lands that ensures the...
ecological integrity of the lands is protected. The BBECA is jointly operated by Metro Vancouver and the City of Delta.

**Table 1: Subject Property (Lot 4) - Summary**

<table>
<thead>
<tr>
<th>Parcel Location</th>
<th>7969 Highway 91 Connector, City of Delta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parcel Size</td>
<td>62.7 ha (155 ac)</td>
</tr>
<tr>
<td>Proposed Development</td>
<td>Development of a 9-lot industrial subdivision over a developable area of 43.79 ha (108.2 ac). Remainder of area to occupied by internal roads and utilities, future highway access, and protection (buffer) / enhancement areas.</td>
</tr>
<tr>
<td>Urban Containment Boundary</td>
<td>Current: Outside of the UCB</td>
</tr>
<tr>
<td>Metro 2040 Designation</td>
<td>Agricultural</td>
</tr>
<tr>
<td>City of Delta OCP Designation</td>
<td>Agricultural (A)</td>
</tr>
<tr>
<td>Municipal Zoning</td>
<td>I3 Extraction Industrial*</td>
</tr>
<tr>
<td>ALR</td>
<td>Exclusion granted by ALC subject to conditions (agriculture / environment buffers). History of peat extraction.</td>
</tr>
</tbody>
</table>

* Extraction activities are subject to non-farm use approval by ALC.

** Proposed CD Zone allows light industrial uses on the majority of the site with environmental buffers along the perimeter. Allowable light industrial uses include warehousing, wholesaling and distribution, transportation, communication, equipment sales, repair and servicing, etc., but restrict container storage and uses with higher potential for emissions of air contaminants and spills of hazardous materials.

**APPLICATION HISTORY**

The subject property owner (MK Delta Lands Group) owns approximately 202 hectares (500 acres) of land in or near Burns Bog. In 2015, the owner submitted applications to the City of Delta to amend the City’s Official Community Plan (OCP), the zoning bylaw, the sanitary sewer area, and for a development permit, to allow for the development of an industrial business park on the subject property.

The application also included requests to:

- exclude the subject property (Lot 4) from the Agricultural Land Reserve;
- amend the regional land use designation of Lot 4 in Metro 2040 from Agricultural to Industrial, and include the lands within the Urban Containment Boundary;
- amend the Fraser Sewerage Area to include the subject property;
- include Lot B (one of three other lots owned by MK Delta Lands Group to the south) into the ALR (Figure 1); and
- transfer three other parcels of land owned by the property owner (i.e. Lots A, B and C) into public ownership.
In July 2016, City of Delta Council gave the OCP Amendment Bylaw 3rd reading, and referred the application to the Agricultural Land Commission for consideration to exclude the subject property from the ALR and to include Lot B into the ALR. In August 2017, the Agricultural Land Commission conditionally approved the application. In September 2018, the Agricultural Land Commission Executive Committee upheld the South Coast Panel’s August 2017 decision.

Metro 2040 sets out that an ALR exclusion must be granted before Metro Vancouver can consider an application for amendment from the Metro 2040’s Agricultural designation (Section 2.3.4). The City of Delta and the owner are working with Agricultural Land Commission staff to finalize the conditions of approval.

The Proposed Metro 2040 Amendment
As per Section 6.3.4(f) of Metro 2040, for sites that are contiguous with the Urban Containment Boundary and are not within the ALR, a land use amendment from Agricultural to Industrial, and the associated Urban Containment Boundary adjustment, requires a Type 3 minor amendment to Metro 2040 (i.e. an amendment bylaw passed by a majority weighted vote and no regional public hearing).

The proposed Metro 2040 amendment also triggers the need for a revised Regional Context Statement from the City of Delta so that the mapping in the City’s OCP, the RCS and Metro 2040 will be consistent. The City’s amended RCS request will be forwarded to the MVRD Board for consideration should direction be given to initiate the regional growth strategy amendment, consistent with Regional Growth Strategy Implementation Guideline #1: Regional Context Statements.

Although not part of this proposed amendment, at a later date the City of Delta will also be seeking approval from the GVS&DD Board to extend the Fraser Sewerage Area to include Lot 4, subject to the MVRD Board’s approval of the amendment to the regional land use designation.

ANALYSIS OF ALIGNMENT WITH METRO 2040
Metro 2040 provides a framework for assessing the proposed amendments. Consideration has been given to each of the five Metro 2040 goals and applicable strategies, which are discussed below.

GOAL 1 – CREATE A COMPACT URBAN AREA
Strategy 1.1: Contain Urban Development within the Urban Containment Boundary
A core concept of Metro 2040 is urban containment. The Urban Containment Boundary was established to create a stable, long-term, regionally defined area for urban development that results in compact development patterns that support efficient use of land and transportation networks, and that reduce greenhouse gas emissions. The lands inside the Urban Containment Boundary have the capacity to accommodate all of the population and employment growth projected over the timeframe of the regional growth strategy (i.e. to 2040).

The subject property abuts the BBECA to the west and south, and is bounded by Hwy 17 and the Hwy 91 Connector to the north. As a result, an extension of the Urban Containment Boundary in this particular location will likely not lead to a proliferation of associated applications. It is noted that there is one large property to the east that is currently in the ALR. If the redesignation application for
the subject property is successful, this large remaining parcel will be additionally isolated, and one can anticipate an increased likelihood of a future application for a Metro 2040 amendment for that property. However, given the location and site constraints of the subject property, an extension of the Urban Containment Boundary in this particular location will not undermine the overall growth containment intent of Metro 2040 or the effectiveness of the Urban Containment Boundary either locally or regionally.

GOAL 2 – SUPPORT A SUSTAINABLE ECONOMY

Strategy 2.2: Protect the supply of industrial land
The region is facing a shortage of industrial land for both trade-enabling and region serving activities. The addition of the subject property to the regional industrial lands inventory would provide an additional 43.8 ha (108.2 ac) of usable and available industrial land, which would be of local and regional benefit from an industrial-activity, goods movement, and employment generating perspective. Locally, the subject property is in an area contiguous with other industrial lands along the Fraser River, and is in close proximity to Sunbury, Tilbury, and other River Road industrial activities. These areas are well-established employment areas for both local and regional workers. Regionally, the subject property has direct access to the South Fraser Perimeter Road, a key transportation connector for moving people and goods in and through the region.

It is beyond the scope of the assessment of the proposed regional land use redesignation to consider the type and tenure of industrial activity planned for the subject property. That said, the specifics associated with type and tenure of activity do have regional implications. For example, if the site is developed as a strata development, having a large number of owners on site likely increases the impact risk to the adjacent Burns Bog. Conversely, with a shortage of large, flat, accessible distribution-oriented parcels available in the regional industrial land inventory, this site would serve well for a trade-enabling supportive use given its proximity to the Port and goods movement network.

Strategy 2.3: Protect the supply of agricultural land and promote agricultural viability with an emphasis on food production
The subject property has a regional Agricultural land use designation as it was within the ALR at the time Metro 2040 was adopted. As part of the application process, the owner sought to have the subject property excluded from the ALR. It had never been farmed. The Agricultural Land Commission has granted conditional approval to the exclusion subject to requirements to be met through the development process including a buffer to the adjacent property to the east to support agriculture.

As part of the submission to the Agricultural Land Commission, the lands were noted to exhibit a bog ecosystem, have a history of peat extraction, and be somewhat compromised due to drainage issues. It was noted that given the proximity to the BBECA, the subject property could not be remediated for the only viable crop (i.e. cranberries), without significant and challenging drainage improvements.

The owner has proposed to offset the requested ALR exclusion of the subject property by:

1) providing the City of Delta with $6 million toward drainage and irrigation improvements for Westham Island and East Delta, thereby increasing the agricultural productivity of those areas; and,
2) including the 78.1 ha (193 ac) property at 7007 Highway 91 (Lot B) into the ALR. This inclusion has been completed. It is noted that Lot B exhibits a similar bog ecosystem to Lot 4, but has been disturbed to a lesser extent. Should the application be approved, the City of Delta would accept ownership of Lot B, consistent with the BBCEA.

From an agricultural land inventory perspective, the proposal results in the loss of 62.7 ha (Lot 4) from the ALR and a gain of 78.1 ha (Lot B), resulting in a net gain of 15.4 ha (38 ac) of agricultural land. The Agricultural Land Commission notes that Lot B is more agriculturally viable than Lot 4. Furthermore, the owner’s proposed funding for improved drainage on Westham Island and East Delta can be seen as a significant benefit.

Given that Lot B has a regional Conservation and Recreation land use designation, the proposal results in a net loss of regionally-designated Agricultural lands. It is recognized, however, that the qualitative aspects of the lots must also be taken into consideration. Specifically, Lot 4 is substantially limited in its agricultural productive capacity due to a high water table (at or near the surface) and proximity to the BBCEA. Consequently, the loss of land with an Agricultural regional land use designation will not have a significant implication on regional agricultural productivity, whether or not Lot B is farmed in the future.

**GOAL 3 – PROTECT THE ENVIRONMENT AND RESPOND TO CLIMATE CHANGE IMPACTS**

**Strategy 3.1: Protect Conservation and Recreation lands**

The owner is proposing to transfer its remaining holdings in the area to the City of Delta for inclusion in the BBCEA. Lots A, B, and C, total 132.7 ha in size. All three parcels currently have a regional Conservation and Recreation land use designation, however these privately-owned lands are currently located outside of the BBCEA and are zoned Extraction-industrial (I3) in the City’s zoning bylaw. This zoning permits a range of industrial extraction activities for sand, gravel, and peat, as well as related processing, such as crushing, screening, and stockpiling.

The City of Delta application states that the transfer of these lands into public ownership protects additional bog lands from future development and resolves the remaining MK Delta Lands Group holdings adjacent to the bog.

Inclusion of Lots A, B, and C as additional protected bog lands represents a significant benefit to maintaining the integrity and long term viability of the BBCEA. The Agricultural Land Commission has indicated that Lot B shall not be limited, through covenant or other legal means, in its ability to grow crops and undertake other activities permitted in the ALR, which may impact its inclusion in the BBCEA.

From a regional Conservation and Recreation designation benefit perspective, activities permitted under the City’s current Extraction-industrial zoning would no longer be permitted on Lots A, B and C given that they would be under public ownership with future potential amended zoning and inclusion in the BBCEA. An Environmental Effects Assessment for the subject property was prepared by Environmental Dynamics as part of the proposal. The study concluded that the proposed industrial development, in conjunction with the transfer of 132.7 ha (328 ac) of Lots A, B, and C to public ownership results in a net gain in ecologically-sensitive lands, vegetation, and wildlife habitat.
protection. The study also finds a net gain for all broad ecosystem types, save for herb dominated habitat (Table 2).

Metro Vancouver staff note that Lots 4, A, B, and C are entirely comprised of sensitive ecosystems in the Metro Vancouver Sensitive Ecosystem Inventory. Lots 4, A, and B are wetland bog, and exhibit evidence of past peat harvesting, but recovery is in progress for all three sites. Lot 4 is in moderately better condition than Lot B, and Lot C is a mix of wetland bog and wetland swamp.

Table 2: Parcel Size of Lot 4 and Lots A, B, and C

<table>
<thead>
<tr>
<th>Parcel</th>
<th>Area (ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lot A</td>
<td>18.4</td>
</tr>
<tr>
<td>Lot C</td>
<td>36.1</td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td><strong>54.5</strong></td>
</tr>
<tr>
<td>Lot B</td>
<td>77.8</td>
</tr>
<tr>
<td><strong>Total (A, B, C)</strong></td>
<td><strong>132.7 (328 ac)</strong></td>
</tr>
<tr>
<td><strong>Lot 4 (Subject Property)</strong></td>
<td><strong>62.7 (155 ac)</strong></td>
</tr>
</tbody>
</table>

*12.45 ha (30.74 ac), or 20% of Lot 4 will be a protection / enhancement area

**Strategy 3.2: Protect and enhance natural features and their connectivity**

Looking at the overall trade-offs for the environment given the four properties at play is one aspect to consider, but the potential impacts for the subject property of the amendment from Agricultural to Industrial and the potential impacts on the adjacent bog is of critical importance to consider.

To mitigate and monitor the proposal, environmental buffers are proposed around the perimeter of the development area of the subject property, with the objective of separating bog waters and any run-off from the proposed industrial development. The proposed 30 m (98 ft) wide buffer areas to the west and south will provide additional land conservation protection for the BBECA and would be owned and managed by the City of Delta, while the proposed 100 m (328 ft) wide buffer areas to the north and 10 m (34 ft) wide buffer area to the east would remain privately owned. The proposed protection and enhancement areas on the subject property total approximately 12.45 ha (30.7 ac). The property owner and City of Delta state that water quality and water level monitoring will be undertaken as part of stormwater management activities before, during, and after construction to ensure effective protection of adjacent bog lands.

The proposed development of the subject property will require up to 6 m (20 ft) of fill to raise the elevation and offset an anticipated 3 m of ground settlement. Potential impacts to the bog from surcharge loading and other construction activities are being addressed through water quality and water level monitoring. The introduction of fill to the site and the resulting sub-surface effects could have wide-ranging impacts including peat damage / fissures, a lowered water table, the intrusion of nutrient water, and an increased risk of fire and invasive species on the bog.

It is unclear with the information that has been provided in support of the proposal, that the proposed 30 metre buffers in the current plan are of sufficient width to avoid damage to lands within the BBECA. In general, the Burns Bog Ecological Conservancy Area Scientific Advisory Panel has suggested
that the buffer should be at least 50 metres in width on the west and south margins of the development area. Metro Vancouver staff recommend that further information be sought about the potential impacts and planned mitigation efforts for the addition of fill. Seeking additional information and coordinating conversations between the City of Delta and the Burns Bog Scientific Advisory Panel on these potential impacts are recommended.

GOAL 5 – SUPPORT SUSTAINABLE TRANSPORTATION CHOICES

Strategy 5.1: Coordinating land use and transportation to encourage transit, multiple occupancy vehicles, cycling and walking

The focus of Metro Vancouver’s assessment of the proposed amendment is at the regional land use scale, therefore it is out of scope to comment on particular aspects of the proposed development. It is recognized that if the regional land use designation amendment is approved, Metro Vancouver will have no comment on whether the proposal comes to fruition as currently envisioned, or changes. That said, it is noted that the proposed development is intended to include a 3 m (10 ft) wide multi-use pathway on both sides of the internal road network to encourage walking and cycling. Potential linkages from the site to the local / regional cycling network (such as Hwy 17) would provide options for employees to use alternative modes of transportation to single occupant vehicles.

Strategy 5.2: Coordinating land use and transportation to support the safe and efficient movement of vehicles for passengers, goods, and services

The subject property is well positioned to support regional goods movement due to its proximity to the US border, Roberts Bank Container terminal, and other industrial docks and facilities along the Fraser River (i.e. Sunbury, River Road, Tilbury, etc.). Immediate adjacency to Hwy 17 allows direct access to an important regional goods movement corridor, thereby minimizing impact on residential areas and improving safety.

The existing Hwy 17 (South Fraser Perimeter Road) and Hwy 91 Connector junction is a signalized at-grade intersection and is currently operating at capacity at peak periods. The Province is undertaking improvements to the Sunbury Interchange involving grade separation of the intersection, upgrade of the Hwy 91 and Nordel Way Interchange, and access improvements at River Road and Hwy 17. The proposed industrial development on the subject property is planned to be phased to coincide with the completion of the Sunbury Interchange project.

OTHER METRO VANCOUVER DEPARTMENT COMMENTS

Metro Vancouver Water Services staff request that the City of Delta clarify the anticipated impacts of the proposed amendment on the City’s estimated water purchases from Metro Vancouver as a result of the proposed industrial development.

Metro Vancouver Liquid Waste Services staff request that, as a condition of a potential extension of the Fraser Sewerage Area to permit this proposed development, general design features be provided for the proposed sanitary system which could presumably flow (via City of Delta’s nearby sanitary forcemain) to the GVS&DD sanitary sewer system.

Metro Vancouver Regional Parks comments are integrated into the assessment of alignment with Metro 2040, primarily under Goal 3.
NEXT STEPS
Should the process for considering the Metro 2040 amendment be initiated by the MVRD Board and the draft bylaw be given 1st and 2nd readings, staff will notify affected governments as per Metro 2040 Section 6.4.2., and provide a comment period of approximately 45 days. The proposed amendment also triggers the need for a revised Regional Context Statement from the City of Delta so that mapping in the City’s OCP, RCS and Metro 2040 will be consistent. The City of Delta will forward its Regional Context Statement to Metro Vancouver for consideration by the MVRD Board should the initial readings of the amendment bylaw have been given.

Staff anticipate reporting back to the MVRD Board with a summary of comments on the proposed amendment, together with the draft amendment bylaw for consideration of 3rd and final reading and the updated Regional Context Statement, at the July, 2019 Board meeting.

ALTERNATIVES

FINANCIAL IMPLICATIONS
If the MVRD Board chooses Alternative 1, notification will be given to all affected local governments as laid out in the Local Government Act and Regional Growth Strategy Implementation Guideline #2: Amendments to the Regional Growth Strategy. Staff will report back to the MVRD Board with a summary of comments on the proposed amendment and the draft amendment bylaw for consideration of 3rd and final reading and the updated Regional Context Statement upon completion of the notification period.

If the MVRD Board chooses Alternative 2, the City of Delta will be notified of the Board’s decision. A dispute resolution process may take place as described in the Local Government Act. The cost of this dispute resolution is prescribed based on the proportion of assessed land values. Metro Vancouver would be responsible for most of the associated costs.

SUMMARY / CONCLUSION
On February 12, 2019, the City of Delta submitted a request to Metro Vancouver to amend the regional land use designation for a property located at 7969 Highway 91 Connector in Delta. The City is requesting an amendment to the regional land use designation for the subject property from Agricultural to Industrial, and to include the subject property within the Urban Containment Boundary.

Should the amendment be approved, the property owner has committed to transfer three other lots that it owns, totalling 132 ha (328 ac), that are located adjacent to the Burns Bog Ecological Conservancy Area, to the City of Delta for protection from future development. In addition, one of
those properties will also be included in the ALR, and funds provided to improve drainage and irrigation on agricultural lands elsewhere in the municipality.

Staff conclude that the proposed amendment will result in a net benefit to the municipality and region by:

- increasing the supply of industrial lands in the region;
- increasing land in the ALR and providing funds to improve the productivity of other agricultural lands; and
- increasing the protection of other ecologically important lands contiguous with Burns Bog by eliminating the potential for permitted industrial extraction activities on three other parcels also owned by the property owner and transferring them to public ownership.

The biggest caveat associated with the proposed amendment is that success is contingent on the mitigation measures proposed for the industrial development on Lot 4. There is a real and significant environmental impact of converting these lands to industrial uses, and an increased risk to the BBECA. Given that the parcel to the east of Lot 4 would be further isolated as a result of the proposal, the likelihood of a future application for its redesignation is increased.

Staff recommend...

**Attachments:**

2. City of Delta Referral to Metro Vancouver for the MK Delta Lands Group Industrial Development Application at 7969 Highway 91 Connector, Delta (569244 BC Ltd.)
WHEREAS the Metro Vancouver Regional District (the “MVRD) Board (the “Board”) has adopted the “Greater Vancouver Regional District Regional Growth Strategy Bylaw Number 1136, 2010” on July 29, 2011;

WHEREAS the Metro Vancouver Regional District wishes to amend “Greater Vancouver Regional District Regional Growth Strategy Bylaw Number 1136, 2010”;

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

1. “Greater Vancouver Regional District Regional Growth Strategy Bylaw Number 1136, 2010” is hereby amended as follows:
   a) Re-designating the subject property at 7969 Highway 91 Connector (Lot 4 Plan NWP1180 District Lot 437 Land District 2 Land District 36 Except Plan EPP375) from Agricultural to Industrial, as shown in the maps contained in Schedule “A” attached to and forming part of this Bylaw;
   b) Extending the Urban Containment Boundary to encompass the subject property at 7969 Highway 91 Connector (Lot 4 Plan NWP1180 District Lot 437 Land District 2 Land District 36 Except Plan EPP375), as shown in the maps contained in Schedule “A” attached to and forming part of this Bylaw; and
   c) Maps 2, 3, 4, 6, 7, 11, and 12, contained in Greater Vancouver Regional District Regional Growth Strategy Bylaw Number 1136, 2010 are deleted and replaced with Maps 2, 3, 4, 6, 7, 11, and 12 as contained in Schedule “B” attached to and forming part of this Bylaw.

2. This bylaw shall be cited as “Metro Vancouver Regional District Regional Growth Strategy Amendment Bylaw No. 1283, 2019”. This bylaw may be cited as “Regional Growth Strategy Amendment Bylaw No. 1283, 2019”.

READ A FIRST TIME this ______ day of ____________________, 2019.

READ A SECOND TIME this ______ day of ____________________, 2019.

READ A THIRD TIME this ______ day of ____________________, 2019.

PASSED AND FINALLY ADOPTED this ______ day of ____________________, 2019.

_________________________________________  ______________________________
Sav Dhaliwal, Chair  Chris Plagnol, Corporate Officer
SCHEDULE A

The subject property at 7969 Highway 91 Connector includes lands redesignated from Agricultural to Industrial.
SCHEDULE B

Map 2 Regional Land Use Designations

Map 3 Urban Containment Boundary and General Urban Areas
SCHEDULE B (continued)

Map 4 Urban Centres and Frequent Transit Development Areas

Map 6 Industrial and Mixed Employment Areas
SCHEDULE B (continued)

Map 7 Agricultural Areas

Map 11 Local Centres, Hospitals and Post-Secondary Institutions
SCHEDULE B (continued)

Map 12 Special Study Areas and Sewerage Extension Areas
February 19, 2019

Sav Dhaliwal, Chair
Metro Vancouver Board of Directors
4730 Kingsway, MetroTower III
Burnaby, BC V5H 0C6

Dear Chair Dhaliwal,

Re: Referral to Metro Vancouver for the MK Delta Lands Group Industrial Development Application at 7969 Highway 91 Connector, Delta (569244 BC Ltd.)

The purpose of this letter is to refer the industrial development application for the MK Delta Lands Group to Metro Vancouver, and to seek approval of amendments to the Regional Growth Strategy and Fraser Sewerage Area.

Proposal

The MK Delta Lands Group application involves a master-planned industrial subdivision with environmental and agricultural buffers on the 62.7 ha (155 ac) site at 7969 Highway 91 Connector as shown on the Location Map on the following page. The site is located just south of Highway 17 (South Fraser Perimeter Road) and the existing Sunbury industrial business area and it is adjacent to the Burns Bog Ecological Conservancy Area (BBECA). The subject property is located within the Agricultural Land Reserve (ALR), but has received conditional approval for exclusion. The subject property is currently designated Agricultural (A) in Delta’s Official Community Plan and zoned Extraction Industrial (I3) in Delta’s Zoning Bylaw. The following is a summary of the proposed land use components which are illustrated on the development concept plan in Attachment A:

<table>
<thead>
<tr>
<th>Proposed Land Use</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial (developable area)</td>
<td>43.79 ha (108.2 ac)</td>
</tr>
<tr>
<td>Internal Roads and Utilities</td>
<td>3.38 ha (8.4 ac)</td>
</tr>
<tr>
<td>Future Highway Access</td>
<td>3.08 ha (7.6 ac)</td>
</tr>
<tr>
<td>Protection/Enhancement Areas:</td>
<td></td>
</tr>
<tr>
<td>West and South Perimeter Buffer, Fill Slope and Maintenance Access</td>
<td>5.92 ha (14.6 ac)</td>
</tr>
<tr>
<td>North Undisturbed Area and Fill Slope</td>
<td>6.23 ha (15.4 ac)</td>
</tr>
<tr>
<td>East Perimeter Ditch and Fill Slope</td>
<td>0.3 ha (0.74 ac)</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>62.7 ha (155 ac)</strong></td>
</tr>
</tbody>
</table>
Environmental and Agricultural Benefits and Community Amenities

Given the location of the site, the applicant is proposing buffers around the perimeter of the development area to protect the adjacent BBECAs by keeping development run-off and bog waters separate (refer to the BBECAs mitigation buffer in Attachment A). The buffer areas to the west and south would be owned and managed by Delta; however, the applicant would be responsible for the installation of the berm and fill slope and interim maintenance and monitoring prior to Delta assuming responsibility for the buffer area. The north and east buffers would be on privately owned lands. Water quality and water level monitoring would be done before, during and after construction to ensure effective protection of the BBECAs.
Access to the site is proposed from an improved connection to the Highway 91 Connector. The existing Highway 17 (SFPR) and Highway 91 Connector junction is a signalized at-grade intersection and is currently operating at capacity during the peak periods. To support the continual traffic growth on the SFPR and the Highway 91 Connector, the Province is undertaking improvements to the Sunbury Interchange involving grade separation of the intersection of Highway 91 Connector and SFPR, upgrade of the Highway 91 and Nordel Way interchange, and access improvements at River Road and SFPR. The proposed industrial development on the subject property would be contingent upon or phased to coincide with the completion of the Sunbury Interchange project.

Should the industrial development application be approved, the applicant has committed to providing land dedication and $11 million towards the following:

- Transferring the following lands to Delta:
  - 132.7 ha (328 ac) of land (Lots A, B and C) as shown on the Location Map. This would place additional bog lands in public ownership. These privately owned lands are currently located outside of the ALR and the BBCEA. As part of this application, Lot B (7007 Highway 91) would be included in the ALR. Lots A, B and C are zoned Extraction Industrial (I3) which permits a range of industrial extraction activities including peat extraction. Dedication to Delta would protect these lands from future development or disturbance.
  - 5.92 ha (14.6 ac) as shown as the BBCEA mitigation buffer on Attachment A. This lot would contain an environmental buffer area along the west and south property lines and maintenance access.

- $6 million towards agricultural drainage and irrigation improvements. The applicant commissioned a study to identify opportunities to improve agricultural capability and suitability on Westham Island that found that unless sufficient suitable irrigation water and improved drainage can be supplied to Westham Island, crop production is anticipated to decrease and the effects of salinity on soils may increase. Improving components of Delta’s existing irrigation and drainage system would increase the availability of non-saline irrigation water to Westham Island. Part of the financial contribution would also be set aside for East Delta drainage and irrigation improvements.

- $5 million towards transportation improvements and community amenities as determined by Council.

**Process**

The proposal requires amendments to Delta’s Official Community Plan and Zoning Bylaw, a sanitary sewer area extension and a development permit in order to allow for an industrial subdivision. The application also included a request to exclude the subject property from the ALR, a request to amend the Metro Vancouver Regional Growth Strategy to permit industrial uses on the subject property, and a request to include Lot B (7007 Highway 91) into the ALR. The
Provincial Agricultural Land Commission (ALC) has conditionally approved the exclusion and inclusion applications (refer to the ALC Decision section below).

This application has been under consideration since April 2015. Delta has, throughout that period, undertaken extensive analysis of the project and has consulted with the community. The consultation process included:

- Public Information Meeting hosted by the MK Delta Lands Group on February 25, 2016
- Public Information Meeting hosted by Delta on May 25, 2016
- Public Hearing on July 26, 2016

Throughout the application process, a number of technical studies have been completed. The application analysis is provided in the staff report dated June 10, 2016 which was considered by Council at their June 20, 2016 Regular Meeting. The studies and other documents are available through Delta's website at www.delta.ca/mkindustrial.

On June 20, 2016, Council gave first and second readings to Bylaws No. 7505, 7506 and 7507, and first, second and third readings to Bylaw No. 7508. On July 11, 2016, Council rescinded second reading of Bylaw No. 7505, and gave second reading to an amended bylaw that corrected an error in the regional land use designation. These bylaws would:

- amend the regional land use designation in the Regional Context Statement in Schedule A of the Official Community Plan from Agriculture to Industrial and extend the Urban Containment Boundary to include the subject property (Bylaw No. 7505);
- amend the land use designation for the subject property in the Future Land Use Plan in Schedule A of the Official Community Plan from Agricultural (A) to Industrial (I) (Bylaw No. 7506);
- rezone from I3 Extraction Industrial to Comprehensive Development Zone No. 474 (C.D. 474) to permit industrial uses on a majority of the site with environmental buffers along the perimeter (Bylaw No. 7507); and
- extend the Sewer Area boundary to include the subject property in Delta’s Sewer Area and Metro Vancouver’s Fraser Sewerage Area (Bylaw No. 7508).

On June 20, 2016, Council also received Development Permit LU007445 which would address environmental setbacks within the Streamside Protection and Enhancement (SPEA) Development Permit Area.

Bylaws No. 7505, 7506 and 7507 and Development Permit LU007445 were referred to the July 26, 2016 Public Hearing. At the Public Hearing there were:

- 25 speakers: 11 in support, 10 in objection, 3 with concerns, and 1 comment;
- 89 letters: 36 in support, 45 in objection and 8 with concerns; and
5 petitions in objection with a total of 1,416 hard copy signatures and 944 online.

At the Meeting Following the Public Hearing on July 26, 2016, Council gave third reading to Bylaws No. 7505, 7506 and 7507. On July 24, 2017, Council extended third reading of Bylaws No. 7505, 7506, 7507 and 7508 to December 31, 2018.

On July 26, 2016, Council also endorsed the following motions:

- THAT the Metro Vancouver Board be requested to amend “Greater Vancouver Regional Growth Strategy Bylaw No. 1136, 2010” by changing the regional land use designation of the property at 7969 Highway 91 Connector from Agriculture to Industrial and to include the subject property in the Urban Containment Boundary; and
- THAT the Metro Vancouver Board be required to approve “Delta Sewer Area Extension and Enlargement (MK Delta Lands Group – LU007445) Bylaw No. 7508, 2016” to extend the sewer area to include the property at 7969 Highway 91 Connector.

Referrals for the amendments to the Regional Growth Strategy and the Fraser Sewerage Area are now being undertaken following the ALC’s recent conditional approvals (see below).

**Provincial Agricultural Land Commission Decision**

The applications to exclude the 62.7 ha (155 ac) property at 7969 Highway 91 Connector from the ALR and to include the 78.1 ha (193 ac) property at 7007 Highway 91 (Lot B) into the ALR were conditionally approved by the ALC on September 11, 2018. The majority of the ALC Executive Committee upheld an August 2017 conditional approval decision of the South Coast Panel. The key points of the decision include:

1. The proposed industrial property at 7969 Highway 91 Connector (subject property) has a history of peat extraction and has been disturbed to a greater extent than the property proposed for inclusion at 7007 Highway 91 (Lot B). The Panel found that both properties exhibit a bog ecosystem and that a cranberry operation would be the most suitable agricultural use; however, establishing a cranberry operation on the subject property would be unreasonably difficult due to the degree of disturbance exhibited. As such, the property at 7969 Highway 91 Connector is suitable for exclusion from the ALR.

2. Due to the lesser degree of disturbance and the greater probability of future agricultural remediation, 7007 Highway 91 (Lot B) is suitable for inclusion into the ALR.

3. A covenant that restricts agricultural uses on 7007 Highway 91 (Lot B) is not appropriate for a parcel within the ALR as it would preclude any future remediation and use of the property for agriculture. The Panel is opposed to a restrictive covenant or any future Official Community Plan and rezoning amendment that would prohibit agricultural uses on Lot B.
The ALR exclusion and inclusion approval are subject to the following conditions:

- Submission of a vegetative buffering plan, prepared by a qualified professional, for all boundaries of 7969 Highway 91 Connector that abut ALR lands consistent with section 3.8b in the Ministry of Agriculture and Lands' Guide to Edge Planning. The plan must be reviewed and approved by the ALC;
- Installation of the required vegetative buffering plan;
- Agriculture cannot be restricted on 7007 Highway 91 (Lot B) by covenant or otherwise; and
- Any future Official Community Plan or rezoning amendments for 7007 Highway 91 (Lot B) Connector must include agricultural uses and be subject to ALC review and approval.

ALC staff have advised that the exclusion conditions would be satisfied by the submission and approval of the vegetative buffering plan, registration of a covenant on the property at 7969 Highway 91 Connector between the applicant, Delta and the ALC for the installation and maintenance of the agricultural buffer and provision of a letter of credit for the cost of agricultural buffer to be held by the ALC. The applicant prepared a vegetative buffering plan that was accepted by ALC staff on January 24, 2019. Delta staff are in the process of preparing the terms of the covenant for the three parties to sign. Prior to registration of the covenant, the applicant would deposit the letter of credit, based on an accepted cost estimate, with the ALC. Delta staff will update Metro Vancouver on the status of the exclusion process when final confirmation is received from the ALC.

With respect to the ALC's conditions for 7007 Highway 91 (Lot B), Delta agreed to not restrict agriculture on the property by covenant or otherwise, and to include agricultural uses in any future Official Community Plan or zoning amendments for the property subject to ALC's review and approval. Having satisfied the conditions for inclusion, ALC staff advised in December 2018 that the property at 7007 Highway 91 (Lot B) would be added to the ALR.

Local and Regional Context

The Regional Growth Strategy Amendments Map provided in Attachment B illustrates the proposed regional land use designation amendment from Agriculture to Industrial and amendment to the Urban Containment Boundary to include the subject property. Metro Vancouver staff provided comments on the MK Delta Lands Group application on May 27, 2016. The comments identified regional factors, which should be considered should Council submit a request for a Regional Growth Strategy amendment and sanitary sewer area extension. Further discussion on the regional factors and technical information identified by Metro Vancouver and Delta staff response are provided in Attachments C and D to this letter, and were also included in the staff report dated June 10, 2016 to Council. Also attached is a certified copy of Bylaw No. 7508 to extend the sanitary sewer area (Attachment E).
In Delta’s view, some of the significant regional benefits that would be generated by this proposal include the following:

- Dedication to Delta of 132.7 ha (328 ac) of land adjacent to the BBCEA would protect these lands from future development and would place additional bog lands in public ownership.
- Environmental and agricultural buffer areas are proposed on the subject property around the perimeter of the development. The buffers would protect the adjacent BBCEA by keeping development run-off and bog waters separate, and would mitigate potential conflicts between industrial and agricultural uses should the adjacent lands to the east within the ALR be farmed.
- This proposal would create an additional 43.79 ha (108.2 ac) of industrial lands for development which would contribute to Delta’s and the region’s supply of industrial lands.
- The loss of ALR lands is proposed to be offset by:
  - The inclusion of a 78.1 ha (193 ac) parcel (7007 Highway 91) with similar agricultural capability into the ALR.
  - The applicant’s proposal to contribute a minimum $6 million for irrigation and drainage improvements for Westham Island and East Delta would assist in increasing the agricultural productivity of valuable cultivated lands in Delta.

Conclusion

In forwarding this application to Metro Vancouver, we have prepared a comprehensive package that contains all of the information noted in Attachment F, including staff reports, minutes of Council meetings and the Public Hearing, applicable technical reports and the vegetative buffering plan for 7969 Highway 91 Connector.

Delta’s request for an amendment to the Regional Context Statement will be forwarded to Metro Vancouver for consideration should the amendments to the Regional Growth Strategy and Fraser Sewerage Area be approved.

Should you require any further information, please contact Marcy Sangret, Director of Community Planning & Development, by phone at 604.946.3219 or email at msangret@delta.ca.

Yours truly,

George V. Harvie
Mayor
Enclosures:

A. Development Concept Plan
B. Proposed Regional Growth Strategy Amendments Map
C. Regional Factors to Consider for the Proposed Regional Growth Strategy Amendments
D. Sewer Area Extension Evaluation Summary and Sanitary Sewer Area Map
E. Sanitary Sewer Area Extension Bylaw No. 7508 Certified Correct
F. List of Information Included in Referral Package to Metro Vancouver

cc: Delta Council
    Metro Vancouver Board of Directors
    Carol Mason, Commissioner/Chief Administrative Office, Metro Vancouver
    Heather McNeill, Director of Regional Planning & Electoral Area Services, Metro Vancouver
    Mark Wellman, Senior Project Engineer, Liquid Waste Services, Metro Vancouver
    Sean McGill, City Manager, City of Delta
    Steven Lan, Director of Engineering, City of Delta
    Marcy Sangret, Director of Community Planning & Development, City of Delta
Figure 2. Proposed site plan with Ministry of Transportation ALR exclusion property in northeast corner (solid blue and green parcels) (Binnie).
Regional Factors to Consider for the Proposed Regional Growth Strategy Amendments for the MK Delta Lands Group Application

The subject property at 7969 Highway 91 Connector is currently designated Agriculture in the Metro Vancouver Regional Growth Strategy, and is located outside of the regional Urban Containment Boundary. The following section responds to comments received by Metro Vancouver based on the preliminary application circulation for the proposed industrial business park application which would require amendments to the Regional Growth Strategy to change the regional land use designation of the subject property to Industrial and to include the property within the Urban Containment Boundary.

1) Support a Sustainable Economy (Goal 2)

2.1 Promote land development patterns that support a diverse regional economy and employment close to where people live.
The property is situated directly south of the Sunbury industrial business park area and is located in close proximity to both Highway 17 and Highway 91. The proposed industrial development would create an employment area that is located in close proximity to the North Delta community.

2.2 Protect the supply of industrial land.
Metro Vancouver studies show the demand for industrial land is increasing and the region will face a shortage in the next 10 to 15 years. The applicant has provided an Industrial Development, Market and Impact Study prepared by Site Economics Ltd., dated November 2015, which also provides an analysis of the industrial land supply with similar conclusions. This proposal would create an additional 43.79 ha (108.2 ac) of developable industrial lands which would contribute to Delta’s and the region’s supply of industrial lands.

2.3 Protect the supply of agricultural land and promote agricultural viability with an emphasis on food production.
The property has a regional Agriculture land use designation and is located with the Agricultural Land Reserve; however, the Provincial Agricultural Land Commission has conditionally approved the subject property for exclusion. The applicant has provided an Agricultural Capability Assessment for the subject property prepared by PGL Environmental Consultants, dated March 2016. The assessment found that drainage improvements would be required to improve the agricultural capability of the lands to organic Class 4 soils with excess water. Given the property’s proximity to the much larger Burns Bog Ecological Conservancy Area, surface drainage for any crops other than cranberries would be a significant undertaking.
The applicant proposes to offset the requested Agricultural Land Reserve exclusion for the subject property by:

- providing Delta with a $6 million contribution towards drainage and irrigation improvements for Westham Island and East Delta. This proposal is based on the conclusions of the Agricultural Benefit for Westham Island Salinity Analysis by PGL Environmental Consultants, dated March 2016, that identified opportunities to improve agricultural capability and suitability on Westham Island. The study found that unless sufficient suitable irrigation water can be supplied to Westham Island, crop production is anticipated to decrease and the effects of salinity on soils may increase. Improving components of Delta’s existing irrigation system would increase the availability of non-saline irrigation water to Westham Island. Part of the contribution would also be set aside for East Delta drainage. Improvement options in the vicinity of Lorne Ditch would be reviewed. The applicant’s proposal to contribute $6 million for irrigation and drainage improvements for Westham Island and East Delta would assist in increasing the agricultural productivity of valuable cultivated lands in Delta; and

- including the property at 7007 Highway 91 (Lot B) as shown on the Location Map below, totaling 78.1 ha (193 ac) into the Agricultural Land Reserve.
Inclusion of this property was not part of the original application as Lot B has considerable ecological values. However, it is recognized that there are existing environmentally sensitive lands located within the Burns Bog Ecological Conservancy Area that are also located within the Agricultural Land Reserve. The Provincial Agricultural Land Commission has approved inclusion of Lot B into the Agricultural Land Reserve. Should the industrial business park application be approved and the land transferred, Delta would manage Lot B consistent with the Burns Bog Ecological Conservancy Area and apply a conservation covenant.

2) Protect the Environment and Respond to Climate Change (Goal 3)

3.1 Protect Conservation and Recreation lands.
The applicant is proposing to transfer to Delta a total of 132.7 ha (328 ac) of land (Lots A, B and C). These lands have a regional land use designation of Conservation & Recreation. These privately-owned lands are currently located outside of the Burns Bog Ecological Conservancy Area. They are zoned Extraction Industrial (I3) which permits a range of industrial extraction activities including peat extraction. Dedication to Delta would protect these lands from future development and would place additional bog lands in public ownership.

3.2 Protect and enhance natural features and their connectivity.
The applicant submitted an Environmental Effects Assessment, dated April 2016, prepared by Environmental Dynamics Inc. that found that the proposed industrial development would realize a net gain in ecologically sensitive lands, vegetation and wildlife habitat protection with the proposed transfer of 132.7 ha (328 ac) of land (Lots A, B and C as shown on the Location Map) to Delta for protection from development. Other than the change in habitat for the subject site, development impacts can be minimized through the implementation of mitigation measures for fish and fish habitat, wildlife and vegetation. A covenant would be registered on the subject property that would require implementation and monitoring of the proposed mitigation measures.

Environmental buffer areas are proposed around the perimeter of the development area on the subject property to protect the adjacent Burns Bog Ecological Conservancy Area by keeping development run-off and bog waters separate. In addition to the peat berm and perimeter ditches, the site would be surrounded by a fill slope that would transition from the development site down to the perimeter ditches. A fence would be placed at the top of the slope to prevent public access to the perimeter buffer areas and the adjacent Burns Bog Ecological Conservancy Area and to maintain continuity of the South Fraser Perimeter Road wildlife fence. The buffer areas to the west and south would be owned and managed by Delta; however, the applicant would be responsible for
the installation of the berm and fill slope and interim maintenance and monitoring prior to Delta assuming responsibility for the buffer area. The north buffer and the east perimeter ditch and fill slope would be on privately-owned lands. Water quality monitoring would be done before, during and after construction to ensure effective protection of the Burns Bog Ecological Conservancy Area.

3.3 Encourage land use and transportation infrastructure that reduce energy consumption and greenhouse gas emissions, and improve air quality.

The industrial development on the subject property would be contingent upon or phased to coincide with the completion of the Sunbury Interchange Project which would reduce congestion and the associated idling thereby improving local air quality and reducing greenhouse gas emissions from transportation.

The development itself would have a 3 m (10 ft) wide multi-use pathway to encourage walking and connectivity to public transit. Links to the local and regional cycling network would provide options for employees to seek alternative modes of transportation and thereby reducing greenhouse gas emissions.

The proposed design guidelines encourage the implementation of sustainable, energy-efficient design standards in building and site design. It is noted that energy-efficient design standards utilizing natural lighting, promoting renewable energy use and adhering to LEED standards would be implemented wherever applicable. Opportunities to incorporate renewable energy systems into buildings would also be pursued.

3.4 Encourage land use and transportation infrastructure that improve the ability to withstand climate change impacts and natural hazard risks.

The development site would be elevated significantly above existing site grades to about 5.3 m geodetic with mineral fill. This is in excess of the design flood proofing grade and current height of the Fraser River dike.

Stormwater infrastructure proposed includes increased pumping capacity with a new pump station at the Silda outfall which would provide drainage for the project site as well as improving drainage for the existing Nordel Industrial area. This would accommodate the more intense storm events predicted due to climate change.
3) Support Sustainable Transportation Choices (Goal 5)

5.1 Coordinate land use and transportation to encourage transit, multiple-occupancy vehicles, cycling and walking.
The development would have 3 m (10 ft) wide multi-use pathways on both sides of the internal roads to encourage walking and cycling. Possible links to the local and regional cycling network such as Highway 17 would provide options for employees to seek alternative modes of transportation.

5.2 Coordinate land use and transportation to support the safe and efficient movement of vehicles for passengers, goods and services.
The proposed development is ideally positioned for supporting goods movement in the region due to its proximity to the US border, Roberts Bank Container Terminal, and other industrial docks and facilities along the Fraser River. As the site can be directly accessed from Highway 17, commercial truck traffic would be separated from residential areas thus improving community safety.
Sewer Area Extension Evaluation Summary and Sanitary Sewer Map

Applications to extend the Sewer Area are reviewed with consideration given to a number of factors including: consistency with local policy and land use designations; the technical, operation and financial impacts of the proposed extension; and the goals, objectives and land use designations of the Regional Growth Strategy.

An application is in process for the property at 7969 Highway 91 Connector to permit the property to be included in the Delta Sewer Area in order to allow for an industrial development with approximately 43.79 ha (108.2 ac) of net developable land into Delta’s sanitary sewer system. The property is currently designated Agricultural in Delta’s Official Community Plan and Agriculture in Metro Vancouver’s Regional Growth Strategy and is outside of Metro Vancouver’s Urban Containment Boundary. The property is also located within the Agricultural Land Reserve. The property is located adjacent to the Urban Containment Boundary and lands designated Industrial in Delta’s Official Community Plan and Metro Vancouver’s Regional Growth Strategy. The applicant has submitted applications to exclude the property from the Agricultural Land Reserve, which the Provincial Agricultural Land Commission has conditionally approved, and to amend the land use designations in Delta’s Official Community Plan and Metro Vancouver’s Regional Growth Strategy from Agricultural and Agriculture, respectively, to Industrial. The applicant is also requesting that the lands be included within Metro Vancouver’s Urban Containment Boundary.

There is an existing 1,050 mm (41 in) diameter sanitary sewer forcemain located approximately 400 m (1,312 ft) north of the property. Sanitary flows from the property would be pumped to Delta’s sanitary sewer forcemain from a proposed onsite sanitary sewer pump station. The average flow rate from the development is estimated at approximately 22 litres per second, and a peak discharge rate of 79 litres per second. This additional flow can be accommodated within Delta’s collection system, and will enter into Metro Vancouver’s South Surrey’s Interceptor at the Tilbury Meter Chamber.

Metro Vancouver approval is required in order to extend the Sewer Area. The applicant is requesting consideration of their sewer area extension request in conjunction with the applications to amend the local and regional land use designations and to include the site in the Urban Containment Boundary. Sites within the Urban Containment Boundary which are designated Industrial would be eligible for sewerage services, subject to Greater Vancouver Sewerage and Drainage District technical considerations, provided that the proposed development complies with the applicable policies under the General Urban designation. In the absence of specific criteria, Delta staff have evaluated the proposal in the same manner as has been done for previous sewer area extensions. A summary of the areas evaluated is presented in the table below.
| **Financial** | The proposed sewer extension would be paid for by the owner at the time of connection. There would be no capital cost to Delta or Metro Vancouver. If connected, the land owner would be charged regular sewer charges offsetting financial impacts of operating Delta's overall sewer system. |
| **Land Use Compliance** | The proposed industrial use requires an amendment to Delta's Official Community Plan and Metro Vancouver's Regional Growth Strategy. |
| **Service Levels** | The applicant has indicated that the anticipated average flow rate from the proposed industrial development is 22 litres per second, and a peak flow rate of 79 litres per second. |
| **Technical/Operational** | This incremental increase in flow can be accommodated within Delta's existing sanitary sewer collection system. |
| **Local Community** | The proposed industrial use would be compatible with the adjacent industrial uses along Nordel Way and River Way. |
| **Regional Concepts** | The applicant is requesting that the property be included in the Urban Containment Boundary in Metro Vancouver's Regional Growth Strategy. |
THE CORPORATION OF DELTA

BYLAW NO. 7508

A Bylaw to extend the boundaries and area of the “Delta Sewer Area”

WHEREAS the Council of The Corporation of Delta has adopted a bylaw entitled “Delta Sewer Area Merger Bylaw No. 2551, 1976” which outlined areas specified as the “Delta Sewer Area” created for the purpose of providing a sanitary sewer system for the special benefit of the said areas;

AND WHEREAS it is deemed desirable and expedient to extend the specified area serviced by the sewer system;

NOW THEREFORE, the Municipal Council of The Corporation of Delta in open meeting assembled, ENACTS AS followS:

1. This Bylaw may be cited for all purposes as “Delta Sewer Area Extension and Enlargement (MK Delta Lands Group– LU007445) Bylaw No. 7508, 2016”.

2. Any liabilities incurred, on behalf of the “Delta Sewer Area” as created by the “Delta Sewer Area Merger Bylaw No. 2551, 1976” shall be borne by all the owners of parcels of lands in the “Delta Sewer Area” as extended and enlarged by this bylaw.
3. The "Delta Sewer Area" as created by the "Delta Sewer Area Merger Bylaw No. 2551, 1976" and as extended from time to time is hereby further extended and enlarged to include the property described as "Proposed Sewer Area Extension" as shown outlined in bold on the plan attached hereto and identified as Schedule "A".

READ A FIRST time the 20th day of June, 2016.
READ A SECOND time the 20th day of June, 2016.
READ A THIRD time the 20th day of June, 2016.
THIRD READING EXTENSION APPROVED the 24th day of July, 2017.
APPROVED BY the Greater Vancouver Sewer & Drainage District the day of 201.

FINALLY CONSIDERED AND ADOPTED the day of , 20 .

Lois E. Jackson
Mayor

Robyn Anderson
Municipal Clerk

CERTIFIED CORRECT AT THIRD READING:

Robyn Anderson
City Clerk
This is Schedule “A” to
“Delta Sewer Area Extension and Enlargement
(MK Delta Lands Group – LU007445) Bylaw
No. 7508, 2016”

Legal:
P.I.D. 000-915-025
Lot 4 District Lot 437 Group 2
New Westminster District Plan 1180 Except Plan EPP375
List of Information Included in Referral Package to Metro Vancouver

1. Cover Letter to Metro Vancouver Board Chair with attachments:
   a. Development Concept Plan
   b. Proposed Regional Growth Strategy Amendments Map
   c. Regional Factors to Consider for the Proposed Regional Growth Strategy Amendments
   d. Sewer Area Extension Evaluation Summary and Sanitary Sewer Area Map
   e. Sanitary Sewer Area Extension Bylaw No. 7508 Certified Correct

2. Staff Reports Dated:
   a. June 10, 2016
   b. July 5, 2016
   c. January 29, 2019

3. Council Meeting Minutes:
   a. Regular Council Meeting on June 20, 2016
   b. Regular Council Meeting on July 11, 2016
   c. Public Hearing on July 26, 2016
   d. Meeting Following the Public Hearing on July 26, 2016
   e. Regular Council Meeting on February 11, 2019

4. Provincial Agricultural Land Commission Decision dated September 11, 2018

5. Technical Reports:
   c. Industrial Development, Market and Impact Study dated November 2015
   d. Environmental Effects Assessment (Revision 3) dated April 2016
   e. Agricultural Capability Assessment dated March 2016
   f. Agricultural Benefit for Westham Island Salinity Analysis dated March 2016

6. Agricultural Buffer:
   a. Vegetative Buffering Plan dated December 2018

Note: Additional information and documents relating to the MK Delta Lands industrial development application, including copies of presentations, can be found on Delta’s website at www.delta.ca/mkindustrial.
To: Regional Planning Advisory Committee

From: Erin Rennie, Senior Planner, Jessica Hayes, Planner, and Raymond Kan, Senior Planner, Regional Planning

Date: March 4, 2019

Meeting Date: March 15, 2019

Subject: Equity in Regional Growth Management – Project Initiation

RECOMMENDATION
That the Regional Planning Advisory Committee receive for information the report dated March 4, 2019, titled “Equity in Regional Growth Management – Project Initiation”.

PURPOSE
To provide an overview of the Equity in Regional Growth Management research project and an opportunity to provide feedback on the preliminary project scope and objectives.

BACKGROUND
In 2019, Regional Planning will be undertaking preparatory work for an update to Metro Vancouver 2040: Shaping Our Future (Metro 2040), the regional growth strategy. Given the ongoing review of Metro 2040’s policy framework, there is an opportunity to explore how equity can better be considered in the update to the regional growth strategy.

The Equity in Regional Growth Management research project aligns with the intent of Metro Vancouver Board Strategic Plan’s Vision Statement, and goals in Metro 2040 and the Regional Affordable Housing Strategy, particularly with regards to creating complete communities, increasing access to transportation and housing, and responding to climate change.

PROJECT DESCRIPTION
Equity is an emergent issue in regional planning that lacks a clear definition in Metro 2040, and in Metro Vancouver’s growth management policy framework in general. Many of the region’s growth management challenges could potentially be driving inequities and/or be driven by equity issues. There is also growing recognition of the inequality experienced by Canada’s Indigenous peoples and the need for continued efforts toward reconciliation. Whether related to income, access to services, or vulnerability to financial or physical impacts, there is an opportunity to review equity from an intersectional lens and consider how equity considerations can be infused into the pending regional growth strategy update.

The Equity in Regional Growth Management research project will comprise four key components:

1. Compare and contrast how other government agencies (especially regional planning agencies) define and incorporate equity in land use and transportation planning and policy with a focus on growth management. Document the differences in legislative mandates.
2. Examine how other government agencies acknowledge and/or incorporate Indigenous interests, perspectives, and needs in land use and transportation planning and policy. Document the differences in legislative mandates.

3. Identify the gaps and opportunities in Metro 2040 to more explicitly promote equity and address inequities. Also, identify any legislative gaps governing equity and regional growth management in British Columbia.

4. Identify potential performance measures for evaluating equity in regional growth management.

The project deliverable will be a research paper, prepared by a contracted consultant, to inform the update to Metro 2040 and affiliated plans, policies, and actions. The consultant’s scope of work will include desktop reviews and key informant interviews with up to 6 regional government planning agencies outside the Metro Vancouver region (to be identified) and the identification and documentation of gaps in how Metro Vancouver currently promotes equity considerations in Metro 2040.

It is anticipated that the research paper will only be the start of a dialogue about equity in regional growth management. Subsequent phases of research and engagement with local and regional stakeholders are anticipated and will expand on the initial research.

PROJECT TIMELINE
The Equity in Regional Growth Management research project timeline is as follows:

- Project Definition (March – May 2019)
- Research and Review of Results (May – September 2019)
- Communications and Reporting Out (September – November 2019)

ALTERNATIVES
This is an information report. No alternatives are presented.

FINANCIAL IMPLICATIONS
The project is consistent with the 2019 Budget approved by the MVRD Board on October 27, 2018. $20,000 is allocated in the Regional Planning budget for consultant support for this project.

SUMMARY / CONCLUSION
The Equity in Regional Growth Management research project will advance Regional Planning’s understanding of equity considerations as they relate to land use and transportation planning and policy. Further, the research findings will identify gaps and opportunities for Metro Vancouver to better incorporate equity (including Indigenous perspectives and interests) into its regional growth management practices, particularly as staff undertake preparatory work for an update to Metro Vancouver 2040: Shaping Our Future, the regional growth strategy. Prior to retaining consultant services, staff are seeking input and feedback on the proposed scope of the project from RPAC and its Housing and Social Issues Subcommittees.
To: Regional Planning Advisory Committee
From: Erin Rennie, Senior Planner, Regional Planning
Date: March 1, 2019
Meeting Date: March 15, 2019
Subject: Lougheed Corridor Land Use and Monitoring Study – Final Report

RECOMMENDATION
That the Regional Planning Advisory Committee receive for information the report dated March 1, 2019, titled “Lougheed Corridor Land Use and Monitoring Study – Final Report”.

PURPOSE
To inform the Regional Planning Advisory Committee of the proceedings, findings, and next steps of the Lougheed Corridor Land Use and Monitoring Study.

BACKGROUND
As part of the ongoing Metro Vancouver 2040: Shaping Our Future (Metro 2040) Urban Centres and Frequent Transit Development Area (FTDA) Policy Review, Metro Vancouver is conducting a series of Frequent Transit Corridor Studies in partnership with TransLink and member jurisdictions. These studies are pilot projects to further the integration of regional land use and transportation planning through support and coordination by Regional Planning staff. The first Frequent Transit Corridor Study (2015-2017) pilot took place on the Marine-Main Corridor (connecting the District and City of North Vancouver, and the District of West Vancouver).

On September 14, 2018, the Regional Planning Advisory Committee received a report titled, “Lougheed Land Use and Monitoring Study – Project Initiation” (Reference 1) initiating the second Frequent Transit Corridor Study on the Lougheed corridor (connecting the Cities of Coquitlam, Port Coquitlam, Pitt Meadows, and Maple Ridge). The Lougheed Corridor Land Use and Monitoring Study took place between September 2018 and February 2019 and has now concluded. This report describes the study process and findings. On March 8, 2019, the Regional Planning Committee received a report titled “Lougheed Corridor Land Use and Monitoring Study – Final Report” (Reference 6).

STUDY BACKGROUND
There are a number of activities taking place on the Lougheed Corridor that made this an opportune time to conduct a multi-stakeholder corridor study. These include the introduction of a new B-Line bus service on the corridor, the development of a new Pitt Meadows-Maple Ridge Area Transport Plan, TransLink’s Lougheed Corridor Long-Term Transit Study, a number of municipal planning projects, and Ministry of Transportation and Infrastructure highway upgrades along the corridor.

Purpose and Goals
This study was motivated in particular by the pending introduction of the Lougheed B-Line frequent bus service implementation scheduled for September 2019. This investment in frequent transit
service in the corridor will bring important mobility benefits to people who live, work, and visit the corridor with the potential to increase transit ridership and transit mode share, and to create new development opportunities. This Study was scoped to complement the B-Line introduction by considering how land use and growth on the corridor could be coordinated and planned across municipal boundaries to support the new transit service as well as to better understand how transit service improvement might impact growth and development generally. The purpose of the Study was to further thinking about transit-supportive land use options along the B-Line route and to explore the better integration of growth corridors into regional planning and monitoring.

**Partnership**

The Study was led by Metro Vancouver in collaboration with TransLink. The project was guided by a Staff Working Group (SWG) with staff representation drawn from Metro Vancouver, TransLink, the Cities of Coquitlam, Port Coquitlam, Pitt Meadows, and Maple Ridge, the Katzie, Kwantlen and Kwikwetlem First Nations, the Agricultural Land Commission (ALC), and the Ministry of Transportation and Infrastructure (MOTI).

**STUDY COMPONENTS AND ANALYSIS**

The Study was scoped to integrate into TransLink’s Lougheed Corridor Long-Term Transit Study and to feed into the various local community projects. The Study comprised the following five activities designed to further thinking about transit-supportive land use and growth options along the new B-Line route and to explore the better integration of corridors into regional planning and monitoring.

**Activity 1: Study Area Development and Site Assessment**

Regional Planning staff worked with the SWG to collectively develop a custom study area geography for the corridor (Figure 1). The purpose of the Study Area geography was to inform future analysis including the monitoring program and the market potential assessment. In general, the study area geography is between 400m and 800m from the corridor right-of-way, it includes most of the area of each designated urban centre, but excludes most industrial, railway and agricultural lands along the corridor.

*Figure 1: Lougheed Corridor Custom Study Area Geography*
Activity 2: Monitoring Program Development
The monitoring program (Attachment 1) is a service being undertaken by Metro Vancouver to help SWG members observe how land use and transportation patterns change after the introduction of the B-Line. The goals of the program were to: learn about the influence of B-Line on community development patterns and travel behaviour, learn about the use of corridors for shaping growth, and inform policy and track progress over time.

The SWG identified a list of performance indicators of interest and determined how those indicators could be tracked. Metro Vancouver will track the indicators for the custom corridor study area geography and prepare regular reports for the partners to use in evaluating their policies and programs including a Baseline Report, an Annual Update with a selection of the agreed-upon indicators, and a full Monitoring Report every 5 years.

Activity 3: Market Potential Assessment
Urban Systems was hired to conduct a Market Potential Assessment for the Study Area to help participants understand the likely real estate market impact of the introduction of the B-Line service. The results of the analysis show that there is likely to be a modest impact on population and market potential for residential and commercial real estate in the corridor as a result of the B-Line investment. That impact would be focused primarily on the eastern end of the corridor. A separate non-market analysis showed that the potential for non-market housing in the corridor is greater following the introduction of the B-Line as compared to the status quo scenario. The consultant also found that there is unlikely to be regional-scale stand-alone office development in the corridor other than around Coquitlam Regional City Centre, due to the presence of SkyTrain. Local-serving office potential was therefore included as part of the commercial market potential analysis.

The Market Potential Assessment included a high-level capacity analysis which identified vacant lands in the Study Area by zoning category. These vacant properties represent opportunities for transit-supportive community elements such as: rental housing, non-market housing, pedestrian and cycling connections, employment opportunities, streetscape improvements, parks, and greenspace. More nuanced capacity analysis at the municipal level should be considered to further explore these opportunities.

Urban Systems emphasized that one of the clearest opportunities arising out of the introduction of the new B-Line service is its potential to stimulate and support development of a range of affordable and non-market housing types. It has previously been determined by other studies that the residents of rental and non-market housing are more likely to ride transit and support desired ridership levels and are also less likely to require parking. Municipalities may wish to consider re-evaluating land use and zoning policies in the Study Area relating to provisions for new rental housing, supportive housing for seniors, and other non-market housing types.

Activity 4: Alternative Growth Scenario Process
Metro Vancouver worked with TransLink to model how redirecting growth to the corridor could impact transit ridership for different transit service levels in the long term (i.e. to the year 2050). An Alternative Growth Scenario of trend-forward growth for the corridor plus 20% was conceptualized and analyzed through the Multiple Accounts Evaluation component of TransLink’s Lougheed Corridor Long-Term Transit Study. Additional analysis is required, but generally the results suggest that
redirecting growth from elsewhere in the respective municipalities to appropriate locations along the Lougheed Corridor could help to grow transit ridership and in turn support the municipalities’ long-term transit ambitions. Growth projection maps by Traffic Area Zone by the corridor as well as a corridor transportation and land use profile were prepared as part of this analysis and are included in the attachments (Attachment 2, 3, and 4).

Activity 5: Transit-Supportive Corridor Opportunities
Drawing on established policy and best practices, Metro Vancouver facilitated discussions with the SWG to identify opportunities to enhance the transit-supportive quality of the adjacent communities. These opportunities were geared towards responding to concerns and observations articulated by SWG members over the course of the Study.

STUDY FINDINGS
The following findings have emerged through the course of the Lougheed Corridor Study:

- **B-Line investment represents an opportunity to significantly increase the supply of transit-oriented affordable and non-market housing in this region.** The Urban Systems market potential assessment shows that the market potential for non-market housing is likely to increase as a result of the B-Line investment and at a greater rate than market-rate housing. Locating affordable, non-market and rental housing in the Lougheed Corridor will support ridership on the B-Line since renters and lower-income residents take transit at higher rates than homeowners and people with higher incomes. Stronger ridership numbers on the corridor could support the municipalities’ long-term ambitions for higher-order transit options.

- **Office development in the corridor is likely to be primarily local-serving.** Urban Systems found that there is unlikely to be significant market potential for stand-alone office in the Lougheed Corridor as a result of the B-Line, other than in the Coquitlam Regional City Centre area. The market potential for local-serving office (e.g. professional service firms) was presented as part of the commercial analysis portion of the Market Potential Assessment.

- **Not all locations within 400m of the Frequent Transit Network are appropriate for transit-oriented growth.** Development of the custom corridor study area geography with the SWG demonstrated that not all areas within 400m of the Frequent Transit Network (FTN) are appropriate for transit-oriented growth and higher densities. Many of the lands within a five-minute walk of the Lougheed section of the FTN are designated for agricultural or industrial uses, are unlikely to change, or are otherwise inappropriate areas for growth. This demonstrates a recognition that growth will not be uniform across a corridor and regional policy tools need to consider and reflect this. Developing this custom corridor geography could support regional planning and monitoring in the next iteration of the regional growth strategy because the projections and subsequent targets can be set based on a more nuanced understanding of the land uses and local ambitions for the corridor, improving the likelihood that the region will meet its regional corridor growth targets.

- **Redirecting municipal growth to the corridor could increase transit ridership for all potential service types.** An analysis of the Metro Vancouver and TransLink Alternative
Growth Scenario demonstrates that one potential approach for increasing transit ridership in the long-term could be to reduce growth opportunities outside a corridor and re-allocate them to appropriate areas along it. Transit ridership growth may support a municipality’s ambitions for scaling up transit service levels in the long term. This is consistent with the approach taken by Metro 2040’s regional growth targets for areas along the FTN.

- **B-Line investment alone is unlikely to cause speculative pressure on adjacent ALR lands.** Urban Systems through their Market Potential Assessment work concluded that the B-Line alone was unlikely to stimulate speculation on Agricultural Land Reserve lands and that land owners are generally more attuned to changes to agricultural land use policy than transit investment at this service level.

- **Introduction of a B-Line service in combination with parking standard reductions may help make multi-family development financially viable in areas in the corridor with water table concerns.** Communities located in areas with high water table concerns have noted a difficulty in attracting multi-family development interest because of the costs associated with building underground parking. This may be potentially addressed by reducing parking requirements in multi-family buildings within walking distance of a B-Line stop, especially if they are rental or non-market buildings. The Regional Parking Study has demonstrated that parking utilization is lower in apartment buildings along the FTN, especially for rental buildings. Reducing parking requirements for areas within 400m of B-Line stops, especially for rental buildings may support the creation of higher-density nodes close to transit by reducing developer construction costs. This strategy is especially effective when a range of other transportation options are made available, such as reserving spaces for carshare vehicles and secure bicycle parking.

- **B-Line creates a number of opportunities to work towards other local and regional objectives.** The implementation of the Lougheed B-Line transit service has the potential to do more than enhance the customer experience for existing transit riders. If communities leverage the B-Line investment and integrate it into other local strategies it has the potential to:
  - Support an increase to the supply of transit-oriented affordable housing;
  - Help increase transit mode share and reduce greenhouse gas emissions;
  - Help increase economic opportunity for all municipalities along the corridor;
  - Support employee recruitment and retention for local employers;
  - Help achieve the regional growth targets for frequent transit corridors.

**KEY LEARNINGS FROM REGIONAL PLANNING’S CORRIDOR WORK**
The Lougheed Corridor Land Use and Monitoring Study is the second Frequent Transit Corridor Study conducted by Metro Vancouver. Regional Planning staff continue to look for opportunities to improve the approach. Some of the learnings from this study include:

- **The Market Potential Assessment provides a useful analysis.** This assessment helped to project the level of potential development impact that the new service could stimulate, helping participants to understand the likely range of new development resulting from the
transit investment. This supports ongoing planning work that may lead to the identification of new FTDAs or other transit-supportive initiatives throughout the region.

- **The Alternative Growth Scenario process needs to be refined.** This was the first opportunity for local partners to suggest alternative growth patterns as an input into the Multiple Accounts Evaluation analysis undertaken by TransLink. Determining what an appropriate alternative growth scenario might be proved to be challenging. It is recommended that future analyses be developed by Regional Planning staff in accordance with established regional growth targets or other established policy.

- **Future studies should go further than analysis by drafting a shared vision for the corridor.** This may encourage a higher degree of engagement among the project participants and clarify the goals and outcomes of a study. Drafting a collective vision for a corridor has been shown to be an effective component of multi-stakeholder corridor studies in other regions in North America.

- **There is a need for additional education on the benefit of B-Line/Bus Rapid Transit to community development.** Generally, the benefits of B-Line and Bus Rapid Transit for enhancing the transit network and achieving community goals and regional targets are not well-understood. Educating all decision-makers on the benefits of B-Line and opportunities to take advantage of those benefits will support the creation of more transit-supportive communities (Reference 4).

**IMPLICATIONS FOR METRO 2040 URBAN CENTRE AND FTDA POLICY REVIEW**

Frequent Transit Corridor Studies are pilot projects within the overarching Metro 2040 Urban Centre and FTDA Policy Review, scoped to help test the further integration of corridors into regional planning and monitoring. The following implications for the Policy Review have emerged from the Lougheed Land Use and Monitoring Study:

- **Defining Urban Centre types should consider floodplain risk.** Concerns about floodplain and high water table constraints to higher-density multi-family development in Urban Centres and corridors raised questions about the identification of regional growth centres in hazard-prone areas, especially given growing climate change risk. In the update to the regional growth strategy, consideration should be given to flood risk when identifying and designating regional growth centres.

- **Urban Centres should be differentiated into ‘Urban Centres where growth is directed’ and ‘Urban Centres not anticipated to grow significantly’.** This could provide helpful clarity around the expectations for different Urban Centre types in the regional growth strategy. It would also help to differentiate the policy intent by Urban Centre type; for example, the policy of directing office development to Urban Centres is not nuanced enough to address different growth expectations or market realities.

- **Policies to encourage inter-municipal corridor coordination.** The update to the regional growth strategy should include a consideration of policies requiring municipalities with sections of important corridors on the FTN to include policies to coordinate corridor planning
efforts with neighbouring municipalities and First Nation communities through their respective Regional Context Statements. This will help to further integrate corridors into regional planning in a more consistent and constructive way.

- **Further differentiate Urban Centres from corridors.** Some municipalities are concerned that corridors may compete with Urban Centres for growth and this has led to a reluctance to identify FTDAs. Policies to address this concern should be considered in the update to the regional growth strategy. That may include further differentiating identification criteria and expectations for different centre and corridor types.

**ALTERNATIVES**
This is an information report. No alternatives are presented.

**FINANCIAL IMPLICATIONS**
There are no financial implications arising from this report. The study was funded from the 2018 and 2019 Board-approved Regional Planning budget, which allocates $20,000 for corridor studies each year.

**SUMMARY / CONCLUSION**
Metro Vancouver led the Lougheed Corridor Land Use and Monitoring Study in partnership with TransLink, the Cities of Coquitlam, Port Coquitlam, Pitt Meadows, Maple Ridge, as well as invited representation from the Katzie, Kwantlen and Kwikwetlem First Nations, the ALC, and MOTI.

The purpose of the Study was to further thinking about transit-supportive land use options along the pending Lougheed B-Line route and to explore the better integration of growth corridors into regional planning and monitoring. The activities of the Study included: Study Area Development and Site Assessment; Monitoring Program Development; a Market Potential Assessment; an Alternative Growth Scenario Process; and discussions of Transit-Supportive Corridor Opportunities.

The Study resulted in a number of findings including the recognition that the introduction of the B-Line on the Lougheed Corridor would drive an increase in both commercial and residential real estate market potential, especially for non-market residential. The Study’s results hold important implications for the Metro 2040 Urban Centre and FTDA Policy Review including the need to recognize natural hazard risk in identifying growth-oriented Urban Centres, the need for policies to encourage inter-municipal corridor coordination in regional context statements, and the need to further differentiate between Urban Centre types and corridors in the upcoming update to the regional growth strategy.

**Attachments:** (orbit doc #28813882)
1. Lougheed Corridor Monitoring Program Plan
2. Lougheed Corridor Profile
3. Corridor Growth Projections by Traffic Area Zone, 2035
4. Corridor Growth Projections by Traffic Area Zone, 2050
References
1. Lougheed Land Use and Monitoring Study – Project Initiation, Regional Planning Committee Staff Report, October 5, 2018
2. Transit-Oriented Communities: A Primer on Key Concepts, TransLink, 2010
3. Transit-Oriented Communities Design Guidelines, Translink, 2012
5. The Regional Parking Study Draft Technical Report, Metro Vancouver, 2019 (refer to Attachment of Agenda Item 4.8 The Regional Parking Study – Key Findings, dated February 15, 2019)
6. “Lougheed Corridor Land Use and Monitoring Study - Final Report” dated February 19, 2019
Metro Vancouver Corridor Monitoring Program Plan:
Lougheed Corridor

Introduction
This monitoring program plan describes how the members of the Lougheed Corridor Land Use and Monitoring Study Staff Working Group will collaborate to monitor the Lougheed Corridor study area in order to observe changes following the implementation of the Lougheed B-Line bus service. This monitoring program will support the further integration of land use and transportation planning in the region by studying how improvements to transit service influence a variety of community and transportation planning outcomes. This monitoring program will help the region to better understand the role that B-Line frequent bus service can play in shaping travel behaviour and development as well as to better understand the role that corridors could play as regional growth structuring tools. The program will benefit the project partners by providing data to support the self-evaluation of local policies that are geared towards creating compact, complete, and transit-supportive communities.

This monitoring program was developed as a component of the Lougheed Corridor Land Use and Monitoring Study. The study’s Staff Working Group (SWG) developed the monitoring program collaboratively to support the study as well as local and regional objectives. The Staff Working Group membership was made up of municipal staff from the Cities of Coquitlam, Port Coquitlam, Pitt Meadows, Maple Ridge, TransLink, Metro Vancouver, as well as invited representation from the Katzie First Nation, Kwantlen First Nation, Kwikwetlem First Nation, the Agricultural Land Commission (ALC), and Ministry of Transportation and Infrastructure (MOTI).

Goals and Objectives
Goals
There are three broad goals of the monitoring program

1. Learn about the influence of B-Line on community development patterns and travel behaviour
2. Learn about Growth Corridors
3. Inform Policy and Track Progress

Objectives
Beneath these goals are a number of objectives

1. Learn about the relationship between B-Line and community development patterns and travel behaviour
   a. Learn how the introduction of B-Line service in conjunction with associated transit priority measures, influences:
      i. growth and development interest along a corridor,
      ii. goods movement, ridership on other routes, travel times, and congestion,
      iii. transit mode share,
      iv. access to employment opportunities.

2. Learn about Growth Corridors
3. Inform Policy and Track Progress
   a. Provide data to help partner jurisdictions self-evaluate local policies that are geared towards creating complete, transit-supportive communities.
   b. Collectively monitor progress towards the shared regional vision in *Metro 2040*.

**Monitoring Study Area**

The Monitoring Study Area (Figure 1) has been identified in partnership with the four affected municipalities and other members of the SWG to reflect the area that may influence or be influenced by the implementation of new frequent transit service in September 2019. It is in this study area that the partners wish to monitor change to better understand the relationship between the B-Line bus service, transportation behaviour, and community development.

The study area includes portions of four *Metro 2040* Urban Centres (areas that are already identified as growth areas in the regional growth strategy and Official Community Plans): Maple Ridge Regional City Centre, Pitt Meadows Municipal Town Centre, Port Coquitlam Municipal Town Centre, and Coquitlam Regional City Centre. The study area includes areas along the corridor in-between the Urban Centres.

In general, the study area consists of a 400 to 800 metre network buffer (5-10 minute walk) around the corridor roadway. In some cases the study area extends beyond 800 metres from the roadway to include destinations that are likely to generate B-Line ridership. Some areas within walking distance from the corridor roadway were excluded from the study area because they either a) have Agricultural or Industrial Land Use Designations in *Metro 2040*, b) are neighbourhoods that are highly unlikely to change following the new B-Line services, or c) have topographical or connectivity issues that would create a barrier to bus stop accessibility. In some instances the corridor is limited to the roadway only because the adjoining lands have been determined to be unsuitable or inappropriate for transit-oriented growth and are unlikely to have a strong land use-transportation relationship.
Corridor Study Area and Neighbourhood Planning

The study area runs through four Metro 2040 Urban Centres – Maple Ridge Regional City Centre, Pitt Meadows Municipal Town Centre, Port Coquitlam Municipal Town Centre, and Coquitlam Regional City Centre as well as other local planning areas. However, several areas within the study area have not gone through a neighbourhood planning process, meaning the community may not yet have had the opportunity to hold engagement process and plan for growth in these areas. For this reason, the monitoring study area should not be considered a growth overlay area. However, the partners acknowledge that the new B-Line frequent transit service will likely have an impact on land use, growth, and other community development trends so it is important to begin monitoring efforts now. The study area reflects an estimation of where change to community development patterns and transportation behaviour is anticipated.

Corridor Performance Indicators

Change in the corridor study area will be monitored using the following performance indicators:

- Land Use Change
- Population Growth
- Change in Lease Rates
- Sub-Regional Growth Shares
- Dwelling Unit Growth by Tenure
- Transit service frequency
- Population Distribution by Age Group
- Dwelling Unit Density
- Transit service trip time
- Household Make-up
- Presence of Transit-Supportive Housing Policies
- Transit service span
- Housing Tenure Mix
- Change in Property Values
- Capacity utilized
- Housing Type Mix
- Daily Ridership
- Population Growth
- Peak Ridership
- Dwelling Unit Growth by Tenure
- Change in Property Values
- Transit service frequency
- Transit service trip time
- Transit service span
- Capacity utilized
- Daily Ridership
- Peak Ridership
• On-Time Performance
• Bus Bunching
• Service Cost per APC Boarding
• Resident Mode Share
• Annual Vehicle Kilometres Travelled per capita
• Traffic Volumes
• Truck Volumes
• Vehicle Occupancy Rates
• Cycling Connectivity
• Pedestrian Connectivity
• Intersection Density
• Employment Growth
• Business Licenses within the Corridor
• Employment Types
• Park Space
• Public Art Installments
• Number of street trees
• Street furniture items

Table 1 attached lists the performance indicators that will make up the Monitoring Pram as well as relevant details including the units and calculation method, the data source or owner, and collection frequency. As the monitoring program evolves, Metro Vancouver may recommend not collecting data on specific performance indicators if the data is unavailable or unreliable for those indicators.

Data Sources
The majority of the data will be collected by Metro Vancouver via a custom Census request. Some measures will be collected and forwarded to Metro Vancouver staff by partners (see Table 1). Metro Vancouver will be responsible for gathering data from project partners. Project partners will be responsible for collecting and submitting the data indicated to Metro Vancouver at the frequencies indicated.

Reporting
The primary purpose of the Lougheed Corridor Monitoring Program is to provide technical data to project partners to support planning work. A secondary purpose is to keep relevant committees appraised of how land use and transportation indicators are changing over time. Reports will be made available to SWG members for review prior to being reported through the Regional Planning Advisory Committee and Regional Planning Committee.

Baseline Report
A baseline report will be developed using 2016 Census data and released to SWG members by as soon as census data is made available to Metro Vancouver staff.

Annual Updates
Annual Corridor Monitoring Updates containing a limited number of performance measures will be prepared by Metro Vancouver and submitted to the SWG for review and discussion on an annual basis. SWG members will identify any revisions, action items, or questions arising from the report. Metro Vancouver will be responsible for revising the Annual Corridor Monitoring Update to reflect SWG input.

5 Year Corridor Monitoring Reports
5 Year Corridor Monitoring Reports containing all performance measures will be prepared by Metro Vancouver and submitted to the SWG for review and discussion. Delivery of the 5 Year Corridor Monitoring Reports will be subject to Statistics Canada Census data availability. Metro Vancouver will incorporate any SWG revisions to the 5 Year Corridor Monitoring Report prior to submitting it to Regional Planning Advisory Committee (RPAC) and Regional Transportation Advisory Committee (RTAC) for information. The 5 Year Corridor Monitoring Report will then be revised to incorporate RPAC and

Regional Planning Advisory Committee
RTAC input prior to submission to the Regional Planning Committee and Metro Vancouver Board of Directors. Municipalities may also wish to present the 5 Year Corridor Monitoring Reports to their respective Councils.

**Urban Centre and FTDA Policy Review**
This monitoring program is of interest to Metro Vancouver’s ongoing *Metro 2040* Urban Centres and Frequent Transit Development Area Policy Review. Should the monitoring program yield significant findings or conclusions with implications for the Urban Centres and FTDA Policy Review, these will be presented to the SWG for feedback prior to being incorporated into the Policy Review.

**Monitoring Team**
Metro Vancouver staff will conduct the monitoring and reporting work in consultation and with the support of the project partners. Roles and responsibilities of the team are described in Table 2.

<table>
<thead>
<tr>
<th>Organization</th>
<th>Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy and Planning Analyst, Metro Vancouver</td>
<td>Custom census request preparation. Compilation and analysis of data. Data visualization.</td>
</tr>
<tr>
<td>Senior Policy and Planning Analyst, Metro Vancouver</td>
<td>Compilation and analysis of data. Data visualization.</td>
</tr>
<tr>
<td>Senior Regional Planner, Metro Vancouver</td>
<td>Coordination of data transfer. Managing partner relations. Report preparation.</td>
</tr>
<tr>
<td>Division Manager, Growth Management and Transportation</td>
<td>Review project and project sponsorship.</td>
</tr>
<tr>
<td>Municipal SWG Members</td>
<td>Gathering and transferring municipal performance data to Metro Vancouver. Review and provide feedback on Corridor Performance Reports.</td>
</tr>
<tr>
<td>Senior Planner, TransLink</td>
<td>Transferring TransLink performance data to Metro Vancouver. Review and provide feedback on Corridor Performance Reports.</td>
</tr>
<tr>
<td>Senior Planner, TransLink</td>
<td>Review and provide feedback on Corridor Performance Reports.</td>
</tr>
</tbody>
</table>

**Monitoring Budget**
Metro Vancouver will be responsible for the costs of the custom Census data and the costs of acquiring any other special data. Project partners will contribute staff time in gathering and providing the above-mentioned data to Metro Vancouver.

**Program Conclusion**
The monitoring and reporting will continue for a period of twenty years following the opening of the Lougheed B-Line Service (September 2019) or until the partners agree to conclude the program. The study area boundaries or measures may be modified with the agreement of the project partners.
### Lougheed Corridor Monitoring Program – Performance Indicators Master List

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Unit and calculation</th>
<th>Data Source and Owner</th>
<th>Metro 2040 Performance Program?</th>
<th>Collection Frequency</th>
<th>Available at corridor level</th>
<th>Metro 2040 Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Land Use Measures</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land Use Change</td>
<td>• Designation Change – RGS</td>
<td>Metro Vancouver land use designation map and municipal OCP land use maps (and neighborhood plans where available).</td>
<td>yes</td>
<td>Annually</td>
<td>yes</td>
<td>Land Use Designations and Overlays 1.2</td>
</tr>
<tr>
<td></td>
<td>• Development Capacity Change - OCP</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>• Hectares of land under each Metro 2040 designation within the corridor.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Hectares of land by OCP land use designation.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sub-regional Growth Shares</td>
<td>• Jobs</td>
<td>Census</td>
<td>yes</td>
<td>5 year</td>
<td>Yes</td>
<td>1.2</td>
</tr>
<tr>
<td></td>
<td>• Dwelling Units</td>
<td>Census</td>
<td>yes</td>
<td>5 year</td>
<td>Yes</td>
<td>1.2</td>
</tr>
<tr>
<td><strong>Housing Measures</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population Distribution by Age Group</td>
<td>Proportion of each age group as a percentage of total corridor population</td>
<td>Census</td>
<td>Yes</td>
<td>5 years</td>
<td>Yes</td>
<td>4.1.7.a</td>
</tr>
<tr>
<td>Household Make-up</td>
<td>Proportion of non-families, families with kids, and families without kids as a proportion of all households</td>
<td>Census</td>
<td>Yes</td>
<td>5 years</td>
<td>yes</td>
<td>4.1.7.a</td>
</tr>
<tr>
<td>Housing Tenure Mix</td>
<td>Percentage of renters and owners living within the corridor</td>
<td>Census</td>
<td>Yes</td>
<td>5 years</td>
<td>yes</td>
<td>4.1.7.a</td>
</tr>
<tr>
<td>Housing Type Mix</td>
<td>Percentage of housing units by structural type (house, xplex, low rise, mid-rise, high rise)</td>
<td>Municipality Building Permit Data</td>
<td>Yes</td>
<td>5 years</td>
<td>TBC</td>
<td>4.1</td>
</tr>
<tr>
<td>Population growth</td>
<td>New residents as a percent of baseline</td>
<td>Census</td>
<td>Yes</td>
<td>5 years</td>
<td>Yes</td>
<td>1.2.6.b.ii</td>
</tr>
<tr>
<td>Dwelling unit growth by tenure</td>
<td>New units as a percent of baseline, broken down by:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Ownership</td>
<td>Census (custom cross tabs required)</td>
<td>Yes</td>
<td>5 years</td>
<td>Yes</td>
<td>4.1.7.a.ii</td>
</tr>
<tr>
<td></td>
<td>• Rental by income groups (use income groups from Metro 2040 Housing Demand Estimates Table A.2)</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Dwelling Unit Density</td>
<td>Average number of dwelling units per hectare of land with a General Urban designation within the corridor.</td>
<td>Census</td>
<td>yes</td>
<td>5 years</td>
<td>yes</td>
<td>1.2</td>
</tr>
<tr>
<td>Indicators</td>
<td>Unit and calculation</td>
<td>Data Source and Owner</td>
<td>Metro 2040 Performance Program?</td>
<td>Collection Frequency</td>
<td>Available at corridor level</td>
<td>Metro 2040 Policy</td>
</tr>
<tr>
<td>------------</td>
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</tr>
</tbody>
</table>
| Transit-Supportive Housing Policies  
- Family-friendly housing policy  
- Affordable rental housing policy  
- TDM Policies  
- Parking maximum/parking reduction incentive policy  
- Rental zoning area within corridor study area | How will we measure this?  
Yes/No measure  
Displayed as number of jurisdictions with these policies out of 4 jurisdictions | Municipalities | no | Annually | n/a | 4.1.1, 4.1.7, 4.1.8 RAHS 1.n |
| Change in Property Values | Price per square meter for:  
- Residential  
- Retail  
- Office | BC Assessment | No | 5 years | unknown | 4.1 |
| Change in Lease Rates | Lease rates per square meter for:  
- Residential  
- Retail  
- Office | MLS Home Price Index (residential - owner)  
CMHC (residential - rental)  
Retail/Office – commercial brokerages  
Spacelist.ca | No | unknown | unknown | 4.2 |

### Transportation Measures - Transit

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Unit and calculation</th>
<th>Data Source and Owner</th>
<th>Metro 2040 Performance Program?</th>
<th>Collection Frequency</th>
<th>Available at corridor level</th>
<th>Metro 2040 Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transit service frequency</td>
<td>Buses/hour</td>
<td>TransLink</td>
<td>No</td>
<td>Available quarterly</td>
<td>Yes, with manual calculation</td>
<td>5.1.3</td>
</tr>
<tr>
<td>Transit service trip time</td>
<td>Average trip time end to end</td>
<td>TransLink</td>
<td>No</td>
<td>Annual</td>
<td>Yes</td>
<td>5.1.3</td>
</tr>
<tr>
<td>Transit service span</td>
<td>Span of service</td>
<td>TransLink</td>
<td>No</td>
<td>Available quarterly</td>
<td>Yes</td>
<td>5.1.3</td>
</tr>
<tr>
<td>Capacity utilized</td>
<td>Average daily bus capacity used</td>
<td>TransLink</td>
<td>No</td>
<td>Annual</td>
<td>Yes</td>
<td>5.2</td>
</tr>
<tr>
<td>Daily ridership</td>
<td>Average of total boardings/day</td>
<td>TransLink</td>
<td>No</td>
<td>Annual</td>
<td>Yes</td>
<td>5.2</td>
</tr>
<tr>
<td>Measure</td>
<td>Description</td>
<td>Source</td>
<td>Frequency</td>
<td>Reporting</td>
<td>Notes</td>
<td>Page</td>
</tr>
<tr>
<td>----------------------------------------------</td>
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<td>---------------------------------------------</td>
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<td>------</td>
</tr>
<tr>
<td>Peak ridership</td>
<td>Average of total boardings during am peak</td>
<td>TransLink</td>
<td>No</td>
<td>Annual</td>
<td>Yes</td>
<td>5.2</td>
</tr>
<tr>
<td>On time performance</td>
<td>Number of on-time departures at timing points as a percentage of total departures.</td>
<td>TransLink</td>
<td>no</td>
<td>Annual</td>
<td>Yes</td>
<td>5.2</td>
</tr>
<tr>
<td>Bus bunching</td>
<td>The percentage of bus arrivals at timing points within 25 percent of the scheduled headway of another bus arrival.</td>
<td>TransLink</td>
<td>no</td>
<td>Annual</td>
<td>Yes</td>
<td>5.2</td>
</tr>
<tr>
<td>Service Cost per APC Boarding</td>
<td>Cost in dollars for each boarding</td>
<td>TransLink</td>
<td>no</td>
<td>Annual</td>
<td>Yes</td>
<td>5.2</td>
</tr>
<tr>
<td>Transportation Measures – Single Occupancy Vehicles</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resident Mode Share</td>
<td>Percent of trips originating in the corridor by mode</td>
<td>Census</td>
<td>yes</td>
<td>5 year</td>
<td>Yes</td>
<td>5.1</td>
</tr>
<tr>
<td>Annual Vehicle Kilometres Travelled per capita</td>
<td>Annual per capita vehicle kilometres travelled for corridor residents and workers.</td>
<td>Census</td>
<td>Yes</td>
<td>5 year</td>
<td>Yes</td>
<td>5.1</td>
</tr>
<tr>
<td>Traffic Volumes</td>
<td>Daily Average Vehicle Volumes at Pitt River Screenline</td>
<td>TransLink Regional Screenline Survey &amp; MOTI Traffic Data Program</td>
<td>no</td>
<td>~every 3 years</td>
<td>No</td>
<td>5.2</td>
</tr>
<tr>
<td>Truck Volumes</td>
<td>Total Truck Volumes at Pitt River Screenline 6:00-22:00</td>
<td>TransLink Regional Screenline Survey</td>
<td>no</td>
<td>~every 3 years</td>
<td>No</td>
<td>5.2</td>
</tr>
<tr>
<td>Vehicle Occupancy Rates</td>
<td>Average Daily Auto Occupancy 06:00-22:00</td>
<td>TransLink Regional Screenline Survey</td>
<td>no</td>
<td>~every 3 years</td>
<td>No</td>
<td>5.2</td>
</tr>
<tr>
<td>Transportation Measures - Active</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cycling connectivity</td>
<td>Kilometres of bike facility by:</td>
<td>Municipalities</td>
<td>no</td>
<td>5 year</td>
<td>yes</td>
<td>5.1.6. f.ii</td>
</tr>
<tr>
<td></td>
<td>• Off-Street Bicycle Route (physical barrier)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• On-Street Bicycle Route (no barrier bike lanes, sharrows, etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pedestrian connectivity</td>
<td>Kilometres of sidewalk</td>
<td>Municipalities/MV Orthophoto</td>
<td>no</td>
<td>5 year</td>
<td>yes</td>
<td>5.1.6. f.ii</td>
</tr>
<tr>
<td>Intersection Density</td>
<td>Number of intersections per hectare</td>
<td>Metro Vancouver/BC Road Network/MV Orthophoto</td>
<td>no</td>
<td>5 year</td>
<td>yes</td>
<td>5.1.6. f.ii</td>
</tr>
</tbody>
</table>

Regional Planning Advisory Committee
<table>
<thead>
<tr>
<th>Indicators</th>
<th>Unit and calculation</th>
<th>Data Source and Owner</th>
<th>Metro 2040 Performance Program?</th>
<th>Collection Frequency</th>
<th>Available at corridor level</th>
<th>Metro 2040 Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Employment Measures</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment growth</td>
<td>Percent of sub-regional employment growth located in corridor</td>
<td>Census</td>
<td>yes</td>
<td>5 year</td>
<td>yes</td>
<td>1.2.1</td>
</tr>
<tr>
<td>Business Licenses within the corridor</td>
<td>Number of business licenses within the corridor</td>
<td>Municipalities</td>
<td>No</td>
<td>Annually</td>
<td>Yes</td>
<td>2.1</td>
</tr>
<tr>
<td>Employment Types</td>
<td>Total number and growth of employment by sector within the corridor</td>
<td>Census</td>
<td>yes</td>
<td>5 year</td>
<td>Yes</td>
<td>2.1</td>
</tr>
<tr>
<td><strong>Urban Design Measures</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Park space</td>
<td>Square metres of park or space within the corridor.</td>
<td>Municipalities</td>
<td>no</td>
<td>Annually</td>
<td>yes</td>
<td>4.2</td>
</tr>
<tr>
<td>Public Art Installments</td>
<td>Number of public art pieces within the corridor</td>
<td>Municipalities</td>
<td>no</td>
<td>Annually</td>
<td>yes</td>
<td>4.2</td>
</tr>
<tr>
<td>Number of street trees</td>
<td>Number of street trees within the corridor</td>
<td>Municipalities</td>
<td>no</td>
<td>Annually</td>
<td>yes</td>
<td>4.2</td>
</tr>
<tr>
<td>Street Furniture</td>
<td>Number of individual street furniture items in public road right of way (needs to be specified)</td>
<td>Municipalities</td>
<td>no</td>
<td>Annually</td>
<td>yes</td>
<td>4.2</td>
</tr>
</tbody>
</table>

*All Indicators include lands within the Urban Containment Boundary with General Urban or Mixed Employment Land Use designations only

**All housing Indicators exclude heritage residential
Corridor Data Summary per Study Area (TAZ)

- Population 2016: 98,200
- Employment 2016: 53,000
- Land area in hectares*: 2800
- Population density per hectare*: 35.07
- Employment density per hectare*: 18.93
- Route 701 Daily Weekday Boardings per km in 2017: 275

*S Not including ALR and industrial lands

Socio-economic characteristics per Study Area (DB)

- Corridor households that rent: 34%
- Median household income: $73,214
- Average household income: $82,530

Residential Development Profile per Study Area (DB)

- Apartment buildings: 59%
- Single-detached buildings: 26%
- Other residential buildings: 15%

Sustainable Mode Share

Journey-to-Work for Residents per Study Area (DB)

- 21% total
- 14% transit
- 6% walk
- 1% bike

Journey-to-Work for Workers per Study Area (CT)

- 17% total
- 13% transit
- 5% walk
- 1% bike

Commuting duration for the employed labour force per Study Area (DB)

- 60 minutes and over: 19%
- 45 to 59 minutes: 13%
- 30 to 44 minutes: 21%
- 15 to 29 minutes: 25%
- Less than 15 minutes: 21%

Regional Planning Advisory Committee 
### What is happening in the entire municipality?

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Projected Count in Municipality in 2035</th>
<th>Population</th>
<th>Employment</th>
<th>Dwelling Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coquitlam</td>
<td>213,100</td>
<td>82,000</td>
<td>80,400</td>
<td></td>
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<tr>
<td>Port Coquitlam</td>
<td>79,600</td>
<td>30,600</td>
<td>30,500</td>
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<tr>
<td>Pitt Meadows</td>
<td>23,100</td>
<td>8,500</td>
<td>8,700</td>
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<tr>
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<td>39,600</td>
<td>43,300</td>
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<tr>
<td>Total</td>
<td>429,600</td>
<td>160,700</td>
<td>162,900</td>
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### What is happening in the Study Area (TAZ)?

<table>
<thead>
<tr>
<th>Study Area (TAZ)</th>
<th>Projected Count in Study Area (TAZ) in 2035</th>
<th>Population</th>
<th>Employment</th>
<th>Dwelling Units</th>
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</thead>
<tbody>
<tr>
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<td>13,400</td>
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<td>15,800</td>
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<td>62,300</td>
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### Percentage of municipal activity occurring in Study Area (TAZ)?

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Percentage of Municipal Count within Study Area (TAZ)</th>
<th>Population</th>
<th>Employment</th>
<th>Dwelling Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coquitlam</td>
<td>22%</td>
<td>22%</td>
<td>22%</td>
<td></td>
</tr>
<tr>
<td>Port Coquitlam</td>
<td>41%</td>
<td>41%</td>
<td>41%</td>
<td></td>
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<tr>
<td>Pitt Meadows</td>
<td>68%</td>
<td>68%</td>
<td>68%</td>
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<tr>
<td>Maple Ridge</td>
<td>44%</td>
<td>44%</td>
<td>44%</td>
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<tr>
<td>Total</td>
<td>34%</td>
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<td>34%</td>
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</table>

### Projected Change

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Change in Municipality between 2016 and 2035</th>
<th>Percentage of Municipal Growth within Study Area (TAZ)</th>
<th>Population</th>
<th>Employment</th>
<th>Dwelling Units</th>
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</thead>
<tbody>
<tr>
<td>Coquitlam</td>
<td>67,500</td>
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<td>47%</td>
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<tr>
<td>Port Coquitlam</td>
<td>18,400</td>
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<td>47%</td>
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<tr>
<td>Pitt Meadows</td>
<td>3,600</td>
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<td>2,800</td>
<td>47%</td>
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<tr>
<td>Maple Ridge</td>
<td>28,100</td>
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<td>13,200</td>
<td>47%</td>
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<tr>
<td>Total</td>
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<td>64,900</td>
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</table>

### Percentage of municipal activity occurring in Study Area (TAZ)?

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Percentage of Municipal Count within Study Area (TAZ)</th>
<th>Population</th>
<th>Employment</th>
<th>Dwelling Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coquitlam</td>
<td>31%</td>
<td>31%</td>
<td>31%</td>
<td></td>
</tr>
<tr>
<td>Port Coquitlam</td>
<td>54%</td>
<td>54%</td>
<td>54%</td>
<td></td>
</tr>
<tr>
<td>Pitt Meadows</td>
<td>78%</td>
<td>78%</td>
<td>78%</td>
<td></td>
</tr>
<tr>
<td>Maple Ridge</td>
<td>47%</td>
<td>47%</td>
<td>47%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>40%</td>
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<td>40%</td>
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### Change in Study Area (TAZ) between 2016 and 2035

<table>
<thead>
<tr>
<th>Study Area (TAZ)</th>
<th>Change in Study Area (TAZ) between 2016 and 2035</th>
<th>Percentage of Municipal Growth within Study Area (TAZ)</th>
<th>Population</th>
<th>Employment</th>
<th>Dwelling Units</th>
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</thead>
<tbody>
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<td>20,900</td>
<td>31%</td>
<td>8,900</td>
<td>31%</td>
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<tr>
<td>Port Coquitlam</td>
<td>10,000</td>
<td>31%</td>
<td>3,100</td>
<td>31%</td>
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</tr>
<tr>
<td>Pitt Meadows</td>
<td>2,800</td>
<td>31%</td>
<td>500</td>
<td>31%</td>
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<tr>
<td>Maple Ridge</td>
<td>13,200</td>
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<tr>
<td>Total</td>
<td>46,900</td>
<td>31%</td>
<td>19,500</td>
<td>31%</td>
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</table>

### Percentage of municipal activity occurring in Study Area (TAZ)?

<table>
<thead>
<tr>
<th>Municipality</th>
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</thead>
<tbody>
<tr>
<td>Coquitlam</td>
<td>54%</td>
<td>54%</td>
<td>54%</td>
<td></td>
</tr>
<tr>
<td>Port Coquitlam</td>
<td>78%</td>
<td>78%</td>
<td>78%</td>
<td></td>
</tr>
<tr>
<td>Pitt Meadows</td>
<td>78%</td>
<td>78%</td>
<td>78%</td>
<td></td>
</tr>
<tr>
<td>Maple Ridge</td>
<td>47%</td>
<td>47%</td>
<td>47%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>40%</td>
<td>40%</td>
<td>40%</td>
<td></td>
</tr>
</tbody>
</table>
To: Regional Planning Advisory Committee  
From: Jessica Hayes, Planner, Regional Planning  
Date: February 22, 2019  
Meeting Date: March 15, 2019  
Subject: GVS&DD Development Cost Charge Waiver or Reduction for Not-for-Profit Rental Housing – 2018 Annual Report

RECOMMENDATION
That the Regional Planning Advisory Committee receive for information the report dated February 22, 2019, titled “GVS&DD Development Cost Charge Waiver or Reduction for Not-for-Profit Rental Housing – 2018 Annual Report”.

PURPOSE
To provide the Regional Planning Advisory Committee with information regarding the value of the Greater Vancouver Sewerage and Drainage District (GVS&DD) Development Cost Charge (DCC) waivers or reductions granted in the Metro Vancouver region in 2018, as well as the number of benefiting dwelling units.

BACKGROUND
Section 4.2 of Greater Vancouver Sewerage and Drainage District Development Cost Charge Waiver or Reduction for Not-for-Profit Rental Housing Bylaw No. 314, 2018 states that staff will report annually to the GVS&DD Board, the number and cost of GVS&DD DCC waivers or reductions granted under the bylaw.

LEGAL CONTEXT AND BYLAW HISTORY
The Greater Vancouver Sewerage and Drainage District Act permits the GVS&DD to, by bylaw, waive or reduce DCCs for eligible developments and to set the conditions for which such waivers or reductions may be granted. Since 2010, Metro Vancouver’s Development Cost Charge bylaw (GVS&DD Bylaw No. 254, 2010) has included provisions to waive DCCs for not-for-profit rental housing.

The Regional Affordable Housing Strategy (RAHS) outlines the actions that Metro Vancouver will employ to advance regional goals and strategies and to support its members, one of which is to use fiscal measures such as the waiver of GVS&DD DCCs to encourage the creation of affordable rental housing. Furthermore, Goal 3 of the RAHS directs Regional Planning to:

Review Greater Vancouver Sewerage and Drainage District Development Cost Charge bylaw waiver conditions for affordable rental housing to ensure the waiver can assist in the creation of new affordable rental housing by reflecting current funding arrangements and that it is consistent with municipal practices, as much as possible.
In 2015, Metro Vancouver initiated a DCC review process to address the increasing need for system expansion and the rising cost of liquid waste infrastructure. Through this process the DCC rates were updated and it was determined that the existing waiver language in GVS&DD Bylaw No. 254, 2010 should be clarified in terms of applicability and ease of use. As a result, a separate waiver bylaw was developed. On May 25, 2018, the GVS&DD Board adopted Greater Vancouver Sewerage and Drainage District Development Cost Charge Waiver for Affordable Housing Bylaw, No. 314, 2018.

On October 26, 2018, the GVS&DD Board enacted an amending bylaw to GVS&DD Bylaw, No. 314, 2018. The amending bylaw, GVS&DD Bylaw, No. 322, 2018, establishes additional requirements and conditions for a 50 percent reduction of DCCs for Not-for-Profit Student Housing.

**2018 GVS&DD DCC WAIVERS**

For the reporting period of January 1 to December 31, 2018, GVS&DD DCCs were waived for a total of 1761 rental units in 27 developments throughout the region. The total value of these waivers is $1,578,011.

It is noted that not all of the dwelling units within each development qualified for a DCC waiver, though 17 of the 27 developments (63 percent) did receive a waiver for 100 percent of the respective project’s dwelling units.

As shown in Table 1, of the 27 developments that received waivers: 16 were in the City of Vancouver (representing 1381 apartment dwelling units); six were in the City of Richmond (99 apartment dwelling units); two were in the City of New Westminster (8 townhouse dwelling units); one was in the City of Burnaby (145 apartment dwelling units); one was in the City of Port Moody (47 apartment dwelling units and 8 townhouse dwelling units); and one was in the City of Surrey (73 apartment dwelling units).

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Total # Developments</th>
<th>Total # Dwelling Units</th>
<th># of Dwelling Units Waived</th>
<th>Amount of GVS&amp;DD DCCs Waived</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vancouver</td>
<td>16</td>
<td>2,094</td>
<td>1,381</td>
<td>$1,089,849</td>
</tr>
<tr>
<td>Richmond</td>
<td>6</td>
<td>1,611</td>
<td>99</td>
<td>$67,854</td>
</tr>
<tr>
<td>New Westminster</td>
<td>2</td>
<td>11</td>
<td>8</td>
<td>$12,120</td>
</tr>
<tr>
<td>Burnaby</td>
<td>1</td>
<td>145</td>
<td>145</td>
<td>$125,732*</td>
</tr>
<tr>
<td>Port Moody</td>
<td>1</td>
<td>55</td>
<td>55</td>
<td>$203,470</td>
</tr>
<tr>
<td>Surrey</td>
<td>1</td>
<td>73</td>
<td>73</td>
<td>$78,986</td>
</tr>
<tr>
<td><strong>Metro Vancouver</strong></td>
<td><strong>27</strong></td>
<td><strong>3,989</strong></td>
<td><strong>1,761</strong></td>
<td><strong>$1,578,011</strong></td>
</tr>
</tbody>
</table>

Of the 16 developments in the City of Vancouver for which GVS&DD DCCs were waived, seven were Temporary Modular Housing projects (representing 450 apartment dwelling units). In 2018, only five applications were assessed under the new waiver conditions of GVS&DD DCC Bylaw No. 314, 2018 and subject to the new GVS&DD DCC rates which came into effect May 1, 2018. Most of these were

* The total waiver for this development was reduced after credit for existing units on the development site.
Temporary Modular Housing projects, likely because this type of housing can be constructed more quickly than permanent housing, and would not have already had a precursor application in-stream on the date the new bylaw was adopted.

**GVS&DD DCC Waivers Granted between 2010 and 2018**

Since 2010, when *GVS&DD Bylaw No. 254, 2010* was amended to permit the waiver of DCCs, 4,555 dwelling units in 99 projects have benefitted from receiving the waiver. The cumulative amount of waivers granted, from 2010 to 2018 is just over $3.5 million.

**Table 2: GVS&DD Development Cost Charges Waived, 2010 – 2018**

<table>
<thead>
<tr>
<th>Year</th>
<th>Total # Developments</th>
<th># of Dwelling Units Waived</th>
<th>Amount of GVS&amp;DD DCCs Waived</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010-2011</td>
<td>13</td>
<td>642</td>
<td>$451,083</td>
</tr>
<tr>
<td>2012</td>
<td>9</td>
<td>581</td>
<td>$319,291</td>
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<tr>
<td>2013</td>
<td>12</td>
<td>363</td>
<td>$230,924</td>
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<tr>
<td>2014</td>
<td>12</td>
<td>168</td>
<td>$107,705</td>
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<tr>
<td>2015</td>
<td>15</td>
<td>660</td>
<td>$577,773</td>
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<td>2016</td>
<td>5</td>
<td>182</td>
<td>$109,603</td>
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<td>$174,930</td>
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<tr>
<td>2018</td>
<td>27</td>
<td>1,761</td>
<td>$1,578,011</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>99</strong></td>
<td><strong>4,555</strong></td>
<td><strong>$3,549,320</strong></td>
</tr>
</tbody>
</table>

The number of dwelling units receiving waivers fluctuated year-to-year between 2010 and 2017, with the value of DCCs waived amounting to a low of $107,705 in 2014 and a high of $577,773 in 2015. As anticipated, the amount of DCCs waived in 2018 nearly tripled the historical high. It is expected that greater recognition of *GVS&DD DCC Bylaw No. 314, 2018* by local governments and developers, coupled with the increases in provincial and federal funding to promote rental housing supply will lead to continued growth in uptake of the GVS&DD waiver for not-for-profit rental housing in the coming years.

**Applicability to Not-for-Profit and For-Profit Affordable Rental Housing**

Section 563 of the *Local Government Act* defines the types of eligible development for which Development Cost Charges may be waived or reduced, including both not-for-profit rental housing and for-profit affordable rental housing. Under the previous waiver provisions of *GVS&DD Bylaw No. 254, 2010*, both types of rental housing could qualify for a waiver of GVS&DD DCCs. During the preparation of *GVS&DD Bylaw No. 314, 2018*, it was determined that the new waiver bylaw should limit its applicability to not-for-profit rental housing, removing the eligibility of for-profit affordable rental housing.

As shown in Table 3, not-for-profit rental housing units have historically been the predominant beneficiary of the GVS&DD DCC waivers. In 2018, not-for-profit rental housing accounted for approximately 94 percent of waivers. Therefore, as the applicability of the waiver to for-profit developments offering affordable rental units is phased out, it is not expected that this will have a large impact on the provision of affordable rental units in the region. In many cases, developers that provide affordable rental units as part of a condo / strata or market rental development will receive...
other incentives from municipalities, for example, through density bonusing, relaxation of parking requirements, inclusionary requirements or other measures.

Table 3: Number of Developments and Dwelling Units with GVS&DD Development Cost Charges Waived by Rental Housing Developer Type, 2010-2018

<table>
<thead>
<tr>
<th>Year</th>
<th>Not for Profit Rental</th>
<th>For Profit Affordable Rental</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total # Development</td>
<td># of Dwelling Units Waived</td>
<td>Total # Development</td>
</tr>
<tr>
<td>2010</td>
<td>4</td>
<td>193</td>
<td>3</td>
</tr>
<tr>
<td>2011</td>
<td>6</td>
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<tr>
<td>2012</td>
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<td>574</td>
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<td>2013</td>
<td>7</td>
<td>276</td>
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<tr>
<td>2015*</td>
<td>6</td>
<td>478</td>
<td>9</td>
</tr>
<tr>
<td>2016</td>
<td>0</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>2017</td>
<td>2</td>
<td>144</td>
<td>4</td>
</tr>
<tr>
<td>2018</td>
<td>21</td>
<td>1,662</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>54</td>
<td>3,720</td>
<td>33</td>
</tr>
</tbody>
</table>

Student Housing
GVS&DD has not yet received any applications for a reduction in DCCs for student housing since GVS&DD Bylaw No. 314, 2018 was amended to include not-for-profit student housing development as eligible not-for-profit rental housing in October 2018.

In-stream Applications
New DCC bylaws are subject to “in-stream” provisions as determined by Section 568 of the Local Government Act, whereby a DCC bylaw that would otherwise be applicable to the construction, alteration or extension of a building or structure, would have no effect if the building permit is issued within 12 months after the date of the bylaw’s adoption, and a precursor application to that building permit was in-stream on the date the bylaw was adopted. Similarly, if under the old DCC bylaw a precursor application would qualify for a waiver or refund of DCCs, and the building permit in relation to that application was approved within 12 months of the new bylaw’s adoption, then any waiver provisions available under the old DCC bylaw would apply to that application.

After April 29, 2019, the waiver provisions of GVS&DD Bylaw No. 254, 2010 will no longer apply to precursor applications that were instream upon adoption of GVS&DD Bylaw, No. 314, 2018, and 2018 GVS&DD DCC rates will apply to all new waiver applications.

Effectiveness
Relief from DCCs is one way that Metro Vancouver contributes to reducing the cost of developing affordable rental housing. The GVS&DD DCC is a small part of overall housing development costs, and

* Note that the breakdown of data for not-for-profit versus for-profit developments is not available in 2014.
taken alone, will not have a significant impact on project viability. However, every effort to reduce costs is helpful and can improve the project, or enable cost savings to be passed on to the tenant through lower rents. As a result of new and significant federal and provincial funding for affordable rental housing, it can be expected that more affordable rental housing units will be built over the near to mid-term, and that fee reductions can contribute to these increases in supply.

2018 Canada Mortgage and Housing Corporation data shows that there were 6,425 rental starts in the Metro Vancouver region in 2018, 43 percent (2,741) were purpose-built market rental apartment units, 31 percent (2,014) were secondary suites, 12 percent (797) were laneway / coach house rental housing, and 13 percent (865) were social housing units. The GVS&DD DCC waiver applied to approximately 27 percent of the 6,425 rental housing starts in the region, or up to 49 percent of the purpose-built rental and social housing starts, which are the eligible types of rental housing considered under GVS&DD Bylaw No. 314, 2018.

ALTERNATIVES
This is an information report. No alternatives are presented.

FINANCIAL IMPLICATIONS
In a report to the GVS&DD Board in May 2018 accompanying the new Greater Vancouver Sewerage and Drainage District Development Cost Charge Waiver for Affordable Housing Bylaw, No. 314, 2018, it was estimated that the annual financial impact of the new GVS&DD DCC waiver bylaw going forward would be in the range of $2.5 and $3.5 million of foregone collections; this was based on applying an average DCC rate of $1,850 per unit, and estimating that the eligible number of units to be developed annually would likely be in the range of 1,500 to 2,000 units per year. The actual amount of GVS&DD DCCs Waived in 2018 is consistent with that estimated impact.

SUMMARY / CONCLUSION
Since 2010, Metro Vancouver’s DCC bylaw (GVS&DD Bylaw No. 254, 2010) has included provisions to waive DCCs for not-for-profit rental housing. In May 2018, the GVS&DD Board adopted Greater Vancouver Sewerage and Drainage District Development Cost Charge Waiver for Affordable Housing Bylaw, No. 314, 2018, a separate waiver bylaw developed to improve the waiver’s ease of use and encourage greater uptake. In 2018, GVS&DD DCCs were waived for a total of 1,761 rental units in 27 developments for a total value of $1,578,011. Staff will report back later this year with an update following the first year of implementation of the new bylaw.
To: Regional Planning Advisory Committee

From: James Stiver, Division Manager or Growth Management and Transportation, Regional Planning

Date: March 1, 2019

Subject: Manager’s Report

RECOMMENDATION
That the Regional Planning Advisory Committee receive for information the report dated March 1, 2019, titled “Manager’s Report”.

Regional Planning Advisory 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.

Regional Food System Action Plan Municipal Meeting
On February 8, 2019, Metro Vancouver hosted a meeting for municipal staff on the implementation of the Regional Food System Action Plan. The theme of the meeting was reconnecting and refocusing, as it had been over a year since the inaugural forum. The meeting focused on a municipal roundtable and developing new collaborative actions deemed most important to address through a dotmocracy exercise. Darren Stott from Greenchain Consulting provided an informative presentation on Food Hubs and how they support government strategies. The Action Plan meeting notes are attached to this RPAC agenda under Information Items.

Focus Group Interviews
In November of 2018 a number of interviews were undertaken and an in-person focus group was struck to review the delivery of services by Regional Planning to municipal partners and a review of the on-line performance monitoring dashboard for Metro 2040. The final reports have now been received from the respective consultants that were assisting with this work, with the feedback received being coded anonymously. Regional Planning staff will be reviewing the comments in the coming weeks and considering how and where to address any issues and improve our service delivery to Metro Vancouver’s partners. Thank you to those who volunteered their time to help us with these reviews.

Attachment:
Regional Planning Advisory Committee 2019 Workplan
# Regional Planning Advisory Committee 2019 Work Plan

<table>
<thead>
<tr>
<th>1st Quarter</th>
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<td>- Agri-Industrial White Paper</td>
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<td>- Economic Value of Industrial Lands</td>
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<td>- Industrial User Survey</td>
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<td>TOAH 3: Scoping</td>
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<td>Regional Parking Study – Final Report and Recommendations</td>
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<td>Office in Urban Centres (2018 Update) – Final Report</td>
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<td>Equity in Growth Management – Project Scope</td>
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Minutes of the Regional Planning Advisory Committee Housing Subcommittee held at 1:00 p.m. on Thursday January 17, 2019 at Meeting Room 2505 – 25th floor, 4730 Kingsway, Burnaby, B.C.

PRESENT:

Municipal Members:
Wendy Tse – North Vancouver City
Lily Ford – City of Burnaby
Winnie Yip – District of West Vancouver
Sarah Ellis – City of Vancouver
Shazeen Tejani – District of North Vancouver
Aleksandra Brzozowski – City of Delta
Jacint Simon – City of Coquitlam
Meredith Seeton – City of Port Coquitlam
Liam McLellan – City of Port Moody
Brent Elliott – City of Maple Ridge
Dana Parr – City of Pitt Meadows
Alex Wallace – City of Pitt Meadows
Tristan Johnson – City of New Westminster

Staff:
Jessica Hayes – Metro Vancouver
James Stiver – Metro Vancouver
Neil Spicer – Metro Vancouver

Invited Guests:
Alicia Medina – Happy City
Paty Rios – Happy City (by phone)

Election of Chair and Vice-Chair, Regional Planning Advisory Committee - Housing Subcommittee:
Nomination: Wendy Tse was nominated as Chair
Nomination: Meredith Seeton was nominated as Co-Vice Chair
Nomination: Winnie Yip was nominated as Co-Vice Chair

Nominations were deemed accepted and it was declared by acclamation that Wendy Tse would act as RPAC Housing Subcommittee Chair for 2019, with Meredith Seeton and Winnie Yip as Co-Vice Chairs to Wendy, each for a 6-month term.
1. **ADOPTION OF THE AGENDA**

1.1 January 17, 2019 Regular Meeting Agenda

_It was MOVED and SECONDED_

That the Regional Planning Advisory Committee - Housing Subcommittee adopt the agenda for its regular meeting scheduled for January 17, 2019.

_CARRIED_

2. **ADOPTION OF THE MINUTES**

2.1 November 1, 2018 Regular Meeting Minutes

_It was MOVED and SECONDED_

The Regional Planning Advisory Committee - Housing Subcommittee adopt the minutes of its regular meeting held on November 1, 2018, as circulated.

_CARRIED_

3. **INVITED PRESENTATIONS**

3.1 Final Results of the Happy Homes Project – Phase II

Alicia Medina and Paty Rios, Happy City, provided information on the Happy Homes Project and their global clients, including: The World Health Organization; private developers (e.g. British Land and Concert Properties), and many local governments of (e.g. Vancouver, Mexico City, Dubai).

Ms. Medina noted that one of the greatest issues that Canadian cities are facing is social isolation. Research has shown that connected people are healthier, more resilient to illnesses, such as cancers, more productive at work, and can live up to 15 years longer. The purpose of the Happy Homes Project is to increase social connections and wellbeing in multi-unit residential buildings.

Working with a group of organizations, they were able to set 10 evidence-based principles for boosting social wellbeing in multi-family housing and design 47 programming and policy actions and powerful images to represent each principle.

The Happy Homes Toolkit is an open source resource and is available at this link: [https://resilientneighbourhoods.ca/happy-homes-a-toolkit-for-building-sociability-through-multi-family-housing/](https://resilientneighbourhoods.ca/happy-homes-a-toolkit-for-building-sociability-through-multi-family-housing/)

4. **REPORTS FROM COMMITTEE OR STAFF**

4.1 2019 RPAC Housing Subcommittee Priorities and Work Plan

Jessica Hayes, Planner (Housing), Regional Planning, reviewed the 2019 work plan and asked for input. An updated work plan will be provided at the next meeting.
4.2 City of New Westminster Draft Inclusionary Housing Policy
Tristan Johnson, Senior Planning Analyst, City of New Westminster provided an overview of the process that New Westminster has taken to develop an inclusionary housing policy. The process began in the Fall of 2017 and was adopted by Council in December 2018.

The purpose of the policy is to:
- help meet the City’s affordable rental housing needs;
- ensure that below-market and non-market rental units secured through the policy serve intended tenants and household income levels through City or non-profit housing society ownership;
- target household income levels corresponding to rental housing demand in New Westminster; and
- provide incentives to help make the provision of affordable rental housing viable in new multi-unit residential strata developments.

In preparing the policy, consideration was given to the management of the units and the financial viability. The draft Inclusionary Housing Policy can be accessed at this link:

4.3 Updates to the Metro Vancouver Housing Data Book
Neil Spicer, Senior Policy and Planning Analyst, Regional Planning, provided updates to 11 sections of the Housing Data Book. Updates arose from the 2016 Census (released in 2018), the 2018 CMHC Rental Market Report and from Real Estate Board data.

**It was MOVED and SECONDED**
That the RPAC Housing Subcommittee receive for information the report dated January 8, 2019, titled “Updates to the Metro Vancouver Housing Data Book”.

**CARRIED**

4.4 Residential Rental Tenure Zoning

*Subcommittee Discussion*

Members provided updates on their examination or implementation of Residential Rental Tenure Zoning in their respective municipalities. There was general agreement that this subject will be brought forward at each meeting for further discussion and updates, and remain as a standing agenda item.

4.5 RPAC Update

James Stiver, Division Manager of Growth Management and Transportation, Regional Planning, provided a verbal report on the activities of the Regional Planning Advisory Committee.
4.6 **Regional Affordable Housing Strategy 2019 Progress Report**  
In the absence of Andrea Winkler, Program Manager, Affordable Housing Policy and Planning, this item was deferred to the February 28, 2019 meeting.

4.7 **Member Roundtable**  
*Verbal updates from Subcommittee Members*

Subcommittee members provided brief updates on their current projects, initiatives and developments.

5. **INFORMATION ITEMS**  
The following information items were received:

5.1 **RPAC Housing Subcommittee Meeting Schedule 2019**  
5.2 **Housing Department Structures – Lower Mainland and BC Local Governments, compiled by City of Kelowna**  
5.3 **British Columbia Rental Housing Task Force – Final Report and Recommendations**  
5.4 **2018 Report on Homeless Counts in B.C.**  
5.5 **Updates to the National Housing Strategy’s Co-Investment Fund**

6. **OTHER BUSINESS**

6.1 **Next Meeting: February 28, 2019**

7. **ADJOURNMENT/CONCLUSION**  
That the RPAC Housing Subcommittee conclude its regular meeting of January 17, 2019 at 3:50 pm.
Minutes of the Regional Planning Advisory Committee (RPAC) Social Issues Subcommittee held at 9:15 a.m. on Thursday, December 6, 2018 in the 28th floor meeting room, Metrotower III, 4730 Kingsway, Burnaby, B.C.

PRESENT:

Municipal Members:
Rebekah Mahaffey – City of Burnaby
Gillian McLeod – City of Delta
Patrick Ward – Township of Langley
Tony Cotroneo – City of Maple Ridge
John Stark – City of New Westminster
Cristina Rucci – District of North Vancouver
Meredith Seeton – City of Port Coquitlam
Liam McLeLLan – City of Port Moody
Lesley Sherlock – City of Richmond
Peter Marriott – City of Vancouver
Arleta Beckett – District of West Vancouver
Jessica Jiang – City of White Rock

Associate Members:
Co-Chair, Claire Gram – Vancouver Coastal Health
Marylyn Chiang – UBCM

Staff:
James Stiver - Division Manager, Growth Management and Transportation
Erin Rennie – Senior Regional Planner, Parks, Planning and Environment

Invited Guests:
Mary Ellen Schaafsma, Social Purpose Institute at the United Way
Coro Strandberg, Social Purpose Advisor

Regrets:
Heather Evans - City of North Vancouver
City of Abbotsford
Village of Anmore
Village of Belcarra
City of Coquitlam
City of Langley
City of Pitt Meadows
City of Surrey

1. ADOPTION OF THE AGENDA

1.1. December 6, 2018 RPAC Social Issues Subcommittee Regular Meeting Agenda

The RPAC Social Issues Subcommittee adopted the agenda for its regular meeting scheduled for December 6, 2018.

CARRIED
2. ADOPTION OF THE MINUTES
2.1 September 13, 2018 RPAC Social Issues Subcommittee Regular Meeting Minutes
The RPAC Social Issues Subcommittee approved the amended minutes of its meeting held on September 13, 2018.

CARRIED

3. INVITED PRESENTATIONS

3.1 Social Purpose Business Institute – United Way
Presenters: Mary Ellen Schaafsma, Social Purpose Institute at United Way
Coro Strandberg, Social Purpose Advisor

Coro Strandberg and Mary Ellen Schaafsma gave a presentation on the United Way’s Social Purpose Business initiative, geared at coaching businesses to address some of the deepest social issues. The program launched in June 2018 and they have assisted 8 organizations define their unique social purpose. United Way is currently recruiting for the 2nd cohort. The City of Vancouver has an MoU with the United Way to take on this value/ethic and become a driver of social changes in the lower mainland. A discussion ensued on the logistics of the program and how the member municipalities can get involved by supporting business cohort recruitment.

Action: Erin Rennie to share the slides with the Committee members and provide contact information for both Coro and Mary Ellen.

4. REPORTS FROM COMMITTEE OR STAFF

4.1 2018 Youth Homeless Count

Designated Speaker: Theresa Harding, Manager, Homelessness Partnering Strategy, Metro Vancouver

Theresa Harding, Manager, presented the 2018 Youth Homeless Count in Metro Vancouver report dated November 28, 2018.

Reports generated from the 2018 Youth Homeless Count and previous regional Homeless Counts can be found on the Metro Vancouver Community Entity website: http://www.metrovancouver.org/services/regional-planning/homelessness/resources/Pages/default.aspx

Theresa encouraged the SIS Committee to register for the Youth Homelessness - A Regional Conversation being hosted by Metro Vancouver at the Metro Vancouver Head Office on December 17 from 9 am – 12 noon.

Theresa advised she attended a Metro Vancouver Aboriginal Executive Council (MVAEC) Forum on Indigenous Housing and Homelessness that was held December 3, 2018 at Lu’ma Native Housing in Vancouver.
**Action:** Staff to send an invitation to all Committee members to register for the *Youth Homelessness – A Regional Conversation* being hosted by Metro Vancouver at the Metro Vancouver Head Office on December 17 from 9 am – 12 noon.

**Action:** The Committee agreed to invite the MVAEC to a 2019 Social Issues Subcommittee meeting, the date to be determined.

### 4.2 Regional Child Care Forum

*Designated Speaker: Erin Rennie, Senior Regional Planner, Metro Vancouver*

Erin Rennie, Senior Regional Planner presented on a report dated December 6, 2018 in respect to the *Regional Child Care Forum* held November 29, 2018. The Committee discussed the following ideas:

- Create and look for funding for a province-wide resource document for social planners that will include case studies, a summary of projects with contact information
- Update the Municipal Survey of Child Care Spaces and Policies in Metro Vancouver after the next round of funding
- Continue to address child care funding at each SIS meeting in 2019
- Work with the Ministry of Child and Family Development (MCFD) to keep the lines of communication and collaboration open.

**Action:** Resend the link to the web page where all SIS documents can be found.

### 4.3 Manager’s Update

*Designated Speaker: James Stiver, Division Manager of Growth Management and Transportation*

James Stiver, Division Manager of Growth Management and Transportation updated the Committee on the recently-elected Metro Vancouver Board of Directors and its inaugural meeting of November, 2018. James also advised the Committee that Metro Vancouver had a re-organization in November, 2018 and that the Parks, Planning and Environment (PPE) department is now Planning and Environment (PE).

James informed the Subcommittee that Metro Vancouver has committed to participate in the Community Data Program. The Program is a membership-based data cooperative for Canadian public, non-profit or community sector organizations with a local service delivery or public policy mandate. It offers data products, analytical tools, and services, and makes community data available in a Canada-wide platform. Many of the municipalities in Metro Vancouver are also members.

The dates for the Regional Planning Committee and the Regional Planning Advisory Committee haven’t been set yet for 2019, but the first RPAC meeting has been scheduled for January 11, 2018.

There were no questions for James.
5. **2019 SIS Work Plan**

*Verbal Update and Discussion*

5.1 **Proposed Meeting Dates**

Erin confirmed that the Committee’s preference is to hold the SIS Committee meetings on the same date as the Housing Subcommittee. The Committee agreed to the following dates for the 2019 meeting schedule:

- Thursday February 28, 2019
- Thursday May 16, 2019
- Thursday, September 19, 2019
- Thursday, November 28, 2019

**Action:** Erin to send out calendar invitations for the 2019 meeting dates: February 28, May 16, September 19, and November 28, 2019.

5.2 **Nomination of 2019 Co-Chairs**

Co-Chair Claire Gram advised that there will be nominations for Co-Chairs of the Committee at the February 28, 2019 meeting, and asked for Members to consider their interest in serving as co-chair for the 2019 year.

Claire advised that while Section 5.0 of the 2018 Terms of Reference state that officers are to be elected annually, at the outset of each calendar year, her term as co-chair was 2 years. The Committee will review Section 5.0 at the February meeting to decide if the term of the Co-Chairs should be amended to a 2-year term to allow for continuity from year to year.

**Action:** The February 28, 2019 agenda of the SIS Committee to include a review of Section 5.0 of the Terms of Reference in relation to the term of the Co-Chairs.

5.3 **Topic Areas for 2019 Meetings**

The Committee agreed to the following topic areas for the 2019 meetings:

- Urban Indigenous Committee
- Child care
- Poverty reduction
- United Way – vision for the future in our communities
  - Changes to Success by 6 (expansion from age 6 to age 8)
  - Non-profit sector funding
- Framework for municipal grants
- Planning tables (and erosion)
- Mental Health and Additions (after the Province issues its provincial strategy)
- Region’s access
- Metro 2040 Growth Strategy – social policy lens
- Municipal social planning staffing and capacity
- Rental zoning
- Equity policies
6. **MEMBERS ROUNDTABLE**

RPAC Social Issues Subcommittee members provided brief updates on their current projects, events and initiatives.

7. **INFORMATION ITEMS**

7.1. RPAC Meeting Minutes for July 13, September 14, and October 19, 2018

8. **OTHER BUSINESS**

9.1. Next Meeting: February 28, 2018. Possible topics to include:

Members indicated that they are interested in all of the potential topics at the February, 2019 or future meetings. Metro Vancouver staff and co-chairs to handle the scheduling of speakers etc.

9. **ADJOURNMENT**

That the RPAC Social Issues Subcommittee conclude its regular meeting of December 6, 2018.

**MUNICIPAL MEMBERS**

Gram, Claire (Co-Chair) – Vancouver Coastal Health
Evans, Heather (Co-Chair) – City of North Vancouver
Koole, Reuben / Anaka, Amy – City of Abbotsford
Vacant – Village of Anmore
Vacant – Village of Belcarra
Manifold, Margaret – City of Burnaby
Penner, Paul / van Poorten, Cathy - City of Coquitlam
McLeod, Gillian - City of Delta
Beddow, Roy - City of Langley
Kaszonyi, Teresa – Township of Langley
Cotroneo, Tony – District of Maple Ridge
Stark, John - New Westminster
Buitenhuiss, Juliana – City of North Vancouver
Rucci, Cristina – District of North Vancouver
Parr, Dana - City of Pitt Meadows
Seeton, Meredith – City of Port Coquitlam
McLellan, Liam - City of Port Moody
Sherlock, Lesley - City of Richmond
Murphy, Aileen / McCargar, Marlis - City of Surrey
Craig, Keltie - City of Vancouver
Beckett, Arleta / Friere, Claudia - District of West Vancouver
Jiang, Jessica - City of White Rock

**ASSOCIATE MEMBERS**

Pitman, Beverly / Trudel, Yves - UWLM
Chiang, Marylyn / van Loon, Josh – UBCM
Nash, Charles – Tsawwassen First Nation
Copas, Jason – SPARC BC
Minutes of the Regular Meeting of the Regional Planning Advisory Committee – Environment Subcommittee (RPAC-ENV) held at 9:30 a.m. on Thursday, November 22, 2018 in the 28th Floor Boardroom Room (Room 2809), 4730 Kingsway, Burnaby, British Columbia.

MEMBERS PRESENT:
Rodney Stott (Chair), City of Maple Ridge
Angela Crampton (Vice Chair), City of Port Moody
Stephen Godwin, City of Surrey
Erin Clement, City of Delta
Neil MacEachern, City of Port Coquitlam
Matthew MacKinnon, District of West Vancouver
Erika Nassichuk, District of North Vancouver
Marcin Pachcinski, Metro Vancouver Electoral Area A
Chad Paulin, City of Richmond (via phone)
Justin St. Andrassy, Township of Langley
Mark Sloat, City of Burnaby

METRO VANCOUVER STAFF PRESENT:
Josephine Clark, Regional Planner, Regional Planning
Lucy Duso, Policy Coordinator, External Relations
Jason Emmert, Air Quality Planner, Air Quality and Climate Change
Edward Nichol, Senior Policy Planning Analyst, Regional Planning
Leonardo Nicoletti, Research Assistant, Regional Planning
Viktor Panfilenok, Program Assistant I, Regional Planning
Laurie Bates-Frymel, Senior Regional Planner, Regional Planning

GUESTS PRESENT:
Emily Kwok, City of Surrey
Emilia Oscilowicz, UBC School of Community and Regional Planning, Masters Candidate
Brad Seely, 3GreenTree
Clive Welham, 3GreenTree

1. **WELCOME and INTRODUCTIONS**
Members and invited guests introduced themselves.

2. **AGENDA**
   2.1 **Confirmation of November 22, 2018 Meeting Agenda**

   *It was MOVED and SECONDED*
   That the Regional Planning Advisory Committee – Environment Subcommittee (RPAC-ENV) adopt the agenda for its November 22, 2018 regular meeting as circulated.
3. **MINUTES**

3.1 **September 20, 2018 Meeting Minutes**

**It was MOVED and SECONDED**
That the RPAC-ENV adopt the minutes for its regular meeting held on September 20, 2018 as circulated.

**CARIED**

3.2 **September 20, 2018 Action Items - None**

4. **INVITED PRESENTATIONS**

4.1 **Clive Welham and Brad Seely, 3GreenTree**
Subject: [Regional Carbon Storage Dataset Project](#)

Clive Welham, PhD, RPBio, and Brad Seeley, PhD, described the project to improve the existing draft of the regional carbon storage dataset to better support land use decision-making by local government staff.

Data sources include:
- Vegetation Resources Inventory (VRI) – the VRI was updated to account for recent land use changes (i.e. conversion of forest to other land uses) using high resolution ortho photos. This dataset contains forest biomass values which could be used to calculate carbon stored;
- Land Cover Classification + 2 metre resolution LiDAR (where possible*) to obtain tree height (to estimate age and carbon content using forest model);
- Metro Vancouver’s Sensitive Ecosystem Inventory (SEI) – to identify wetland and marine ecosystems;
- Agricultural Soil Carbon (only available for Delta);

* Where LiDAR was not available (e.g., Richmond, Delta) average tree height was used.

Developed 3 raster datasets (2x2m resolution):
- Biomass (t/ha);
- Soil carbon (t/ha); and
- Ecotype.

Developed 1 vector dataset:
- Lot parcels – allocated carbon by parcel

The data could be used in 3 ways:
- A predictive tool – use carbon to predict ecosystem services provided by a parcel
- A tool for carbon accounting and reporting
- A management tool to guide decision-making - detect changes over time, inform planning and develop policies. Need to work with GIS departments.
Some uncertainties – the dataset not perfect, although some errors have been detected and corrected.

The final report will be completed in early 2019.

When ready the dataset will be made available to RPAC-ENV members, and others on request.

Discussion/questions:
Need to engage with the agricultural community to share this information and increase understanding about practices.

Implementation – desirable to acquire unencumbered land where possible, and restore industrial land (even temporarily) to increase connectivity.

Can this be connected to the hydrological cycle? Desire to develop a multi-faceted tool to quantify ecosystem services.

4.2 Lucy Duso, External Relations Policy Coordinator, Metro Vancouver
Subject: Public Engagement on the Environment

Key take-aways:
- Show leadership
- Connect to core values
- Find common ground
- Use clear messaging and imagery
- Make a clear ask
- Positive tone
- Provide support
- Build knowledge (learn from unsuccessful campaigns)

Campaigns need to be catchy, riveting and positive to encourage behaviour change. Know your audience and align messaging with their values.

Community-based social marketing to change human behaviour (uses prompts, commitments, social norms, vivid communications) using these steps:
- identify barriers to behaviours;
- develop a plot to overcome;
- implement the project on the community scale; and
- evaluate the effectiveness of the project.

International Association of Public Participation – spectrum of public engagement

Best practice – Develop a communication plan!
- Objectives
- Audience identification
- Key messages
- Tactics
- Budget
- Evaluation (pre and post campaign surveys to determine level of awareness)

Recent Climate 2050 attitudes survey – residents are highly aware and concerned about climate change, but low awareness about local government action. High support for Metro Vancouver and local governments to have more authority to address climate change.

Check out some great visuals at www.climatevisuals.org. Best to use local images in campaigns.

Finding common ground – use fact-based information, talk about solutions, use moral suasion and connect to their core values, show people and actions, and normalize the behaviour (e.g., the right thing to do, everyone else is doing it, I care for the place I live, the right thing to do for the future generations).

**ACTION:**
Laurie will share Metro Vancouver’s Public Engagement Guide.

5. **REPORTS FROM COMMITTEE OR STAFF**
5.1 **Update on Regional Ecological Health Indicators: Impervious Surfaces and Canopy Cover**

*Designated Speakers: Leonardo Nicoletti*

Impervious surface and canopy cover data were extracted from Metro Vancouver’s high-resolution land cover dataset. The final results provide % canopy cover and % impervious surfaces by area. The results were also intersected with census blocks and land use parcels to give % canopy cover/impervious surfaces by block.

For example, in 2014 canopy cover was 32% and impervious surfaces covered 50% of the land within the urban containment boundary (the footprint within which growth is expected to be contained in the region as per Metro2040).

Areas with low canopy cover and high imperviousness include urbanized areas, downtown office areas, industrial areas, and parking spaces. These areas are more vulnerable to flooding and the heat island effect, conditions that may be enhanced with predicted hotter drier summers and wetter winters. This analysis suggests that these areas are prime opportunities for green infrastructure to assist with climate adaptation.

The research could be used to set canopy cover targets and identify locations of high imperviousness that would benefit from enhanced green infrastructure, particularly in urbanized areas.
But high density development does not always mean low canopy (example from Vancouver’s west end), and low density development does not always mean canopy cover is retained (example from Richmond).

What % canopy cover target would be possible in our region? Is 40% achievable?

Next steps: Leo will assess ‘Possible New Canopy’, identifying locations with the greatest opportunity to enhance canopy cover (and provide associated ecosystem service benefits).

Discussion/questions:

What is needed to enhance canopy cover? Street guidelines, tree bylaws, green roofs, communication regarding archetypes

Which municipalities have set canopy cover targets? Surrey, New Westminster, Maple Ridge (in tree bylaw), Port Coquitlam – new tree bylaw in the works, hopefully by January

Need to identify different types of green infrastructure vegetative performance targets for urban infill areas. Rather than tree canopy targets, other forms of vegetation cover may be more suitable in a built up environment (e.g., grass fields, community gardens, park spaces, etc.).

5.2 HEALTH BREAK

The meeting recessed at 11:35 a.m. for a health break and reconvened at 11:45 a.m.

5.3 Round Table

*Discussion and Verbal Updates from RPAC - Environment Subcommittee members*

Subcommittee members provided brief verbal updates on their programs, events and news.

City of Delta – Agricultural adaptation initiative focuses on flood management preparedness, salinity monitoring and irrigation. Received funding from the Canadian Wildlife Service for waterfowl communication plans in support of Birds and Biodiversity Conservation Strategy.

City of Maple Ridge – Speakers on green infrastructure and natural asset management presented to Maple Ridge’s Environmental Advisory Committee.

District of West Vancouver – Environmental Assessment on Upper lands, developing a community wildfire plan.
Metro Vancouver – Laurie provided copies of Metro Vancouver’s new Ecological Health Framework, which was approved by the Metro Vancouver Board on October 26, 2018.

6. INFORMATION ITEMS / UPCOMING EVENTS
6.1 Upcoming Events:
   • South Coast Conservation Program Webinar: The Value of Indicators – November 21, 2018
   • ACT SFU Biodiversity and Green Infrastructure in a Changing Climate – November 23, 2018
   • Mud Bay/Boundary Bay Ecosystem Vulnerability Workshop – November 27, 2018
   • ICLEI Advancing Collaborative Climate Adaptation in BC – November 27, 2018
6.2 Resources:
   • Connecting Cities and Resources: UBHub Offers Map and Database of Hundreds of Urban Biodiversity Activities
6.3 Recent Journal Articles:
   • Streamside forests store tons of carbon
   • Conservation areas help birdlife adapt to climate change
   • It's not trails that disturb forest birds, but the people on them
   • Pollution in cities damaging insects and ecosystems
   • Natural solutions can reduce global warming

7. ADJOURNMENT

It was MOVED and SECONDED
That the RPAC Environment Subcommittee conclude its regular meeting of November 22, 2018 at 11:55 p.m.

CARRIED

Members were invited to stay for the afternoon’s Regional Engineer’s Advisory Committee – Climate Protection Subcommittee meeting, which focussed on Climate Adaptation.

Membership:

MEMBERS
Stott, Rod (Chair) – City of Maple Ridge
Crampton, Angela (Vice Chair) – City of Port Moody
Bowman, Vania – City of Whiterock
Brotherston, Mike – City of Delta
Godwin, Stephen – City of Surrey
Lensink, Larisa – City of North Vancouver
MacEachern, Neil – City of Port Coquitlam
MacKinnon, Matthew – District of West Vancouver
Nassichuk, Erika – District of North Vancouver
Pachcinski, Marcin – Metro Vancouver, Electoral Area and Environment
Page, Nick – City of Vancouver
Paulin, Chad – City of Richmond
St. Andrassy, Justin – Township of Langley
Sloat, Mark – City of Burnaby
Sloboda, Susanne – City of Pitt Meadows
Teed, Jackie – City of New Westminster

Regional Planning Advisory Committee
ALTERNATES
Armour, Kimberley – City of Richmond
Aven, Neal – City of Surrey
Chan, Nadia – City of Surrey
Clement, Erin – City of Delta
Danyluk, Angela – City of Vancouver
Davis, Margot – City of Vancouver
Douglas, Lesley – City of Port Moody
Elmore, Jeanette – City of Richmond
Garnett, Lee-Ann – City of Burnaby
Isaac, Katherine – City of Vancouver
Landucci, Rob – City of Surrey
Larsen, Kevin – Township of Langley
Negenman, Angela – City of North Vancouver
Pym, Mike – City of Maple Ridge
Russell, Peter – City of Richmond
Smith, James – City of Vancouver
Townsend, Lise – City of Burnaby
Zazubek, Janet – City of New Westminster

ASSOCIATES
Lu, James – Vancouver Coastal Health
Peterson, Emily – Vancouver Coastal Health
Skuce, Carla – Bowen Island Municipality
Woo, Angie – Fraser Health Authority
Notes from the 2019 Metro Vancouver Regional Food System Action Plan meeting held at 9:00 a.m. on Friday, February 08, 2019 at Meeting Room 2505, Metrotower III, 4730 Kingsway, Burnaby, B.C.

**PRESENT:**
Amanda Grochowich, City of Maple Ridge  
Carla Stewart, City of Surrey  
Colin O’Bryne, City of Pitt Meadows  
Cristina Rucci, District of North Vancouver  
Heather Evans, City of North Vancouver  
Janet Zazubek, City of New Westminster  
Magnus Sinclair, City of Richmond  
Rebekah Mahaffey, City of Burnaby  
Sarah Carten, City of Vancouver

**REGRETS**
Arleta Beckett, City of West Vancouver  
Emily Sargent, City of Richmond  
Jessica Jiang, City of White Rock  
Katie Ferland, City of Richmond  
Liam McLennan, City of Port Moody  
Meredith Seeton, City of Port Coquitlam  
Samantha Bohmert, City of New Westminster  
Susan Elbe, City of Delta  
Teresa Kaszonyi, Township of Langley

**STAFF:**
Theresa Duynstee, Senior Planner, Metro Vancouver  
Viktor Panfilenok, Program Assistant I, Metro Vancouver  
Marcin Pachcinski, Electoral Area and Environment Division Manager, Metro Vancouver

**INVITED PRESENTATION:**
Darren Stott, Greenchain Consulting

1. Welcome
Theresa welcomed everyone and stated that the meeting was about reconnecting and refocusing efforts to support local system food activities. The results of the November email survey were presented, as the feedback received was used to develop the agenda for this RFSAP meeting. The responses to the question about hot topics for discussion revealed the following preferences:

- How to integrate food system issues with other local government priorities (5)
- Building capacity of community and civil society groups (3)
- Opportunities for collaboration among municipalities and/or with the regional district (2)
- Important RFSAP items that are not being adequately addressed (1)
- ALC legislation (1)
The survey question asking about preferred invited presentations produced the following responses:

- Food hubs (5)
- Emergency preparedness planning and food (4)
- Diverse food retail options (3)
- Assessment of municipal food policies (3)
- Local food purchasing (2)
- Integrating food assets into large developments (2)
- Climate change adaptation (2)
- Land Matching Program (2)
- Indigenous food systems (1)
- Food safety and health regulations (0)

2. Municipal Roundtable Updates on Food System Activities

The meeting participants were asked to introduce themselves and share information on any agriculture or food actions underway and any issues or gaps of concern.

**City of Burnaby**

- Gardening and landscaping amenities are now included into all new developments.
- Strata sponsored community gardens are working well.
- Some city land in the Big Bend area has been put into agricultural production.
- Residents are now allowed to grow food on their front lawns.
- Community gardens are not permitted in parks at this time, although local groups are continuing to advocate for them to city council.
- All secondary schools now have teaching garden plots.
- Burnaby Food First is developing a food asset map and list of local food resources.
- The Sharing Backyards Program that links people with unused yard space is now less active because it no longer has a coordinator.

**City of Richmond**

- The Garden City Lands have 55.2 hectares (136.5 acres) of open space located within the Agricultural Land Reserve, in the heart of Richmond adjacent to Westminster Highway. These lands will become a new park with diverse uses including urban agriculture, environmental interpretation and recreation. In Richmond farming is allowed in city parks.
- The 2018 Farm Fest at the Garden City Lands successfully showcased agriculture in Richmond.
- At Terra Nova the City has partnered with the Sharing Farm that produced 22,000lbs of food for the food bank and continues to provide educational programs for schools.
- Beekeeping is gaining popularity, however there are no bylaws except for multiple-unit housing.
- Richmond Food Security Society manages all nine community gardens (342 plots) and is looking to expand as there is a considerable wait list for community gardens in Richmond.
- Richmond Tourism wants to develop a food tourism strategy for visitors that includes local farms and other food related businesses.
- A wellness strategy is being developed with Vancouver Coastal Health and the local school district to encourage healthy eating through neighbourhood food hubs.
- In Richmond, 39% of the land is in the ALR. City council has recently put a limit on the house size in the ALR to 400 square meters, less than the provincial recommended size of 500 square meters.
City of Surrey

- There is a 100% new city council and decisions on advisory committees are not complete.
- The new council wants to expand agriculture tourism, however many local farms are not suitable for visitors.
- The economic development office is no longer working on food issues.
- Both private and non-profit community gardens are expanding.
- The backyard chicken program is losing momentum, despite no problems.
- Loblaw has established a new food distribution centre in Campbell Heights.
- The Coastal Flood Strategy has identified potential impacts of sea level rise. Agricultural areas, Highway 99 and the Crescent Beach are vulnerable to flooding.
- There were many applications to construct large mansion houses before the new legislation came into effect.

City of Vancouver

- Several strategies are underway that have a connection to accessing affordable food including a resilient strategy, poverty reduction strategy and an equity framework.
- A new staff person has been hired to manage food recovery and rescue.
- St. Paul’s hospital will be moving to a new location in False Creek Flats.
- City is reconsidering their definition of “food assets” to include economic and cultural assets.
- The urban farm policy that addresses food production outside the ALR is under review.
- Since 2010, the UBC Sustainability Initiative has collaborated with the City of Vancouver to sponsor UBC graduate students to work on sustainability projects. To date over 145 Greenest City Scholars projects have been completed. Internships for full-time UBC graduate students are paid positions.
- The City is working closely with First Nations on various projects with funding provided by the Vancouver Foundation.
- The Vancouver Food Policy Council is being formed with more culturally diverse representation.

City of North Vancouver

- There is lots of work underway related to strategic planning, a policy framework and zoning bylaws.
- It is challenging to infuse food issues into municipal policies as the current OCP does not provide much direction on food.
- The Edible Garden Project and Loutet Farm continue to provide educational programs on food.

District of North Vancouver

- Tsleil-Waututh is hosting an urban farm forum on February 15 weekend. Many stakeholders and local partners will attend and present their projects to the public.
- North Shore Food Charter was endorsed by councils in 2013 and work continues despite changes in community leadership.
- Table Matters completed a Collective Impact process, but lacks capacity to implement projects. It is currently difficult to make food a priority issue.
- Community gardens are managed by the North Shore Community Garden Society but the volunteers are at capacity and cannot expand. They are dealing with theft and vandalism. About 100 people are on the wait-list for community gardens.
- Poverty is becoming more visible. Council is supportive of developing a Poverty Reduction Plan.

Notes from the Regional Food System Action Plan Municipal Meeting held on February 8, 2019

Regional Planning Advisory Committee
**City of Pitt Meadows**

- The City’s planning department has expanded to four staff.
- The OCP is now under review. In Pitt Meadows 85% of the land in the Agricultural Land Reserve. There is interest in increasing policies supportive of agriculture.
- Advisory committees can now submit budgets to Council.
- The Lougheed Corridor is anticipated to help address traffic issues impacting farmers.
- Cannabis issues are still a challenge.
- The oversupply of blueberries is leading to greater interest in wineries.
- Large single-family homes are still a big issue as the land is less likely to be used for agricultural purposes.

**City of New Westminster**

- Despite not having any agricultural land, the city has endorsed a Food Security Action Plan on October 1, 2018 (available [here](#) in the Council agenda on page 205).
- In developing the Plan, two food forums were organized, which enabled food security and community groups to get to know each other and avoid duplication of services to residents.
- New Westminster schools are leading the way on food strategy projects.
- Farmers markets continue to be popular with residents and further action on street food activities has been delayed.

**City of Maple Ridge**

- Working on backyard chickens and addressing issues that arose in the District of North Vancouver and Squamish.
- Council is interested in food hubs but has not provided funding.
- Recent flooding impacted a community kitchen, which is no long functional. Need to find land for a food hub/community kitchen. There are no commercial kitchens in Maple Ridge.
- There is interest in reviving work on land trusts to help make agricultural land viable.
- There are challenges with having appropriate buffers between agricultural and urban land.

**The City of Delta** *(provided by email)*

- Delta’s food security concern is the conversion of greenhouse space and, potentially, farm fields, to cannabis cultivation. This obviously removes the potential for food production and hence, affects food security. The city has attempted to address this by amending their zoning to keep up with any restrictions allowed by the Province, but concerns remain. A copy of the latest bylaw regarding cannabis production in Delta is available from Susan Elbe.

**City of White Rock** *(provided by email)*

- In 2018 the City of White Rock amended their Zoning Bylaw to allow for Community Gardens in all institutional zones, all commercial zones with the exception of gas station commercial, and all Comprehensive development zones.
- In the future, staff will be conducting research on best practices for urban apiaries and backyard hens.
3. **Metro Vancouver Updates on Food System Activities**

Staff noted that there were no significant updates regarding the Regional Food System Action Plan (RFSAP) that was adopted by Metro Vancouver Regional District (MVRD) Board in 2016. As a reminder, the RFSAP lists 160 planned local government actions that are underway and were previously endorsed by municipal Councils. The Plan also includes 18 new collaborative actions, three emerging issues, and two actions facilitating implementation. Metro Vancouver has the convening role and is undertaking its own planned actions. The last progress report to the Regional Planning Committee was completed in February 2018.

Most of staff time is allocated to addressing agricultural land use items. The Agriculture Land Use Inventory (ALUI) was updated in 2016 by the Ministry of Agriculture, who is also developing a web application to make the ALUI results available to the public. Staff are planning an Agriculture Land Use Planning Policy Forum scheduled for April 3, 2019. *Metro Vancouver 2040 Shaping our Future (Metro 2040)*, the regional growth strategy will be updated over the next few years and an Agriculture Policy Review is anticipated to start later this year. Staff are also involved in *Climate 2050*, a new regional strategy endorsed by the MVRD Board last fall, which will be developing road maps (action plans) over the next two years for a range of issue areas covering both mitigation and adaptation.

A new study, called Food Flow: Agri-food Distribution in Metro Vancouver is currently underway. This study emerged after seeing results from the Five Borough Food Flow study on the extent and resiliency of the food distribution system in New York City (2016). The purpose of our Food Flow study is to improve knowledge about the extent of food storage and distribution facilities in Metro Vancouver and better understand how local government land use policies and transportation infrastructure influence the agri-food distribution system.

In 2018, a consulting firm was hired to start building a Food Flow database. They developed a GIS map with layers relevant to the agri-food industry and created a database of food related businesses. The business relevant to food flow were classified into the following eight classes based on data from a variety of sources: food processing, food wholesalers, food storage, support services, food retail, food distribution and institutions that buy/serve large amounts of food.

Some preliminary maps were presented at the meeting. The next step is to refine the database compiled by the consultants and consider the key questions to address. There are also plans to verify the results with stakeholder groups and conduct interviews with the private sector to fill information gaps.

A discussion followed on the possible way to reduce food waste, as there are many aspects to the issue. It was suggested that health authorities could be invited to help inform the discussion on food waste prevention.

4. **Hot-Topic Discussions**

It was decided to cancel this agenda item as much had already been said about the importance of integrating food issues into other local government priorities and the importance of civil society groups in implementing local food activities.
5. **Collaborative Actions Dotmocracy**

The participants were asked to select from the list of collaborative actions, emerging issues, facilitating implementation items what they consider are priorities. Each person was given five dots to indicate their priorities on charts posted on the back wall. The results are presented in the attachment.

6. **Invited presentation**

*Overview of regional food hubs and how they can support government strategies*

Speaker: Darren Stott, Greenchain Consulting

Darren Stott introduced himself and noted that local food, farmers’ markets and farm gate sales are very popular in BC. There are 33 farmers’ markets in Metro Vancouver and eight winter markets enabling farmers’ markets to operate 52 weeks in a year. Local food initiatives provide numerous benefits for the community including: creating new local jobs and businesses, attracting more visitors and tourists, reducing food waste, enhancing food security and providing education about food.

The main purpose of a food hub is to support local producers. The businesses associated with food hubs can include retail sales, storage facilities, shared kitchens, food production, breweries, restaurants, etc. About 350 food hubs exist across North America, with about 20 being added each year; many are social enterprises associated with farmers’ markets and restaurants. The hub’s sizes vary, depending on the location and whether they are for-profit businesses or non-profit organization. Food hubs are an established sector in the US. They have their own conferences and an active network.

Although food hubs have low margins, there are lots of social benefits. The City of Edmonton Case Study demonstrated that food hubs are valuable. Food hubs support incubator farms and often provide training as well as can create jobs in low-income neighbourhoods. They also provide an opportunity to divert food waste. Kitchen space is often rented out at a low rate to individuals and small non-profit organizations.

Local governments have funded several studies to facilitate future development of food hubs and in some instances private capital was invested into the hubs. Most of the food hubs in Metro Vancouver are aggregating hubs used for food distribution, such as the Vancouver Farmers’ Market Direct hub in Abbotsford.

Some food hub projects in the region have not materialized or are still under consideration such as the North Fraser food hub, Township of Langley agri-food hub and the Maple Ridge food hub. The main challenges are finding a champion to promote the food hub and conducting research into the local needs. Also, there are many steps needed to get a food hub established.

All levels of government can play an important role in supporting food hubs. The Ministry of Agriculture is currently investigating food hubs through the Feed BC program. They are working with government and industry partners to bring more local food into BC government facilities, such as hospitals. However, a lack of certification and an extensive approval process prevents many small local producers from benefiting in the Feed BC programs.

Darren’s presentation including his speaking notes is being distributed with these meeting notes.

The meeting ended at 1:00 pm
ATTACHMENT: Results from the Collaborative Actions Dotmocracy

Goals 1 - Increase Capacity to Produce Food Close to Home
1. Collectively advocate to senior governments for funding programs to expand investments in irrigation and drainage infrastructure necessary to adapt to climate change - 0
2. Investigate the feasibility and desirability of a regional land trust to increase access to agricultural land - 3
3. Expand municipal involvement in programs that enable new farmers to start a business such as Surrey’s Virtual Incubator Farm Project Online system - 0

Goal 2 - Improve the Financial Viability of the Food Sector
4. Develop policies to expand processing, storage and distribution of local food (e.g. revitalization tax exemptions) - 4
5. Share information on the potential opportunities to increase local food purchasing strategies - 0
6. Profile and incorporate agri-food business ventures into regional and municipal economic development plans - 0
7. Convene bulk food purchasers to explore how to increase local food purchasing - 1

Goal 3 – People Make Healthy and Sustainable Food Choices
8. Develop a communication strategy with common messaging for local governments to educate residents about the connection between farmland, food security, climate change and sustainability - 4
9. Collaborate with non-profit organizations, build on existing multi-lingual initiatives to develop and distribute information on sustainable and local food programs to new immigrants - 1

Goal 4 – Everyone has Access to Healthy, Culturally Diverse and Affordable Food
10. Promote the Food Donation Guidelines (developed by BC Centre for Disease Control and other partners) to food distribution and food service sectors through municipal and regional business correspondence and events - 3
11. Draw from Surrey’s experience to create and share information on culturally relevant local food availability for refugee and new immigrants - 0
12. Draw from Vancouver’s study on community kitchens to identify opportunities and challenges for expanding food preparation and processing in under-utilized kitchens - 2

Goal 5 – A Food System Consistent with Ecological Health
13. Collaborate with provincial agencies to prepare a regional agriculture climate adaptation strategy for the Metro Vancouver region - 2

Emerging issues in the regional food system
14. Identify how food security and emergency food issues are being addressed in each local government’s emergency management plans and processes - 8
15. Recommend policies and programs to address health outcomes of poverty and food insecurity to senior governments - 4
16. Work with Health Authorities, industry and appropriate agencies to ensure food safety is considered in commercial and community food production - 0

Facilitating Action Plan Implementation
17. Assign a staff member to advance local government efforts on food system issues and to participate in semi-annual working group meetings - 3
18. Strengthen the linkages and understanding between local governments and civil society groups in relation to advancing food system issues - 2

Notes from the Regional Food System Action Plan Municipal Meeting held on February 8, 2019

Regional Planning Advisory Committee