

# REGULAR COUNCIL MEETING – AGENDA

Agenda for the Regular Council Meeting scheduled for  
Tuesday, May 16, 2017 in Council Chambers at  
Village Hall, 2697 Sunnyside Road, Anmore, BC



---

1. **Call to Order**

2. **Approval of the Agenda**

Recommendation: That the agenda be approved as circulated.

3. **Public Input**

Note: The public is permitted to provide comments to Council on any item shown on this meeting agenda. A two-minute time limit applies to speakers.

4. **Delegations**

5. **Adoption of Minutes**

page 2 (a) **Minutes of the Regular Council Meeting held on May 2, 2017**

Recommendation: That the Minutes of the Regular Council Meeting held on May 2, 2017 be adopted as circulated.

6. **Business Arising from Minutes**

7. **Consent Agenda**

8. **Items Removed from the Consent Agenda**

9. **Legislative Reports**

page 8 (a) **Anmore Pre-Authorized Debit Plan Bylaw No. 562-2017**

Recommendation: That Anmore Pre-Authorized Debit Plan Bylaw No. 562-2017 adopted.

10. **Unfinished Business**

**11. New Business**

**12. Mayor's Report**

**13. Councillors Reports**

**14. Chief Administrative Officer's Report**

**15. Information Items**

**(a) Committees, Commissions, and Boards – Minutes**

**(b) General Correspondence**

- page 11 - Letter received May 1, 2017 from Metro Vancouver regarding Metro Vancouver  
2040: Shaping our Future Amendment to Section G Performance Measures.
- page 81 - Letter received May 5, 2017 from Metro Vancouver regarding GVWD Water  
Shortage Response Plan.

**16. Public Question Period**

Note: The public is permitted to ask questions of Council regarding any item pertaining to Village business. A two-minute time limit applies to speakers.

**17. Adjournment**

## REGULAR COUNCIL MEETING – MINUTES

Minutes of the Regular Council Meeting held on May 2, 2017 in  
Council Chambers at Village Hall, 2697 Sunnyside Road, Anmore, BC



---

### ELECTED OFFICIALS PRESENT

Mayor John McEwen  
Councillor Ryan Froese  
Councillor Ann-Marie Thiele  
Councillor Kim Trowbridge  
Councillor Paul Weverink

### ELECTED OFFICIALS ABSENT

Nil

### OTHERS PRESENT

Juli Kolby, Chief Administrative Officer  
Christine Milloy, Manager of Corporate Services  
Jason Smith, Manager of Development Services

#### 1. Call to Order

Mayor McEwen called the meeting to order at 7:00 p.m.

#### 2. Approval of the Agenda

It was MOVED and SECONDED:

R87/2017                      “THAT THE AGENDA BE APPROVED AS CIRCULATED.”

**CARRIED UNANIMOUSLY**

#### 3. Public Input

Mario Piamonte, Sugar Mountain Way, Anmore, BC, commented that infill development would be a win-win situation for the Village and residents, as the Village would increase revenue through property taxes, infrastructure costs, development cost chargers, community amenity contributions, which would help fund a new village hall. He added that infill development will not change the semi-rural nature of the community.

Nick Burwash, Uplands Drive, Anmore, BC, commented that he agrees with the previous comments, adding that it is a great opportunity to take advantage of the opportunity of existing infrastructure to increase the tax base, and take advantage of a bit more money.

#### 4. Delegations

Nil

5. **Adoption of Minutes**

(a) **Minutes of the Regular Council Meeting held on April 18, 2017**

It was MOVED and SECONDED:

R88/2017                   **“THAT THE MINUTES OF THE REGULAR COUNCIL MEETING  
HELD ON APRIL 18, 2017 BE ADOPTED AS CIRCULATED.”**

**CARRIED UNANIMOUSLY**

6. **Business Arising from Minutes**

Nil

7. **Consent Agenda**

It was MOVED and SECONDED:

R89/2017                   **“THAT COUNCIL ADOPTS THE CONSENT AGENDA.”**

**CARRIED UNANIMOUSLY**

(a) **National Wildfire Community Preparedness Day 2017**

R90/2017                   **“THAT COUNCIL RECOGNIZES MAY 6, 2017 AS NATIONAL  
WILDFIRE COMMUNITY PREPAREDNESS DAY IN THE  
VILLAGE OF ANMORE.”**

**ADOPTED ON CONSENT**

(b) **Emergency Preparedness Week 2017**

R91/2017                   **“THAT COUNCIL RECOGNIZES MAY 7-13, 2017 AS  
EMERGENCY PREPAREDNESS WEEK IN THE VILLAGE OF  
ANMORE.”**

**ADOPTED ON CONSENT**

8. **Items Removed from the Consent Agenda**

Nil



**9. Legislative Reports**

**(a) Anmore Tax Rates Bylaw No. 561-2017**

It was MOVED and SECONDED:

R92/2017                    **“THAT ANMORE TAX RATES BYLAW NO. 561-2017 BE ADOPTED.”**

**CARRIED UNANIMOUSLY**

**(b) Anmore Pre-Authorized Debit Plan Bylaw No. 562-2017**

It was MOVED and SECONDED:

R93/2017                    **“THAT ANMORE PRE-AUTHORIZED DEBIT PLAN BYLAW NO. 562-2017 BE READ A THIRD TIME.”**

**CARRIED UNANIMOUSLY**

**10. Unfinished Business**

Nil

**11. New Business**

**(a) Infill Summary Update**

It was MOVED and SECONDED:

R94/017                    **“THAT COUNCIL DIRECT STAFF TO BEGIN DRAFTING AN OFFICIAL COMMUNITY PLAN AMENDMENT AND AN INFILL DEVELOPMENT POLICY, AS RECOMMENDED IN THE REPORT DATED APRIL 26, 2017 FROM THE MANAGER OF DEVELOPMENT SERVICES REGARDING INFILL DEVELOPMENT; AND THAT COUNCIL AUTHORIZE A SPENDING LIMIT UP TO SEVEN THOUSAND DOLLARS (\$7,000) FUNDED FROM THE GENERAL STABILIZATION RESERVE, TO HIRE A DEVELOPMENT FINANCE CONSULTANT TO PROVIDE RECOMMENDATION ON THE APPROPRIATE APPROACH AND AMOUNT OF COMMUNITY AMENITY CHARGES THAT COULD BE EXPECTED FOR EACH NEW INFILL DEVELOPMENT LOT CREATED.”**

**CARRIED**

Councillor Thiele opposed

**(b) Climate Action Revenue Incentive (CARIP) Reporting**

It was MOVED and SECONDED:

R95/2017

**“THAT THE REPORT DATED APRIL 26, 2017 FROM THE  
MANAGER OF DEVELOPMENT SERVICES REGARDING CARIP  
SURVEY PUBLIC REPORTING BE RECEIVED FOR  
INFORMATION.”**

**CARRIED UNANIMOUSLY**

Council directed staff to investigate whether biodiesel, as referenced, is from oil or waste products

**12. Mayor's Report**

Mayor McEwen reported that:

- On April 25, he and Juli Kolby met with Kevin Desmond, TransLink CEO regarding transportation issues pertaining to Anmore. Included in discussion were topics of covered bus stops, which would be an asset in Anmore; recognition of the new increased bus service, and innovative transportation sharing options.
- On April 25, he attended the Volunteer Appreciation Event, adding that he thanks everyone who attended, which included close to 80 people.
- On April 26, he attended the (Metro Vancouver) Regional Parks Meeting on Bowen Island, where they discussed the heritage cottages in Crippen Park, which is a similar situation as the heritage cottages in Belcarra.
- On April 27, he attended the Tri City Communities Healthy Community Partnership. Eagle Ridge Hospital is getting ramped up for the emergency ward addition.
- On April 28, he attended a Metro Vancouver Board meeting.
- On April 29, he and Anmore council members attended the Council of Councils meeting in Langley.

**13. Councillors Reports**

Councillor Froese reported that:

- He attended the Council of Councils meeting.

Councillor Weverink reported that:

- He attended the Council of Councils meeting.
- He attended the Volunteer Appreciation event.
- He attended the first (of 2017) Ma Murray Day Organizing Committee meeting.

- He will be driving Mr. Mike Farnworth in the May Day parade.

Councillor Thiele reported that:

- She attended the volunteer appreciation. She heard comments about how good the food was.
- She will attend the May Day parade, driving with Mayor Stewart.
- She would like an update on the Buntzen Lake traffic management plan that the Village had put together in December 2016.

Councillor Trowbridge reported that:

- He did not attend the Council of Councils meeting
- He will also attend the May Day parade, driving with Mayor McEwen.

#### **14. Chief Administrative Officer's Report**

Juli Kolby reported that:

- The Village had a very successful wildfire scenario exercise on Monday with stakeholders, including Buntzen Lake, RCMP, Port Moody Police, Metro Vancouver, Coquitlam emergency management services, Sasamat Volunteer Fire Department and Port Moody Fire Rescue. The purpose was to engage our neighbouring agencies about the evacuation plan. Discussions did not include Buntzen Lake traffic management specific to the summer, but she can obtain an update on that information and provide an update at the next meeting.
- Emergency Preparedness Week is May 7-13.
- On May 6, it is National Wildfire Community Preparedness Week, which is the same day the Sasamat Volunteer Fire Department is holding their annual car wash. The website includes information shared from FireSmart Canada, with advice for the public.
- The Village has retained resource support to help with launching the website as there is still quite a bit of work to be done to finalize it. The launch date is unknown, but it is anticipated to take place in the next couple of weeks.
- She met with a couple of members of the Anmore Heritage Society, following announcement of the grant award of \$25,000. She has also talked to Simon Fraser University with the desire to hire a co-op student as an archive coordinator.
- Metro Vancouver watering restrictions will take effect May 15, and remain until October 15.
- On request of Coquitlam RCMP, residents are asked to note that there was a community mailbox break-in on Spence Way. If there is a future break-in, the public should follow up with Canada Post.
- On Saturday night, she attended the Ma Murray Newspapering Awards.

**15. Information Items**

**(a) Committees, Commissions, and Boards – Minutes**

Nil

**(b) General Correspondence**

Nil

**16. Public Question Period**

Lynn Burton, Sugar Mountain Way, Anmore, BC, reported that a group of residents who are concerned about the new Hydro power lines have invited Rick Glumac to a meeting to learn his position on this matter. She added that they are already aware of Linda Reimer's position. She further added that the meeting will be held on Thursday at 7:00 p.m. in Council Chambers, noting that it is a community meeting.

**17. Adjournment**

It was MOVED and SECONDED:

R96/2017

**"TO ADJOURN."**

**CARRIED UNANIMOUSLY**

The meeting adjourned at 7:53 p.m.

Certified Correct:

Approved by:

---

Christine Milloy  
Manager of Corporate Services

---

John McEwen  
Mayor

## VILLAGE OF ANMORE

### BYLAW NO. 562-2017

#### A bylaw to authorize a Pre-Authorized Debit Plan

---

**WHEREAS** the Community Charter provides that the Council may, by bylaw, authorize the Finance Officer to receive money for taxes and/or utilities before the due date and may provide the terms for accepting and holding the money including interest on it and its rate;

**AND WHEREAS** it is desirable to encourage the prepayment of property taxes and utilities, and implement a monthly installment system for the convenience of taxpayers;

**NOW THEREFORE** the Municipal Council of the Village of Anmore in open meeting assembled, enacts as follows:

1. This bylaw may be cited as “Anmore Pre-Authorized Debit Plan Bylaw No. 562-2017”.
2. That Anmore Prepayment Plan Bylaw No. 539, 2015 be repealed in its entirety.
3. Any person being liable to the Village of Anmore for property tax and/or utilities may apply to the Finance Officer of the Village to pay taxes and/or utilities on a 10 month installment basis.
4. The payment of taxes and/or utilities on a 10 month installment basis shall commence upon the execution by the taxpayer of a form prepared by the Village authorizing automatic deduction from the taxpayer’s bank account to the credit of the Village and the form shall be deposited with the Finance Officer of the Village a minimum of 10 days prior to an installment date. The pre-authorized debit amount is to be determined by the taxpayer who is responsible to ensure it does not create an excessive credit on their account.
5.
  - (a) Payments due under the 10 monthly installment basis will be processed and collected on the 15th day of each calendar month for the months from August to May.
  - (b) Monthly installment payments made after a property tax or utility notice due date shall be designated as a credit against the taxes and/or utilities to be assessed in the next billing cycle.
  - (c) The Finance Officer shall, on the last day of each month, credit interest on the amount paid to that day to the benefit of the taxpayer participating in the 10 monthly installment system at a rate equal to the Prime rate of the Village’s principal banker at that date, less 3%. Such interest is to be calculated and credited to the taxpayer’s benefit based upon the daily balances in the taxpayer’s account during the current month. Interest will not be earned until all

utilities, taxes, penalties and interest are paid and there is a credit balance on the account(s). Interest will be not payable by the taxpayer to the Village.

6. The Finance Officer shall indicate on each annual tax bill and/or utility bill to any participating taxpayer, the total of all payments received plus interest earned and show the amount required to pay the balance of the taxes and/or utilities due on the due date of that year and such tax bill and/or utility bill shall be calculated on the basis that amounts due on the Pre-Authorized Debit plan shall be paid as scheduled. Payment of outstanding taxes and/or utilities and claiming of the Home Owner Grant (if applicable) are required by notice due date to avoid penalty and/or interest on the account.
7.
  - (a) A participating taxpayer may give notice in writing 10 days prior to the installment date, to discontinue participating in the monthly installment system but no monies paid into the plan will be returned or refunded and the Finance Officer shall continue to pay interest as set out in the bylaw on those monies previously paid.
  - (b) In the event of the sale of the property, prepayments are to stay on the property's account and responsibility for adjustment shall be between the vendor and purchaser. Furthermore, it is the taxpayer's responsibility to submit a written request to stop pre-authorized debits 10 days prior to the installment date.
  - (c) The Finance Officer may cancel the privilege of continuing in the monthly installment system if two consecutive installments fail to be honoured. Dishonored payments are subject to the current non-sufficient funds (NSF) fee as per the Fees and Charges Bylaw.
  - (d) In the event of an overpayment after paying property taxes and/or utilities, the overpayment will remain on the account and the Finance Officer shall continue to pay interest as set out in the bylaw on those monies overpaid.
  - (e) In the event that the taxpayer's mortgage company is to pay property taxes, it is the taxpayer's responsibility to submit a written request to stop pre-authorized debits 10 days prior to the installment date.
8. Participation in the monthly installment system shall continue until terminated by either party in writing. The amount will remain unchanged unless the participant submits a written request for change 10 days prior to installment date.
9. In addition to the monthly installment system authorized herein, the Finance Officer is also authorized to accept and to hold monies to be applied at a future date in payment of taxes and/or utilities upon the following terms and conditions:

- (a) when tendering any amount under this bylaw the taxpayer shall, in writing addressed to the Finance Officer, designate the account for which such tendered amount is to be accepted and held;
- (b) any amount accepted hereunder shall be held in the amount for the parcel of land and any improvements designed by the taxpayer, and shall, together with interest accrued on the day taxes and/or utilities are due, be applied on account of the payment of taxes and/or utilities; and
- (c) All current and prior year property taxes and utilities must be paid in full prior to enrolling in the Pre-Authorized Debit Plan.

**READ** a first time the 18th day of April, 2017

**READ** a second time the 18th day of April, 2017

**READ** a third time the 2nd day of May, 2017

**ADOPTED** this                      day of                      , 2017

---

MAYOR

---

MANAGER OF CORPORATE SERVICES

Certified as a true and correct copy of "Anmore Pre-Authorized Debit Plan Bylaw No. 562-2017".

---

DATE

---

MANAGER OF CORPORATE SERVICES



File: CR-12-01

Ref: RD 2017 Mar 31

Ms. Christine Milloy, Manager of Corporate  
Village of Anmore  
2697 Sunnyside Road  
Anmore BC V3H 5G9



Dear Ms. Milloy:

**Re: *Metro Vancouver 2040: Shaping our Future* Amendment to Section G Performance Measures**

At its March 31, 2017 regular meeting, the Board of Directors of the Metro Vancouver Regional District ('Metro Vancouver') adopted the following resolution:

*That the MVRD Board:*

- a) Initiate the Metro Vancouver 2040: Shaping our Future amendment process for a Type 3 amendment to Section G of the regional growth strategy;*
- b) Give first and second readings to "Greater Vancouver Regional District Regional Growth Strategy Amendment Bylaw No. 1243, 2017"; and*
- c) Direct staff to notify affected local governments and appropriate agencies as per Metro Vancouver 2040: Shaping our Future Section 6.4.2.*

This letter provides notification to affected local governments and other agencies, in accordance with Section 437 of the *Local Government Act*, and Sections 6.4.2, 6.4.4 and 6.4.5 of *Metro Vancouver 2040: Shaping our Future (Metro 2040)*, the regional growth strategy.

Annual reporting of *Metro 2040* is required by Part 13 of the British Columbia *Local Government Act* and *Metro 2040* Section 6.13.3. Three annual reports have been produced to date, covering four years of implementation of the regional growth strategy since its adoption in 2011, including baseline and annual monitoring of the performance measures listed in *Metro 2040* Section G. Through the process of collecting and analyzing data and drafting these early annual reports, opportunities were identified to improve performance monitoring.

Following a comprehensive review of the performance measures in 2015, staff identified opportunities to update the performance monitoring program, including an Type 3 amendment to update Section G of *Metro 2040* with improved and more flexible measures based on the results of the review and further consultation with municipal and partner agency staff.



Through the proposed amendment, the existing Section G Performance Measures would be replaced via Amendment Bylaw No. 1243 (Attachment 1). The proposed amendment reduces the number of performance measures included in *Metro 2040* from 55 total measures to 15 Key Summary Measures that best illustrate progress toward *Metro 2040* strategies. The reduced number of measures facilitates simpler and more useful annual reporting. Additional performance measures are defined in a draft Performance Monitoring Guideline.

The draft Performance Monitoring Guideline (Attachment 2) provides detailed information about the intent, methodology, source, and reporting timeline for each measure, including additional technical measures to support implementation that will be reported online as data is available or useful. The Performance Monitoring Guideline is intended to be adopted by resolution of the MVRD Board following adoption of Amendment Bylaw No. 1243. The Guideline offers an added level of transparency and commitment to performance monitoring, while simplifying annual reporting.

*Metro 2040* Section 6.4.2 'Notification and Request for Comments', states that for all proposed *Metro 2040* amendments, the MVRD Board will provide written notice of the proposed amendment to all affected local governments; provide a minimum of 30 days for affected local governments, and the appropriate agencies, to respond to the proposed amendment; and post notification of the proposed amendment on the Metro Vancouver website, for a minimum of 30 days.

You are invited to provide written comments on the proposed amendment to *Metro 2040*. Please provide comments in the form of a Council/Board resolution, as applicable, and submit to [chris.plagnol@metrovancover.org](mailto:chris.plagnol@metrovancover.org) by June 2, 2017.

If you have any questions with respect to the proposed amendment or wish to receive a presentation, please contact Heather McNell, Acting Director of Regional Planning, at 604-436-6813 or [heather.mcnell@metrovancover.org](mailto:heather.mcnell@metrovancover.org). More information and a copy of *Metro Vancouver 2040: Shaping our Future* can be found on our website at [www.metrovancover.org](http://www.metrovancover.org).

Yours truly,



Chris Plagnol  
Corporate Officer

CP/HM/lk

CC: Jason Smith, Manager of Development Services

Attachments:

1. Metro Vancouver Regional Growth Strategy Amendment Bylaw No. 1243 (Doc #21326472)
2. Draft *Metro Vancouver 2040: Shaping our Future* Performance Monitoring Guideline (Doc #21323218)
3. MVRD Board Report titled, "*Metro Vancouver 2040: Shaping our Future* Amendment to Section G Performance Measures" (Doc #21325338)



**METRO VANCOUVER REGIONAL DISTRICT  
REGIONAL GROWTH STRATEGY AMENDMENT BYLAW NO. 1243, 2017**

A Bylaw to Amend

Greater Vancouver Regional District Regional Growth Strategy Bylaw Number 1136, 2010.

**WHEREAS:**

- A. The Board of the Metro Vancouver Regional District adopted the Greater Vancouver Regional District Regional Growth Strategy Bylaw Number 1136, 2010 on July 29, 2011 (the "Regional Growth Strategy");
- B. The Board wishes to replace the performance measures set out within Section G of the Regional Growth Strategy, with consolidated, updated, and clarified performance monitoring; and
- C. In accordance with Regional Growth Strategy section 6.3.4 (h), an amendment to performance measures is a Type 3 amendment.

**NOW THEREFORE**, the Board of the Metro Vancouver Regional District in open meeting assembled enacts as follows:

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

Section G, entitled 'Performance Measures', of Greater Vancouver Regional District Regional Growth Strategy Bylaw Number 1136, 2010 is deleted in its entirety and replaced with Section G 'Performance Monitoring', attached hereto as Schedule A;

- 2. The official citation for this bylaw is "Metro Vancouver Regional District Regional Growth Strategy Amendment Bylaw No. 1243, 2017". This bylaw may be cited as "Regional Growth Strategy Amendment Bylaw No. 1243, 2017".

Read a First time this \_\_\_\_\_ day of \_\_\_\_\_,

Read a Second time this \_\_\_\_\_ day of \_\_\_\_\_,

Read a Third time this \_\_\_\_\_ day of \_\_\_\_\_,

Passed and Finally Adopted this \_\_\_\_\_ day of \_\_\_\_\_,

RECEIVED  
MAY 11 2017  
Chris Plagnol  
Corporate Officer

Greg Moore  
Chair

# G Performance Monitoring

Performance monitoring allows for the informed review and update of the regional growth strategy as required. Metro Vancouver will produce annual reports on implementation of the regional growth strategy and progress towards its goals using the following measures. Some measures can be monitored in the short-term (1-2 years) while others can be monitored in the medium term (3-5 years).

## Regional Land Use Designations

### REGIONAL DESIGNATIONS AND OVERLAYS

As measured by:

- total and cumulative change in hectares of land in each of the six regional land use designations
- total and cumulative change in hectares of land in the Urban Containment Boundary
- total and cumulative change in number of Urban Centres
- total and cumulative change in number of Frequent Transit Development Areas

Short-term measure.

## Goal 1: Create a Compact Urban Area

### URBAN CONTAINMENT

As measured by:

- percent of regional dwelling unit growth located within the Urban Containment Boundary

Short-term estimate & medium-term cumulative measure.

### GROWTH IN PRIORITY AREAS

As measured by:

- percent of regional dwelling unit growth located in Urban Centres
- percent of regional dwelling unit growth located in Frequent Transit Development Areas

Short-term estimate & medium-term cumulative measure.

## Goal 2: Support a Sustainable Economy

### EMPLOYMENT IN PRIORITY AREAS

As measured by:

- percent of regional employment growth located in Urban Centres
- percent of regional employment growth located in Frequent Transit Development Areas

Medium-term measure.

### EMPLOYMENT ACCESSIBILITY

As measured by:

- average number of kilometres travelled for commute region-wide
- average number of minutes travelled for commute region-wide

Medium-term measure.

### INDUSTRIAL AND MIXED EMPLOYMENT AREAS

As measured by:

- percent of land designated Industrial and Mixed Employment that is developed

Medium-term measure.

### AGRICULTURAL AREAS

As measured by:

- percent of land designated Agricultural that is actively farmed

Medium-term measure.



Goal 3:  
Protect the Environment  
and Respond to Climate  
Change Impacts

ECOSYSTEM HEALTH

As measured by:

- hectares of land inventoried as a Sensitive or Modified Ecosystem
- percent of inventoried Sensitive and Modified Ecosystems rated high quality

Medium-term measure.

CLIMATE CHANGE MITIGATION

As measured by:

- tonnes and percent of regional greenhouse gas emissions produced by building and on-road transportation sources

Medium-term measure.

CLIMATE CHANGE PREPAREDNESS

As measured by:

- climate adaptation planning efforts (proxy measure)

Short-term measure.

Goal 4:  
Develop Complete Communities

HOUSING AFFORDABILITY

As measured by:

- percent of median household income spent on average housing and transportation cost

Medium-term measure.

HOUSING DIVERSITY

As measured by:

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

Short-term measure.

COMPLETE COMMUNITIES AND HEALTH

As measured by:

- walkability

Medium-term measure.

Goal 5:  
Support Sustainable  
Transportation Choices

TRAVEL MODE CHOICE

As measured by:

- percent of total trips that are private vehicle-based
- percent of residents within walking distance of the Frequent Transit Network

Medium-term measure.

ROAD AND VEHICLE USE AND SAFETY

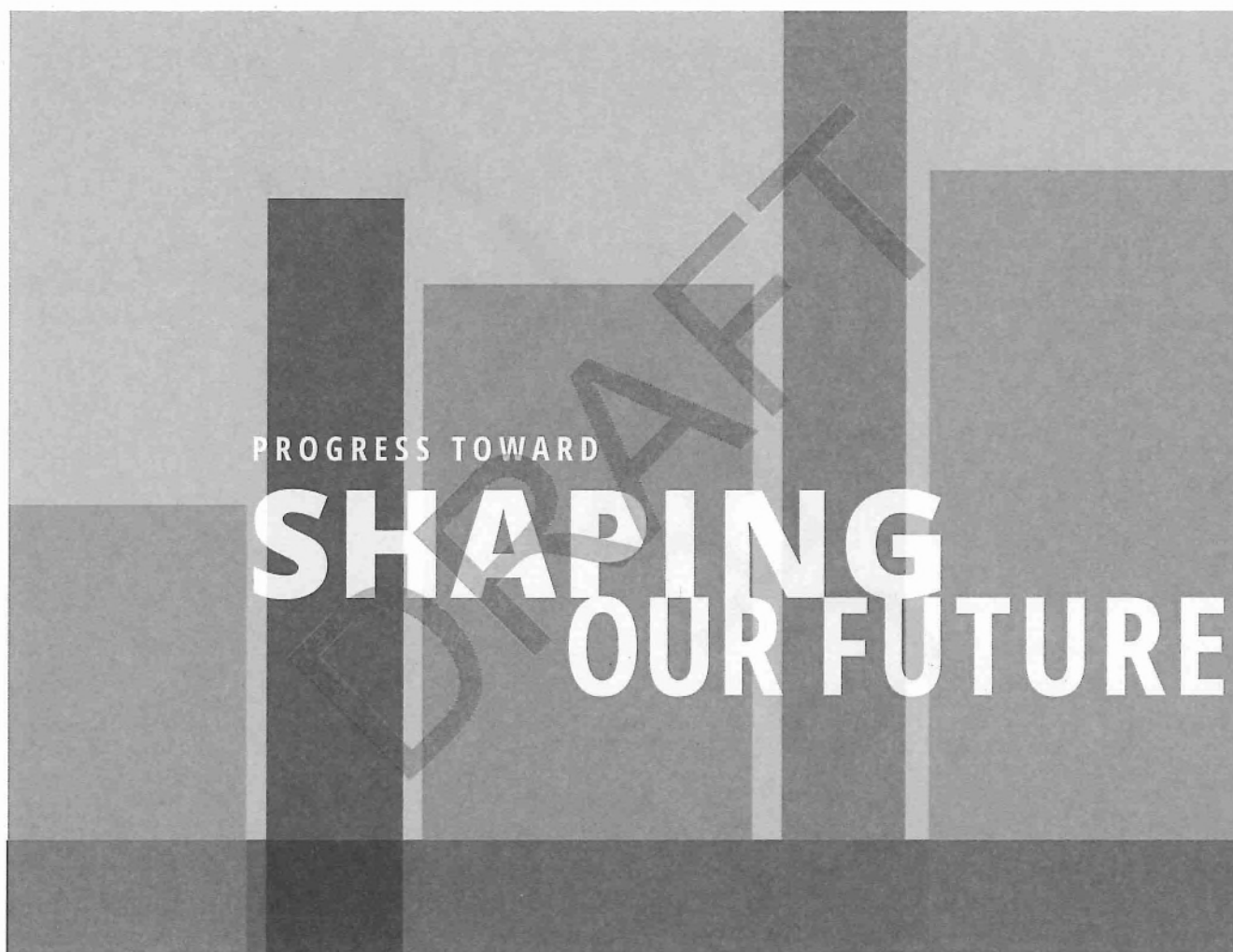
As measured by:

- annual per capita vehicle kilometres travelled

Medium-term measure.

67

## METRO 2040 PERFORMANCE MONITORING GUIDELINE



DRAFT: JANUARY 10, 2017

DRAFT

## TABLE OF CONTENTS

Introduction and Background.....	4
Metro 2040 Key Summary Measures.....	6
Regional Land Use Measures.....	8
Goal 1 Measures.....	10
Goal 2 Measures.....	18
Goal 3 Measures.....	28
Goal 4 Measures.....	36
Goal 5 Measures.....	46
Potential Future Measures.....	52
Appendix I.....	58



# INTRODUCTION AND BACKGROUND

## Metro Vancouver 2040: Shaping our Future

*Metro Vancouver 2040: Shaping our Future* (Metro 2040), the regional growth strategy, is the shared vision to guide urban growth in the province's largest metropolitan region.

*Metro 2040* was created, adopted, and continues to be implemented by Metro Vancouver (GVRD), 21 member jurisdictions and TransLink.

## The Importance of Performance Monitoring

The Progress toward Shaping Our Future annual reports monitor regional performance and provide a framework for discussions of *Metro 2040* implementation among Metro Vancouver Board members, member jurisdictions, TransLink, other regional agencies, and the general public. Metro Vancouver recognizes the important role performance monitoring plays in the implementation of the regional growth strategy and collective decision-making.

The *Metro 2040* performance measures provide the information necessary to benchmark and monitor our progress. Each year, the Greater Vancouver Regional District (GVRD) Board reviews the annual reports to evaluate the state of the region, how well we are doing and what issues may need further attention.

## Performance Monitoring Requirements

Annual reporting of *Metro 2040* is required by Part 13 of the British Columbia *Local Government Act*, and by *Metro 2040* Section 6.13.3. A list of Key Summary Measures (defined in the following section, and provided on page 8 and 9 of this document) were adopted into *Metro 2040* (Section G: Performance Monitoring).

## About this Guideline

The Performance Monitoring Guideline provides additional, often more detailed or technical performance measures that are not included in *Metro 2040* Section G, and includes detailed information about all performance measures, such as sources, methodologies and monitoring timelines.

The intent of the Guideline is to provide a resource to those using the performance monitoring data, including regional and municipal staff and researchers. In addition, the Guideline is intended to provide an added level of transparency and accountability in the planning process to politicians and the public. Detailing performance monitoring methodologies and intents, as they relate to the policies in *Metro 2040*, ensures progress toward goals is being tracked clearly and consistently over time.

The Guideline includes information about types of performance measures, reporting requirements, and communication mediums. The bulk of the Guideline provides detailed information about the intent, methodology, data source, and reporting timeline for each measure, including those Key Summary Measures provided in Section G of *Metro 2040*, and other detailed / technical measures.

The Guideline can be updated by the GVRD Board if new measures or data sources are identified in the future.

## Reporting Formats

Performance Measures are reported online as data is available. An annual report is provided to the GVRD Board and member jurisdictions, highlighting updates to Key Summary Measures and providing additional information about implementation as necessary.

## Procedural Reporting

Procedural reporting is also conducted annually and provided to the GVRD Board and member jurisdictions. The *Greater Vancouver Regional District Regional Growth Strategy Procedures Bylaw No. 1148, 2011 (RGS Procedures Bylaw)* was adopted by the GVRD Board in July 2011 at the same time as the regional growth strategy. The *RGS Procedures Bylaw* includes requirements for reporting on procedural performance associated with *Metro 2040*, such as the number of amendments processed and resources required to implement the regional growth strategy.

Procedural reporting details information about supporting work to implement *Metro 2040*, progress on the completion of, or updates to regional context statements, and *Metro 2040* amendments (including status and processing times for each amendment), as well as information about costs and staffing related to implementation of the regional growth strategy.

## Measure Types and Purpose

### KEY SUMMARY MEASURES

A measure of impact/outcome of Goals and Strategies.

Key Summary Measures provide an overview of how well *Metro 2040* Goals and Strategies are being achieved. Key Summary Measures are targeted to a broader, non-technical audience and are meant to quickly illustrate progress. In annual reporting, these measures will be communicated as a single number or chart that can easily depict change over time.

### STRATEGY PERFORMANCE MEASURES

A measure of impact/outcome of Goals and Strategies.

Strategy Performance Measures provide more detail on achievement of specific Strategies and policy actions. These measures are meant to support implementation of *Metro 2040* and are aimed at a more technical audience. Detailed datasets will be provided online.

### CONTEXT MEASURES

A description of broader trends to help make sense of other measures in the broader planning context.

These measures are helpful for all audiences and provide important contextual or background information, particularly in communications that tell the story of change or progress.

### PARTICIPATION MEASURES

A measure of what's been accomplished by Metro Vancouver or member jurisdictions towards achievement of goals.

These measures are primarily for use by planners and analysts to make comparisons of the effect of different policies on a given planning challenge

## Reporting Timelines

Some measures are reported in the short-term (every 1-2 years), while some are reported in medium-term intervals (every 3-5 years).

Measures that are dependent upon Census data will only be reported in 5 year intervals, following the release of Census data and the procurement of custom run data.

Measures that are dependent on Metro Vancouver inventories will be reported in 3-5 year intervals following inventory updates.

Measures that are dependent on external data collection, such as TransLink's Trip Diary will be updated following data releases, most typically at 3-5 year intervals.

Metro Vancouver will make an effort to update, or estimate change for measures on short-term basis as data and resources allow.



# METRO 2040 KEY SUMMARY MEASURES

Reports on the Key Summary measures listed in this section will be provided annually. Some measures can be monitored in the short-term (1-2 years) while others can be monitored in the medium term (3-5 years). Some measures are noted as proxy measures and will be replaced in the future as improved data is available.

## Regional Land Use Designations

### REGIONAL DESIGNATIONS AND OVERLAYS

As measured by:

- total and cumulative change in hectares of land in each of the six regional land use designations
- total and cumulative change in hectares of land in the Urban Containment Boundary
- total and cumulative change in number of Urban Centres
- total and cumulative change in number of Frequent Transit Development Areas

Short-term measure.

## Goal 1: Create a Compact Urban Area

### URBAN CONTAINMENT

As measured by:

- percent of regional dwelling unit growth located within the Urban Containment Boundary

Short-term estimate & medium-term cumulative measure.

### GROWTH IN PRIORITY AREAS

As measured by:

- percent of regional dwelling unit growth located in Urban Centres
- percent of regional dwelling unit growth located in Frequent Transit Development Areas

Short-term estimate & medium-term cumulative measure.

## Goal 2:

## Support a Sustainable Economy

### EMPLOYMENT IN PRIORITY AREAS

As measured by:

- percent of regional employment growth located in Urban Centres
- percent of regional employment growth located in Frequent Transit Development Areas

Medium-term measure.

### EMPLOYMENT ACCESSIBILITY

As measured by:

- average number of kilometres travelled for commute region-wide
- average number of minutes travelled for commute region-wide

Medium-term measure.

### INDUSTRIAL AND MIXED EMPLOYMENT AREAS

As measured by:

- percent of land designated Industrial and Mixed Employment that is developed

Medium-term measure.

### AGRICULTURAL AREAS

As measured by:

- percent of land designated Agricultural that is actively farmed

Medium-term measure.

Goal 3:  
Protect the Environment  
and Respond to Climate  
Change Impacts

ECOSYSTEM HEALTH

As measured by:

- hectares of land inventoried as a Sensitive or Modified Ecosystem
- percent of inventoried Sensitive and Modified Ecosystems rated high quality

Medium-term measure.

CLIMATE CHANGE MITIGATION

As measured by:

- tonnes and percent of regional greenhouse gas emissions produced by building and on-road transportation sources

Medium-term measure.

CLIMATE CHANGE PREPAREDNESS

As measured by:

- climate adaptation planning efforts (proxy measure)

Short-term measure.

Goal 4:  
Develop Complete Communities

HOUSING AFFORDABILITY

As measured by:

- percent of median household income spent on average housing and transportation cost

Medium-term measure.

HOUSING DIVERSITY

As measured by:

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

Short-term measure.

COMPLETE COMMUNITIES AND HEALTH

As measured by:

- walkability

Medium-term measure.

Goal 5:  
Support Sustainable  
Transportation Choices

TRAVEL MODE CHOICE

As measured by:

- percent of total trips that are private vehicle-based
- percent of residents within walking distance of the Frequent Transit Network

Medium-term measure.

ROAD AND VEHICLE USE AND SAFETY

As measured by:

- annual per capita vehicle kilometres travelled

Medium-term measure.

# REGIONAL LAND USE MEASURES

## Regional Land Use Designations and Overlays

### Key Summary Measures

The following Key Summary Measures are listed in *Metro 2040* Section G: Performance Monitoring. These measures will be reported out regularly as data becomes available to illustrate progress.

<b>Regional Land Use Designations</b> CHANGE IN REGIONAL LAND USE DESIGNATIONS Key Summary Measure	short term
<b>AS MEASURED BY</b> <ul style="list-style-type: none"><li>• Total and cumulative change in hectares of land in each of the six regional land use designations.</li><li>• Total and cumulative change in hectares of land within the Urban Containment Boundary.</li></ul>	
<b>REPORTING &amp; TIMELINE</b> Annual and cumulative measure.  Reported online and in annual reports as data is available.	
<b>SOURCE</b> Metro Vancouver Regional Planning geodata for the <i>Metro 2040</i> regional land use designations.	
<b>METHODOLOGY</b> Changes to the regional land use designations occur only through GVRD Board adopted amendments or generally consistent amendments within Regional Context Statements adopted by municipal Councils and accepted by the GVRD Board. Cumulative change is tracked from the adoption of the plan. Major amendments are noted.	
<b>INTENT</b> Regional land use designations and overlays are key tools in achieving the five goals of <i>Metro 2040</i> . This measure monitors annual and cumulative change in the designations over time.	



## Regional Land Use Designations

### CHANGE IN REGIONAL LAND USE OVERLAYS

#### Key Summary Measure

short  
term

#### AS MEASURED BY

- Total and cumulative change in number and hectares of Urban Centres.
- Total and cumulative change in number and hectares of Frequent Transit Development Areas.

#### REPORTING & TIMELINE

Annual and cumulative measure.

Reported online and in annual reports as data is available.

#### SOURCE

Metro Vancouver Regional Planning geodata for *Metro 2040* Urban Centre / Frequent Transit Development Area (FTDA) boundaries.

#### METHODOLOGY

Urban Centres and FTDA's, and their boundaries, are identified Regional Context Statements adopted by municipal Councils and accepted by the GVRD Board. FTDA's are created in consultation with the member jurisdiction, Metro Vancouver and TransLink. Cumulative change is tracked from the adoption of the plan. Major amendments are noted.

#### INTENT

Regional land use designations and overlays are key tools in achieving the five goals of *Metro 2040*. This measure monitors annual and cumulative change in the overlays over time.

# GOAL 1 MEASURES

## Create a Compact Urban Area

### Key Summary Measures

The following Key Summary Measures are listed in *Metro 2040* Section G: Performance Monitoring. These measures will be reported out regularly as data becomes available to illustrate progress.

<b>Urban Containment</b> GROWTH WITHIN THE URBAN CONTAINMENT BOUNDARY Key Summary Measure	
<b>AS MEASURED BY</b>	
<ul style="list-style-type: none"><li>Percent of regional dwelling unit growth located within the Urban Containment Boundary.</li></ul>	
<b>REPORTING &amp; TIMELINE</b>	
Annual estimate (mid-year to mid-year). Five-year cumulative measure reported following Census data release.	
Reported online and in annual reports as data is available.	
<b>SOURCE</b>	
Metro Vancouver Regional Planning geodata for the <i>Metro 2040</i> General Urban Containment Boundary.	
Five-year intervals: Statistics Canada, Census.	
Annually (mid-year to mid-year): BC Statistics, CMHC Completions and Demolitions, Municipal Building Permits (for estimated residential growth).	
<b>METHODOLOGY</b>	
Residential growth is estimated by Metro Vancouver and reported annually. Employment growth is reported at 5-year intervals following the release of Census data.	
Changes to the UCB occur only through GVRD Board adopted amendments or regionally consistent amendments within adopted and accepted RCSs. Growth is tracked based on the 2011 Urban Containment Boundary.	
<b>INTENT</b>	
<i>Metro 2040</i> targets 98% of dwelling unit growth to areas within the Urban Containment Boundary. This measure illustrates the performance of the Urban Containment Boundary as a tool to contain growth.	

## Growth in Priority Areas

### RESIDENTIAL DEVELOPMENT IN PRIORITY AREAS

#### Key Summary Measure

short  
term

#### AS MEASURED BY

- Percent of regional dwelling unit growth located in Urban Centres.
- Percent of regional dwelling unit growth located in Frequent Transit Development Areas.

#### REPORTING & TIMELINE

Annual estimate (mid-year to mid-year). Five-year cumulative measure reported following Census data release.

Combined percentage of regional growth to Urban Centres and FTDA's provided in annual reports as data is available. Breakdown by individual Urban Centres and FTDA's reported online as data is available.

#### SOURCE

Metro Vancouver Regional Planning geodata for *Metro 2040* Urban Centre / Frequent Transit Development Area (FTDA) boundaries.

Five-year intervals: Statistics Canada, custom Census runs.

Annually (mid-year to mid-year): Residential growth shares estimated based on BC Statistics, CMHC Completions and Demolitions, Municipal Building Permits.

#### METHODOLOGY

Share of residential growth by Urban Centre type and for areas in close proximity to transit is estimated by Metro Vancouver and reported annually. Detailed figures for Urban Centres and FTDA's are reported at 5-year intervals following the release of Census data.

Metro Vancouver maintains geodata for Urban Centre and FTDA boundaries and submits the geographies to Statistics Canada for custom Census data. Boundaries are established and adjusted through regional context statements adopted by municipal Councils and accepted by the GVRD Board.


#### INTENT

*Metro 2040* targets 40% of dwelling unit growth to Urban Centres, for a total of 31% of dwelling units to be located in Urban Centres by 2041. *Metro 2040* also targets 28% of dwelling unit growth, for a total of 27% of dwelling units to be located in FTDA's by 2041.



## Supplementary Measures

The following Strategy Performance, Context, and Participation Measures are supplementary to the Key Summary Measures. These measures may be reported out online as data and resources are available. The intent of supplementary measures is to illustrate progress, serve as a resource to member jurisdictions, and inform implementation.

<b>Contain Development</b> <b>REMAINING URBAN DEVELOPMENT</b> Strategy Performance Measure	
<b>AS MEASURED BY</b> <ul style="list-style-type: none"> <li>Percent of regional dwelling unit growth occurring in remaining General Urban areas.</li> <li>Net change in number of hectares of remaining General Urban areas.</li> </ul>	
<b>REPORTING &amp; TIMELINE</b> Annual estimate (mid-year to mid-year). Reported online annually.	
<b>SOURCE</b> Metro Vancouver Regional Planning geodata for remaining areas in the <i>Metro 2040</i> General Urban designation. BC Statistics, CMHC Completions and Demolitions and Municipal Building Permits.	
<b>METHODOLOGY</b> Remaining urban areas are lands that have a General Urban designation, but are not yet substantially developed. These areas have been identified through aerial photos and assessment of municipal plans. Absorption estimates are based on analysis of the above residential development statistics sources.	
<b>INTENT</b> Metro Vancouver estimates that 75% to 80% of growth will occur through infill or redevelopment in established General Urban areas. The remaining 20-25% will occur through new development in remaining General Urban areas.	

## Contain Development

### ANNUAL GROWTH

#### Context Measure

short  
term

#### AS MEASURED BY

- Annual regional and municipal population growth.
- Annual regional and municipal dwelling unit growth.
- Annual regional and municipal employment growth.

#### REPORTING & TIMELINE

Annual estimate (mid-year to mid-year). Five-year cumulative measure reported following Census data release.

Reported online annually.

#### SOURCE

Five-year intervals: Statistics Canada, Census.

Annually (mid-year to mid-year): BC Statistics, CMHC Completions and Demolitions, Municipal Building Permits (for population and dwelling units). Annual regional employment estimated as a percentage of total population.

#### REPORTING METHODOLOGY & TIMELINE

Total and growth in population and dwelling units reported annually for Metro Vancouver and member jurisdictions based on Metro Vancouver analysis; 5-year reporting from Census, including estimated Census undercount.

Total and growth in employment reported annually for Metro Vancouver (estimated as a percentage of the total population) and on 5-year basis for the region and member jurisdictions from Census, including estimated Census undercount.

#### INTENT

Growth projections are generated by a regional growth model and confirmed with member jurisdictions. The projections are not targets. Growth that vastly and consistently differs from the projections may trigger an update to the growth model, and potential policy considerations.

## Growth in Priority Areas

### DENSITY IN PRIORITY AREAS

Strategy Performance Measure



#### AS MEASURED BY

- Average number of dwelling units per hectare of land with a General Urban designation within Urban Centres.
- Average number of dwelling units per hectare of land with a General Urban designation within Frequent Development Areas.
- Average number of dwelling units per hectare of land with a General Urban designation outside of Urban Centres and Frequent Development Areas within the Urban Containment Boundary.

#### REPORTING & TIMELINE

Five-year estimate.

Reported online every five-years.

#### SOURCE

Metro Vancouver Regional Planning geodata for lands with a *Metro 2040* General Urban designation and Urban Centre / Frequent Transit Development Area (FTDA) boundaries.

Metro Vancouver Growth Model (traffic zone analysis): Statistics Canada custom Census runs; BC Statistics, CMHC Completions and Demolitions, Municipal Building Permits.

#### METHODOLOGY

Density is measured as a ratio of dwelling units to *Metro 2040* General Urban area (hectares) and Urban Centre / FTDA geographies. The measure is best illustrated graphically with Urban Centre and FTDA boundaries, and the Frequent Transit Network overlaid.

This measure is not monitored annually as changes would not accurately depict long-term trends.

#### INTENT

Higher density growth is anticipated to occur in Urban Centres, particularly Regional City Centres, and in areas along the Frequent Transit Network.

Protect Other Lands  
SEWER SERVICE CONNECTIONS  
Strategy Performance Measure

short  
term

AS MEASURED BY

- Number and status of new regional sewerage service connection applications made for areas outside of the Urban Containment Boundary (UCB) to lands with an Agricultural, Rural, or Conservation and Recreation regional designation.

REPORTING & TIMELINE

Annual measure (January to December).

Reported online annually.

SOURCE

Metro Vancouver Liquid Waste Services and Regional Planning Departments.

METHODOLOGY

Status of Metro Vancouver applications (submitted, approved, denied, or under consideration) by designation area outside of the UCB, and percent of total applications outside of the UCB for the calendar year (January to December).

INTENT

While sewerage extensions beyond the Urban Containment Boundary are generally not expected, *Metro 2040* and associated guidelines allow for such extensions under certain exceptions. Sewerage extension applications may be approved without resulting in a net increase in sewerage connections outside of the UCB.



## Protect Other Lands

### RURAL DEVELOPMENT

#### Strategy Performance Measure

short  
term

#### AS MEASURED BY

- Number of new residential developments by type and municipality on land designated Rural.

#### REPORTING & TIMELINE

Annual estimate (mid-year to mid-year).

Reported online annually.

#### SOURCE

Metro Vancouver Regional Planning geodata of lands with a Rural regional designation.

BC Statistics, CMHC Completions and Demolitions and Municipal Building Permits.

#### METHODOLOGY

Total residential growth estimated annually and categorized broadly as follows:

- Large lot single family (one acre or more)
- Small lot single family (less than one acre)
- Cluster development (lot with more than one unit where the undeveloped portion of the lot is greater than the developed portion of the lot).

#### INTENT

About 1% of residential growth is anticipated to occur on lands designated Rural by 2040 and the form of this growth has implications for regional planning. The intent of *Metro 2040* is to maintain the rural character of lands with the Rural designation, however, there is no prescribed density for this lands.


DRAFT

# GOAL 2 MEASURES

## Support a Sustainable Economy

### Key Summary Measures

The following Key Summary Measures are listed in *Metro 2040* Section G: Performance Monitoring. These measures will be reported out regularly as data becomes available to illustrate progress.

<b>Employment in Priority Areas</b> <b>JOB GROWTH IN PRIORITY AREAS</b> Key Summary Measure	
<b>AS MEASURED BY</b> <ul style="list-style-type: none"> <li>Percent of regional employment growth located in Urban Centres.</li> <li>Percent of regional employment growth located in Frequent Transit Development Areas.</li> </ul>	
<b>REPORTING &amp; TIMELINE</b> Five-year measure reported following Census data release.  Combined percentage of regional growth to Urban Centres and FTDA's provided in annual reports as data is available. Breakdown by individual Urban Centres and FTDA's reported online as data is available.	
<b>SOURCE</b> Metro Vancouver Regional Planning geodata for <i>Metro 2040</i> Urban Centre / Frequent Transit Development Area (FTDA) boundaries.  Statistics Canada custom data runs for geographic areas above, Census / NHS Place of Work data.	
<b>METHODOLOGY</b> Urban Centre and FTDA boundaries are established and adjusted through regional context statements adopted by municipal councils and accepted by the GVRD Board.  Statistics Canada classifies jobs as having a usual / fixed place of work, working at home, or having no fixed workplace. This measure includes the total employed population aged 15 years and over with jobs with a usual / fixed place of work, or working at home.	
<b>INTENT</b> <i>Metro 2040</i> targets 50% of employment growth to Urban Centres, for a total 43% of employment to be located in Urban Centres by 2041. <i>Metro 2040</i> also targets 27% of employment growth to FTDA's, 24% of employment to be located in FTDA's by 2041.	

## Employment Accessibility

### COMMUTE TIME AND DISTANCE

#### Key Summary Measure

medium  
term

#### AS MEASURED BY

- Average number of kilometres travelled for commute region-wide.
- Average number of minutes travelled for commute region-wide.

#### REPORTING & TIMELINE

Five-year measure reported following Census and Trip Diary data release.

Regional averages provided in annual reports as data is available. Breakdown by mode and subregion reported online as data is available.

#### SOURCE

Statistics Canada Census / NHS median commuting durations and custom data runs for cross tabs and geographic areas.

TransLink Regional Trip Diary Data or Analysis Report, trip length by trip purpose.

#### METHODOLOGY

Statistics Canada classifies jobs as having a usual / fixed place of work, working at home, or having no fixed workplace. This measure includes the total employed population aged 15 years and over with a usual place of work or no fixed workplace address.

TransLink's Trip Diary estimates trip data on a typical fall weekday. Each trip is allocated to a trip purpose, one of which is Work / Post Secondary (including return trips home from those locations). Trip lengths are estimated for each reported trip based on the geocoded locations of trip start and end points.

#### INTENT

*Metro 2040* aims to support more employment close to where people live. Average commute length and duration serve as indicators of employment accessibility. While an overall reduction in commute length and duration is a positive, analysis of this measure should be carefully balanced with analysis of Employment in Priority Areas measures, as commute length and duration could increase as use of transit increases, indicating jobs and dwelling units are locating in close proximity to transit, but jobs are not being filled by local residents.



## Industrial and Mixed Employment Areas

### INDUSTRIAL AND MIXED EMPLOYMENT LAND USE

#### Key Summary Measure

medium  
term

#### AS MEASURED BY

- Percent of land designated Industrial or Mixed Employment in *Metro 2040* that is 'developed'.

#### REPORTING & TIMELINE

Five-year (anticipated) measure reported following each update of the Metro Vancouver Industrial Lands Inventory.

#### SOURCE

Metro Vancouver Industrial Lands Inventory (ILI).

Metro Vancouver Regional Planning geodata for the *Metro 2040* Industrial and Mixed Employment designation.

#### METHODOLOGY

The ILI inventories parcels that are regionally or municipally designated or zoned for industrial uses. Some areas, including the Vancouver International Airport, and road and utility rights-of-way, though designated Industrial or Mixed Employment in *Metro 2040*, are not captured in the inventory.

For the purposes of annual reporting, 'developed' lands are those with industrial and quasi-industrial uses. 'Developed' lands may also include lands with some non-industrial uses that are building intensive and not likely to redevelop to industrial uses. 'Vacant' lands are those lands that are anticipated to redevelop to industrial uses. Specifically, these include lands that are municipally designated industrial, but currently are used for agriculture, residential, or resource extraction.

#### INTENT

*Metro 2040* aims to ensure there is sufficient industrial capacity to meet the needs of the regional economy. Estimated absorption rates are provided in the Metro Vancouver 2015 Industrial Lands Inventory - Summary Report. Further information about supply and demand will be made available through the Industrial Lands Initiative.

## Agricultural Areas

### AGRICULTURAL LAND USE

#### Key Summary Measure

medium  
term

#### AS MEASURED BY

- Percent of land designated Agricultural in *Metro 2040* that is 'actively farmed'.

#### REPORTING & TIMELINE

Five-year (anticipated) measure reported following each update of the Regional Agricultural Land Use Inventory for Metro Vancouver.

#### SOURCE

Ministry of Agriculture (MoA), Regional Agricultural Land Use Inventory (ALUI), The Metro Vancouver Regional Report and data made available by the MoA.

Metro Vancouver Regional Planning geodata for the *Metro 2040* Agricultural designation.

Agricultural Land Commission geodata for the Agricultural Land Reserve (ALR) boundaries.

#### METHODOLOGY

The ALUI inventories all parcels that are within the ALR, have a *Metro 2040* Agricultural designation, or have farm class status.

For the purposes of annual reporting, actively farmed includes land that was farmed at the time of the inventory, as well as areas that support farming, such as farm buildings and roads. Land with potential for farming includes lands that do not have any significant topographical, physical, or existing land use constraints (natural, semi-natural, managed vegetation, or non-built/bare areas. Land that is unavailable for farming is land that has an existing incompatible use (e.g. parks, golf courses, residences), land with site limitations (drainage or topography), or rights-of-way.

#### INTENT

*Metro 2040* aims to increase actively farmed land.

## Supplementary Measures

The following Strategy Performance, Context, and Participation Measures are supplementary to the Key Summary Measures. These measures may be reported out online as data and resources are available. The intent of supplementary measures is to illustrate progress, serve as a resource to member jurisdictions, and inform implementation.

<div>Employment in Priority Areas</div> <div>OFFICE DEVELOPMENT IN PRIORITY AREAS</div> <div>Strategy Performance Measure</div> <div>short term</div>
<div>AS MEASURED BY</div> <ul style="list-style-type: none"> <li>Percent of office space development locating in Urban Centres by Urban Centre Type.</li> <li>Percent of office space development locating in FTDA's.</li> <li>Percent of office space development locating within 400 metres of the Frequent Transit Network or within 800 metres of a rapid transit station.</li> </ul>
<div>REPORTING &amp; TIMELINE</div> <p>Online as data is available.</p>
<div>SOURCE</div> <p>Metro Vancouver Regional Planning geodata for <i>Metro 2040</i> Urban Centre / Frequent Transit Development Area (FTDA) boundaries.</p> <p>Metro Vancouver Office Inventory (geodata).</p> <p>Frequent Transit Network (FTN) and rapid transit station geodata is provided by TransLink; latest versions are available upon request.</p>
<div>METHODOLOGY</div> <p>The inventory includes all offices in region 10,000 square feet or larger and is based on commercial real estate brokers data and municipal data.</p> <p>The FTN is a network where transit service runs at least every 15 minutes in both directions throughout the day and into the evening, every day of the week. A 400 metre buffer around the FTN is used to identify a walk catchment (approximately 5 minutes) to frequent transit service, and an 800 metre buffer around rapid transit stations is used to identify a walk catchment (approximately 10 minutes) to rapid transit service.</p> <p>Rapid transit includes SkyTrain and Canada Line stations, as well as Sea Bus if frequent service is provided, not West Coast Express stations.</p>
<div>INTENT</div> <p><i>Metro 2040</i> encourages locating office and retail development in Urban Centres to support employment growth in these locations and to support the development of complete communities with access to a range of services and amenities.</p>



## Employment in Priority Areas

### RETAIL DEVELOPMENT IN PRIORITY AREAS

Strategy Performance Measure

medium  
term

#### AS MEASURED BY

- Estimated percent of businesses in the retail trade sector located in Urban Centres and Frequent Transit Development Areas.
- Employed Labour Force in Urban Centres and Frequent Transit Development Areas in the retail trade sector.

#### REPORTING & TIMELINE

Online as data is available.

#### SOURCE

Metro Vancouver Regional Planning geodata for *Metro 2040* Urban Centre / Frequent Transit Development Area (FTDA) boundaries.

Metro Vancouver Dun and Bradstreet Business Database (geodata), purchased by Metro Vancouver. Some use limitations apply.

Statistics Canada Census Place of Work data.

#### METHODOLOGY

Businesses identified with a primary North American Industry Classification System (NAICS) code beginning in 44 or 45 are classified as Retail Trade. The Retail Trade sector comprises establishments engaged in retailing merchandise, generally without transformation, and rendering services incidental to the sale of merchandise. The category includes both store and non-store retails. Retail establishments include office supply stores, computer and software stores, building materials dealers, plumbing supply stores, and electrical supply stores. Catalog showrooms, gasoline stations, automotive dealers and mobile home dealers are also treated as store retailers.

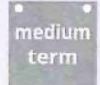
#### INTENT

*Metro 2040* encourages locating office and retail development in Urban Centres to support employment growth in these locations and to support the development of complete communities with access to a range of services and amenities.

## Employment Accessibility

### EMPLOYMENT LEVELS

#### Context Measure



#### AS MEASURED BY

- Jobs to labour force ratio for each subregion.

#### REPORTING & TIMELINE

Online as data is available.

#### SOURCE

Metro Vancouver established subregions based on jurisdictional boundaries for the purpose of *Metro 2040* monitoring

The subregions are:

- North Shore (North Vancouver City, North Vancouver District, West Vancouver, and Lions Bay)
- Vancouver - UBC/UEL
- Richmond - Delta - Tsawwassen First Nation
- Burnaby - New Westminster
- Surrey - White Rock
- Northeast Sector (Coquitlam, Port Coquitlam, Port Moody, Anmore and Belcarra)
- Ridge - Meadows (Maple Ridge and Pitt Meadows)
- Langleys (Langley City and Langley Township)

Statistics Canada Census / National Household Survey, including estimated Census undercount; Statistics Canada Labour Force Survey.

#### METHODOLOGY

Statistics Canada classifies jobs as having a usual / fixed place of work, working at home, or having no fixed workplace. This measure includes the total employed population aged 15 years and over with jobs with a usual / fixed place of work, or working at home.

#### INTENT

*Metro 2040* aims to support more employment close to where people live. This measure tracks employment growth and distribution as context for economic activity and employment across the region.



## Employment Accessibility

### EMPLOYMENT TYPES AND LOCATIONS

#### Context Measure

medium  
term

#### AS MEASURED BY

- Total number and growth of employment by sector for each subregion.

#### REPORTING & TIMELINE

Online as data is available.

#### SOURCE

Metro Vancouver established subregions based on municipal boundaries for the purpose of *Metro 2040* monitoring.

The subregions are:

- North Shore (North Vancouver City, North Vancouver District, West Vancouver, and Lions Bay)
- Vancouver - UBC/UEL
- Richmond - Delta - Tsawwassen First Nation
- Burnaby - New Westminster
- Surrey - White Rock
- Northeast Sector (Coquitlam, Port Coquitlam, Port Moody, Anmore and Belcarra)
- Ridge - Meadows (Maple Ridge and Pitt Meadows)
- Langleys (Langley City and Langley Township)

Statistics Canada Census / National Household Survey (place of work), including estimated Census undercount; Statistics Canada Labour Force Survey.

#### METHODOLOGY

Statistics Canada classifies jobs as having a usual / fixed place of work, working at home, or having no fixed work location. This measure includes the total employed population aged 15 years and over with jobs with a usual / fixed place of work, or working at home.

Employment is measured by industry sector and industries may employ workers with a variety of occupations, such as a mining company with an accountant on staff.

#### INTENT

*Metro 2040* aims to support a diverse regional economy. This measure tracks employment growth and distribution as context for economic activity and employment across the region.

## Agricultural Areas

### ACTIVE FOOD PRODUCING LANDS

#### Strategy Performance Measure

medium  
term

#### AS MEASURED BY

- Percent of lands designated Agricultural with active food production.

#### REPORTING & TIMELINE

Online as data is available.

#### SOURCE

Ministry of Agriculture (MoA), Regional Agricultural Land Use Inventory (ALUI), The Metro Vancouver Regional Report and data made available by the MoA.

Metro Vancouver Regional Planning geodata for the *Metro 2040* Agricultural designation.

Agricultural Land Commission geodata for the Agricultural Land Reserve (ALR) boundaries.

#### METHODOLOGY

The ALUI inventories all parcels that are within the ALR, have a *Metro 2040* Agricultural designation, or have farm class status.

For the purposes of annual reporting, lands under active food production are based on those lands captured within the ALUI as actively farmed cultivated land and greenhouse area. Food producing lands include lands actively farmed with berry, vegetable, cereal, vine fruit and nut tree, specialty crop, mushroom crop barn activities, as well as greenhouses with vegetable activities. Actively farmed forage and pasture land used for livestock activities are included, but those with primary horse activities are excluded. Bare and fallow lands and lands in transition are excluded. Although some nursery operations produce fruit trees, berry bushes and vegetable transplants, they are excluded as they are not the primary activity. Floriculture activities and greenhouses with floriculture and nursery activities are also excluded.

#### INTENT

*Metro 2040* aims to increase actively farmed land with an emphasis food production.

DRAFT



# GOAL 3 MEASURES

## Protect the Environment and Respond to Climate Change Impacts

### Key Summary Measures

The following Key Summary Measures are listed in *Metro 2040* Section G: Performance Monitoring. These measures will be reported out regularly as data becomes available to illustrate progress.

<p><b>Ecosystem Health</b></p> <p>SENSITIVE ECOSYSTEMS QUALITY AND QUANTITY</p> <p>Key Summary Measure</p>	<p>medium term</p>
<p><b>AS MEASURED BY</b></p> <ul style="list-style-type: none"> <li>Hectares of land inventoried as a Sensitive or Modified Ecosystem.</li> <li>Percent of inventoried Sensitive and Modified Ecosystems rated high quality.</li> </ul>	
<p><b>REPORTING &amp; TIMELINE</b></p> <p>Five-year (anticipated) measure reported following each update of the Metro Vancouver Sensitive Ecosystem Inventory.</p> <p>Regional totals and averages provided in annual reports as data is available. Breakdown by quality and subregion reported online as data is available.</p>	
<p><b>SOURCE</b></p> <p>Metro Vancouver Sensitive Ecosystem Inventory (geodata).</p>	
<p><b>METHODOLOGY</b></p> <p>The Sensitive Ecosystem Inventory (SEI) tracks ecosystems throughout the region as a means of monitoring ecological health. The SEI was developed using provincial standards and identifies and map ecologically significant and relatively unmodified 'Sensitive Ecosystems', including wetlands, older forests and woodlands as well as some 'Modified Ecosystems' which are human modified but still have ecological value and importance to biodiversity (such as young forests).</p> <p>The 'quality' of a Sensitive or Modified Ecosystem is determined through evaluation of condition, landscape context and size. Condition is an assessment of disturbance factors within and immediately adjacent to a the area. Landscape context is an assessment of the land cover around an area and is a measure of the degree of fragmentation. Size is also considered because larger sites are generally better able to function more naturally than smaller sites of the same ecosystem.</p>	
<p><b>INTENT</b></p> <p><i>Metro 2040</i> aims to protect and enhance natural features and their connectivity. The SEI provides information about change over time and can help to focus ecosystem protection and enhancement efforts.</p>	

## Climate Change Mitigation

### GREENHOUSE GAS EMISSIONS

#### Key Summary Measure

medium  
term

#### AS MEASURED BY

- Tonnes and percent of regional greenhouse gas emissions produced by building and on-road transportation sources.

#### REPORTING & TIMELINE

Five-year (anticipated) measure reported following each update of the Lower Fraser Valley Emissions Inventory.

#### SOURCE

The Lower Fraser Valley Emissions Inventory and Forecast and Backcast is developed approximately every five years.

#### METHODOLOGY

The 2010 emissions inventory provides information on the types of air emission sources in the Lower Fraser Valley, their location and the amount of air contaminants emitted, for the year 2010. Greenhouse gases included in the emissions inventory are, Carbon dioxide (CO<sub>2</sub>), Methane (CH<sub>4</sub>), and Nitrous oxide (N<sub>2</sub>O). Of the greenhouse gases, CO<sub>2</sub> is the primary contributor and has the most relevant implications for climate change. Building emission sources include commercial, institutional and residential buildings, and on-road transportation sources include light-duty and heavy-duty vehicles.

#### INTENT

*Metro 2040* targets a 33% reduction in GHG emissions below 2007 levels by 2020, and an 80% reduction below 2007 levels by 2050.



## Climate Change Preparedness

### CLIMATE ADAPTATION PLANNING EFFORTS

Proxy Key Summary Measure / Participation Measure

medium  
term

#### AS MEASURED BY

- Climate adaptation planning efforts (proxy measure).

#### REPORTING & TIMELINE

Online and in annual reports as new information is available.

#### SOURCE

Baseline information derived from The Climate Adaptation Scan and Gap Analysis Report (2015). Updates requested from Regional Planning Advisory Committee as appropriate (approximately every 2-3 years).

#### METHODOLOGY

Climate change adaptation efforts are often embedded in other policy documents or management plans, such as Official Community Plans, development plans, detailed environmental management plans, general climate change plans, or emergency management plans. This measures specifically tracks natural hazard risk assessments, natural hazard management plans, or climate change adaptation plans by municipality.

#### INTENT

*Metro 2040* aims to improve the ability to withstand climate change and natural hazard risks (e.g. earthquake, flooding, erosion, subsidence, mudslides, interface fires).

DRAFT

## Supplementary Measures

The following Strategy Performance, Context, and Participation Measures are supplementary to the Key Summary Measures. These measures may be reported out online as data and resources are available. The intent of supplementary measures is to illustrate progress, serve as a resource to member jurisdictions, and inform implementation.

<b>Ecosystem Health</b> <b>ENVIRONMENTAL PROTECTION EFFORTS</b> Participation Measure	
<b>AS MEASURED BY</b> <ul style="list-style-type: none"> <li>Count of tools / mechanisms used by member jurisdictions to protect environmental areas.</li> </ul>	
<b>REPORTING &amp; TIMELINE</b> Online as new information is available.	
<b>SOURCE</b> Compiled by Metro Vancouver staff. Confirmed, and updates requested from Regional Planning Advisory Committee Environmental Subcommittee as appropriate (approximately every 2-3 years).	
<b>METHODOLOGY</b> Tools and mechanisms to protect important environmental areas may include: <ul style="list-style-type: none"> <li>Environmental Management Plans (EMPs)</li> <li>Environmental Development Permit Areas (EDPAs)</li> <li>Designated Environmentally Sensitive Areas (ESAs)</li> <li>Watercourse protection bylaws</li> <li>Tree protection bylaws</li> <li>Conservation covenants</li> <li>Land trusts</li> <li>Tax exemptions</li> </ul>	
<b>INTENT</b> <i>Metro 2040</i> aims to protect, enhance, and restore ecologically important systems and features.	

## Ecosystem Health

### AIR POLLUTANTS

Strategy Performance Measure

short  
term

#### AS MEASURED BY

- Number of pollutant exceedances of regional and national objectives and standards.

#### REPORTING & TIMELINE

Online as data is available.

#### SOURCE

Pollutant exceedances are tracked in the annual Integrated Air Quality and Greenhouse Gas Management Plan Progress Report produced by Metro Vancouver Air Quality.

#### METHODOLOGY

Exceedances of ambient objectives and standards are presented using the data from the Lower Fraser Valley Air Quality Monitoring Network, 28 air quality monitoring stations located from Horseshoe Bay to Hope. Metro Vancouver operates 22 of these stations in Metro Vancouver and 6 stations in the Fraser Valley in partnership with the Fraser Valley Regional District. Exceedances are reported for the following pollutants:

- Nitrogen dioxide
- Sulphur dioxide
- Ground-level ozone
- Fine particulate matter
- Other air contaminants

#### INTENT

*Metro 2040* aims to reduce energy consumption and greenhouse gas emissions, and improve air quality.

## Climate Change Preparedness

### CLIMATE CHANGE PROJECTIONS

#### Context Measure



#### AS MEASURED BY

- Regional baseline and change projections for relevant climate variables.

#### REPORTING & TIMELINE

Online as data is available.

#### SOURCE

Climate Projections for Metro Vancouver (2015 report), supported by the Pacific Climate Impacts Consortium.

#### METHODOLOGY

The 2015 Metro Vancouver report provides an improved understanding of projected local climate change trends in temperature, precipitation, and related indices of extremes. The report is intended to describe a probable future and enable the region's planners, engineers, and policy makers to make better-informed decisions on how to plan and adapt to changes ahead. The full report is available online and [www.metrovancouver.org](http://www.metrovancouver.org). Key indicators for the years 2050 and 2080 are provided online for monitoring, including:

- Daytime High Temperature
- Nighttime Low Temperature
- Precipitation (seasonal total, mm)
- Extreme Precipitation Intensity (1-in-20-year 1-day event, mm)
- Snowpack depth (April 1<sup>st</sup> watershed average)

#### INTENT

*Metro 2040* aims to improve the ability to withstand climate change. This measure provides regional climate change projections as context for anticipated impacts across the region.




DRAFT

# GOAL 4 MEASURES

## Create Complete Communities

### Key Summary Measures

The following Key Summary Measures are listed in *Metro 2040* Section G: Performance Monitoring. These measures will be reported out regularly as data becomes available to illustrate progress.

<b>Housing Affordability</b> <b>HOUSING + TRANSPORTATION COST BURDEN</b> Key Summary Measure	
<b>AS MEASURED BY</b> <ul style="list-style-type: none"> <li>Percent of median household income spent on average housing + transportation costs.</li> </ul>	
<b>REPORTING &amp; TIMELINE</b> Five-year (anticipated) measure reported following the release of Census and Trip Diary data.  Regional cost burden provided in annual reports as data is available. Detailed housing and transportation costs, and a breakdown by subregion and median income level reported online as data is available.	
<b>SOURCE</b> Statistics Canada Census / National Household Survey. Average annual housing costs for working households, including rent/mortgage, services, taxes, and fees.  TransLink Trip Diary. Average annual transit and auto costs for working households (includes transit fares and cost of owning and operating a personal vehicle).	
<b>METHODOLOGY</b> Cost burden refers to the combined household expenditures on housing and transportation relative to gross household income. Methodology is detailed in the The Metro Vancouver Housing and Transportation Cost Burden Study (2015).  Typically, if a household spends less than 30% of pre-tax on housing costs, then housing is considered affordable. However, housing and transportation choices are closely linked and represent the two largest expenditures for many working households.	
<b>INTENT</b> <i>Metro 2040</i> aims to provide diverse and affordable housing choices. This measure provides a comprehensive picture of affordability in the region.	

## Housing Diversity

### ESTIMATED RENTAL HOUSING DEMAND ACHIEVED IN NEW SUPPLY

#### Key Summary Measure

medium  
term

#### AS MEASURED BY

- Share of estimated regional rental housing demand achieved in new supply.

#### REPORTING & TIMELINE

Five-year (anticipated) measure reported following the release of Census data.

Regional average provided in annual reports as data is available. Breakdown by household type and income level reported online as data is available.

#### SOURCE

Statistics Canada Census / National Household Survey.

#### METHODOLOGY

Housing demand estimates are provided in *Metro 2040*. Rental supply is monitored through Metro Vancouver's Housing Data Book.

##### Income levels:

- Very low income (<\$30,000)
- Low income (\$30,000-\$50,000)
- Moderate income (\$50,000-\$75,000)
- Above moderate income (\$75,000-\$100,000)
- High income (\$100,000+)

##### Household types:

- Family Households
- Non-family households

Census family refers to a married couple and their children, if any, of either or both spouses; a couple living in common law and the children, if any, of either or both partners; or a lone parent of any marital status with at least one child living in the same dwelling and that child or those children. Non-Census families may have one or more persons.

#### INTENT

*Metro 2040* aims to provide diverse and affordable housing choices. This measure monitors rental supply against anticipated demand as a key part of the housing continuum.

## Complete Communities and Health

### WALKABILITY

#### Key Summary Measure

medium  
term

#### AS MEASURED BY

- Walkability.

#### REPORTING & TIMELINE

Annual (anticipated) measure reported as data is available.

#### SOURCE

TBD

#### METHODOLOGY

TBD

#### INTENT

*Metro 2040* aims to develop healthy and complete communities with access to a range of services and amenities.

DRAFT



## Supplementary Measures

The following Strategy Performance, Context, and Participation Measures are supplementary to the Key Summary Measures. These measures may be reported out online as data and resources are available. The intent of supplementary measures is to illustrate progress, serve as a resource to member jurisdictions, and inform implementation.

<b>Housing Affordability</b> <b>AFFORDABLE HOUSING WITH ACCESS TO THE FREQUENT TRANSIT NETWORK</b> Strategy Performance Measure	
<b>AS MEASURED BY</b> <ul style="list-style-type: none"> <li>Percent and number of social housing / non-market housing with access to the Frequent Transit Network.</li> </ul>	
<b>REPORTING &amp; TIMELINE</b> Online as data is available.	
<b>SOURCE</b> Metro Vancouver Regional Planning geodata for the <i>Metro 2040</i> Urban Centre / Frequent Transit Development Area (FTDA) boundaries.  Frequent Transit Network (FTN) and rapid transit station geodata is provided by TransLink; latest versions are available upon request.  BC Housing Homeowner Protection Office, Member jurisdictions, BC Assessment Authority.	
<b>METHODOLOGY</b> Housing data is geocoded and overlaid with the FTN. The FTN is a network where transit service runs at least every 15 minutes in both directions throughout the day and into the evening, every day of the week. A 400 metre buffer around the FTN is used to identify a walk catchment (5-10 minutes) to frequent transit service, and an 800 metre buffer around rapid transit stations is used to identify a walk catchment (10-15) minutes to rapid transit service.	
<b>INTENT</b> <i>Metro 2040</i> aims to provide diverse and affordable housing choices. This measure monitors social housing / non-market housing development in locations with transit service, a key amenity for residents in these housing types, as an important part of the housing continuum.	

## Housing Diversity

### COMPOSITION OF HOUSING STOCK

Context Measure

medium  
term

#### AS MEASURED BY

- Composition of housing stock (type, tenure and cost).

#### REPORTING & TIMELINE

Annual estimate and five-year (anticipated) measure reported following the release of Census data.

Metro Vancouver provides annual estimates based on CMHC Completions and Demolitions.

#### SOURCE

Statistics Canada Census, not including estimated Census undercount.

CMHC Completions and Demolitions and Rental Market Activity reports.

Greater Vancouver Real Estate Board (GVREB), Fraser Valley Real Estate Board (FVREB).

#### METHODOLOGY

Type includes:

- Ground-oriented housing (single family and duplex)
- Row housing
- Apartment housing

Tenure includes:

- Owner-occupied
- Renter-occupied
- Band housing

Average rents are for purpose-built rental apartments with 3 units or more and are provided by CMHC Market Area. Multiple Service Listing (MLS) Housing Price Index (HPI) is the mid-year average and is broken down by GVREB and FVREB areas. Improved data sources for market rental costs are currently being explored.

#### INTENT

*Metro 2040* aims to provide diverse and affordable housing choices. This measure monitors housing supply throughout the region as context for housing diversity.

## Housing Diversity

### MUNICIPAL HOUSING ACTION PLANS

#### Participation Measure

short  
term

#### AS MEASURED BY

- Status of municipal housing action plans.
- Count of municipal measures to support housing affordability and diversity.

#### REPORTING & TIMELINE

Online as data is available (approximately every 2-3 years).

#### SOURCE

Metro Vancouver data.

#### METHODOLOGY

Metro Vancouver tracks the status of municipal housing action plans (adopted, updated, or pending), as well as measures in support of housing affordability and diversity, including:

- Fiscal measures
- Planning policies
- Zoning/regulatory actions
- Approval processes
- Rental market incentives
- Rental housing loss prevention
- Education and advocacy

#### INTENT

*Metro 2040* aims to provide diverse and affordable housing choices. This participation measure monitors the status and implementation of municipal housing action plans, which assess local market conditions, identify housing priorities, identify implementation measures which may encourage new rental housing, where appropriate mitigate the loss of existing rental housing, and identify opportunities to participate with other levels of government to secure additional rental units.

## Complete Communities and Health

### AIR QUALITY HEALTH INDEX

#### Strategy Performance Measure

short  
term

#### AS MEASURED BY

- Percent of hours with the Air Quality Health Index (AQHI) in the High and Low health risk categories.

#### REPORTING & TIMELINE

Online as data is available.

#### SOURCE

Air quality health index categories are monitored in the annual Integrated Air Quality and Greenhouse Gas Management Plan Progress Report produced by Metro Vancouver's Air Quality and Climate Change division.

#### METHODOLOGY

Data for this performance measure originate from the Lower Fraser Valley Air Quality Monitoring Network. The AQHI is calculated based on the relative risks to human health from exposure to ground-level ozone, fine particulate matter and nitrogen dioxide.

#### INTENT

*Metro 2040* aims to develop healthy and complete communities with access to a range of services and amenities. This measure monitors air quality as an important element of healthy communities.



## Complete Communities and Health

### HEALTH IMPACTS IN PLANNING AND DEVELOPMENT

#### Participation Measure

short  
term

#### AS MEASURED BY

- Count of official considerations of health impacts in planning and development.

#### REPORTING & TIMELINE

Online as data is available (approximately every 2-3 years).

#### SOURCE

Metro Vancouver data. Updates requested from Regional Planning Advisory Committee Social Issue Subcommittee as appropriate, based on information derived from Metro Vancouver Health Impact Assessment Guidelines.

#### METHODOLOGY

Metro Vancouver collects information about the use of health impact assessments in municipal planning efforts.

#### INTENT

*Metro 2040* aims to develop healthy and complete communities with access to a range of services and amenities. This participation measure tracks the the consideration of health impacts in planning and development.


DRAFT

# GOAL 5 MEASURES

## Support Sustainable Transportation Choices

### Key Summary Measures

The following Key Summary Measures are listed in *Metro 2040* Section G: Performance Monitoring. These measures will be reported out regularly as data becomes available to illustrate progress.

<b>Travel Mode Choice</b> <b>MODE SHARE</b> Key Summary Measure	
<b>AS MEASURED BY</b> <ul style="list-style-type: none"> <li>Percent of total trips that are private vehicle based.</li> <li>Total trips by mode, by region and municipality.</li> </ul>	
<b>REPORTING &amp; TIMELINE</b> <p>Five-year (anticipated) measure reported following the release of TransLink Trip Diary data.</p> <p>Regional share of trips that are private vehicle based reported online and in annual reports as data is available. Breakdown by mode and municipality provide online as data is available.</p>	
<b>SOURCE</b> <p>TransLink Trip Diary.</p>	
<b>METHODOLOGY</b> <p>TransLink's Trip Diary estimates trip data on a typical fall weekday. Each trip is allocated to a mode (walking, cycling, transit, auto passenger, or auto driver).</p> <p>Private vehicle-based trips include trips by auto driver and trips by auto passenger. Passenger trips are counted by the number of passengers in the vehicle for each trip (e.g. a single auto trip with one driver and three passengers is counted as one auto driver trip and three auto passenger trips).</p>	
<b>INTENT</b> <p><i>Metro 2040</i> aims to encourage transit, multiple-occupancy vehicles, cycling, and walking.</p>	

## Travel Mode Choice

### TRANSIT ACCESSIBILITY

#### Key Summary Measure

medium  
term

#### AS MEASURED BY

- Percent of population living within walking distance of Frequent Transit Network (FTN).

#### REPORTING & TIMELINE

Five-year (anticipated) measure reported following the release of Census data.

#### SOURCE

Statistics Canada Census, including estimated Census undercount.

Frequent Transit Network (FTN) and rapid transit station geodata is provided by TransLink; latest versions are available upon request.

#### METHODOLOGY

The FTN is a network where transit service runs at least every 15 minutes in both directions throughout the day and into the evening, every day of the week. A 400 metre buffer around the FTN is used to identify a walk catchment (5-10 minutes) to frequent transit service, and an 800 metre buffer around rapid transit stations is used to identify a walk catchment (10-15 minutes) to rapid transit service. Census Dissemination Blocks are used to estimate population within these catchments.

#### INTENT

*Metro 2040* aims to encourage transit, multiple-occupancy vehicles, cycling, and walking.



## Road and Vehicle Use and Safety

### VEHICLE KILOMETRES TRAVELLED

#### Key Summary Measure



#### AS MEASURED BY

- Annual per capita Vehicle Kilometres Travelled (VKT).

#### REPORTING & TIMELINE

Five-year (anticipated) measure reported following the release of TransLink Trip Diary data.

Regional per capita VKT is reported online and in annual reports as data is available. Breakdown by subregion is provide online as data is available.

#### SOURCE

TransLink Trip Diary.

#### METHODOLOGY

TransLink's Trip Diary estimates trip data on a typical fall weekday. The average trip lengths of Auto Drivers is used to estimate the daily Vehicle Kilometres Travelled (VKT) of Metro Vancouver residents. These values are normalized using total population counts to further estimate weekday VKT per capita.


#### INTENT

*Metro 2040* aims to support the safe and efficient movement of vehicles for passengers, goods and services.

DRAFT

## Supplementary Measures

The following Strategy Performance, Context, and Participation Measures are supplementary to the Key Summary Measures. These measures may be reported out online as data and resources are available. The intent of supplementary measures is to illustrate progress, serve as a resource to member jurisdictions, and inform implementation.

<b>Road and Vehicle Use</b> <b>INSURED VEHICLES</b> Context Measure	
<b>AS MEASURED BY</b> <ul style="list-style-type: none"><li>Number of actively insured vehicles.</li></ul>	
<b>REPORTING &amp; TIMELINE</b> Online as data is available.	
<b>SOURCE</b> Insurance Corporation of British Columbia Report for Active Vehicle Count by City and Vehicle Type, Metro Vancouver.	
<b>METHODOLOGY</b> Reports provided monthly. Report annual average for year by municipality.	
<b>INTENT</b> <i>Metro 2040</i> aims to support the safe and efficient movement of vehicles for passengers, goods and services.	

Road and Vehicle Use and Safety	TBD
COLLISION STATISTICS	
Key Summary Measure	
AS MEASURED BY	
<ul style="list-style-type: none"> <li>Collision statistics, including fatalities and injuries for the region as made available by ICBC.</li> </ul>	
REPORTING & TIMELINE	
Measure contingent on ICBC reporting.	
SOURCE	
Insurance Corporation of British Columbia data, as available.	
METHODOLOGY	
ICBC has made collision injury and fatality statistics available by region in the past, however, reporting is currently being updated.	
INTENT	
Metro 2040 aims to support the safe and efficient movement of vehicles for passengers, goods and services.	



# POTENTIAL FUTURE MEASURES

## To Be Explored

This section includes a list of measures that would improve monitoring, but cannot yet be tracked due to data availability or resource constraints.

<b>Growth in Priority Areas</b> <b>MAJOR TRIP GENERATORS</b> Future Strategy Performance Measure	TBD
<b>POTENTIAL MEASURES</b> <ul style="list-style-type: none"> <li>Number of new Major Trip Generators locating outside of Urban Centres and FTDA's.</li> </ul>	
<b>INTENT</b> <i>Metro 2040</i> aims to focus population and employment growth to Urban Centres and FTDA's and reduce the share of private vehicle trips.	
<b>LIMITATION</b> Requires an established definition for Major Trip Generators.	
<b>Industrial Areas</b> <b>INDUSTRIAL DENSITY</b> Future Strategy Performance Measure	TBD
<b>POTENTIAL MEASURES</b> <ul style="list-style-type: none"> <li>To be determined.</li> </ul>	
<b>INTENT</b> <i>Metro 2040</i> aims to protect the supply of industrial land, in part through industrial intensification.	
<b>LIMITATION</b> There are several forms of intensification that cannot all be accurately measured through a single measure of density (e.g. jobs per area, throughput per area, etc.). An appropriate measure may be established when resources permit, following the Regional Industrial Lands Initiative.	

<b>Ecosystem Health</b> <b>ECOLOGICAL CONNECTIVITY</b> Future Strategy Performance Measure	TBD
<b>POTENTIAL MEASURES</b> <ul style="list-style-type: none"> <li>Ecological Connectivity Index.</li> </ul>	
<b>INTENT</b> <i>Metro 2040</i> aims to protect, enhance, and restore ecologically important systems and features.	
<b>LIMITATION</b> Index may be developed using the Sensitive Ecosystem Inventory and Land Cover Classification when resources permit.	

<b>Ecosystem Health</b> <b>STATUS OF CONSERVATION AND RECREATION AREAS</b> Future Strategy Performance Measure	TBD
<b>POTENTIAL MEASURES</b> <ul style="list-style-type: none"> <li>Protection status of Conservation and Recreation areas.</li> </ul>	
<b>INTENT</b> <i>Metro 2040</i> aims to protect, enhance, and restore ecologically important systems and features.	
<b>LIMITATION</b> Measure dependent on the Metro Vancouver protected areas layer, which is currently under development.	

Climate Change Mitigation	TBD
ENERGY USE Strategy Performance Measure	
POTENTIAL MEASURES <ul style="list-style-type: none"> <li>Kilowatt-hours energy use per capita and by region.</li> </ul>	
INTENT <i>Metro 2040</i> aims to reduce energy consumption and greenhouse gas emissions, and improve air quality.	
SOURCE Detailed data not currently available.	

Climate Change Preparedness	TBD
PEOPLE AND INFRASTRUCTURE AT RISK Future Strategy Performance Measure	
POTENTIAL MEASURES <ul style="list-style-type: none"> <li>Population and value of public assets in hazard areas.</li> </ul>	
INTENT <i>Metro 2040</i> aims to improve the ability to withstand climate change.	
LIMITATION Detailed data on specific areas at risk, and associated adaptation efforts is not yet available.	

Climate Change Preparedness	TBD
ECOLOGICAL ASSETS AT RISK	
Future Strategy Performance Measure	
POTENTIAL MEASURES	
<ul style="list-style-type: none"> <li>Value of ecological assets at risk.</li> </ul>	
INTENT	
Metro 2040 aims to improve the ability to withstand climate change.	
LIMITATION	
Detailed data on specific areas at risk, and associated adaptation efforts is not yet available. Appropriate use of ecosystem valuation figures has not yet been determined.	

Complete Communities and Health	TBD
SHAPING OUR COMMUNITIES PERCEPTION MEASURES	
Future Key Summary Measure	
POTENTIAL MEASURES	
<ul style="list-style-type: none"> <li>To be determined.</li> </ul>	
INTENT	
Metro 2040 aims to develop healthy and complete communities with access to a range of services and amenities.	
LIMITATION	
Shaping our Communities Survey is planned for 2016/2017. Perception data is intended to provide measures related to complete communities and quality of life.	



<b>Road and Vehicle Use</b> <b>TRAVEL TIME RELIABILITY</b> Future Key Summary Measure	TBD
<b>POTENTIAL MEASURES</b> <ul style="list-style-type: none"> <li>Travel time reliability (variation in travel time from day to day, or week to week).</li> </ul>	
<b>INTENT</b> <i>Metro 2040</i> aims to support the safe and efficient movement of vehicles for passengers, goods and services.	
<b>LIMITATION</b> Metro Vancouver aims to work with TransLink on developing a measure related to travel time reliability or congestion.	
<b>Road and Vehicle Use</b> <b>GOODS MOVEMENT MEASURE</b> Future Key Summary Measure	TBD
<b>POTENTIAL MEASURES</b> <ul style="list-style-type: none"> <li>Goods movement measure.</li> </ul>	
<b>INTENT</b> <i>Metro 2040</i> aims to support the safe and efficient movement of vehicles for passengers, goods and services.	
<b>LIMITATION</b> Following the completion of TransLink's Goods Movement Strategy, a goods movement measure may be included.	

DRAFT

# APPENDIX I

## Index of Performance Measures

Below is a complete list of Regional Planning performance measures related to *Metro 2040*. Key Summary (KS) measures are listed in Section G of *Metro 2040*. Strategy Performance (SP), Context (C), and Participation Measures (P) are listed in the Supplementary Measures sections of this document.

### REGIONAL LAND USE MEASURES

#### Designations and Overlays

- Regional Land Use Designations (KS)
- Regional Land Use Overlays (KS)

### GOAL 1: CREATE A COMPACT URBAN AREA

#### Contain Development

- Growth within the Urban Containment Boundary (KS)
- Remaining Urban Development (SP)
- Annual Growth (C)

#### Growth in Priority Areas

- Residential development in priority areas (KS)
- Density in priority areas (SP)

#### Protect Other Lands

- Sewer service connections (SP)
- Rural development (SP)

### GOAL 2: SUPPORT A SUSTAINABLE ECONOMY

#### Employment in Priority Areas

- Job growth in priority areas (KS)
- Office development in priority areas (SP)
- Retail development in priority areas (SP)

#### Employment Accessibility

- Commute time and distance (KS)
- Employment levels (C)
- Employment types and locations (C)

#### Industrial and Mixed Employment Areas

- Industrial and Mixed Employment Land Use (KS)

#### Agricultural Areas

- Agricultural Land Use (KS)
- Active food producing lands (SP)

### GOAL 3 PROTECT THE ENVIRONMENT AND RESPOND TO CLIMATE CHANGE IMPACTS

#### Ecosystem Health

- Sensitive Ecosystem quality and quantity (KS)
- Air pollutants (SP)
- Environmental protection efforts (P)

#### Climate Change Mitigation

- Greenhouse gas emissions (KS)

#### Climate Change Preparedness

- Climate adaptation efforts (KS)
- Climate change projections (C)

### GOAL 4: DEVELOP COMPLETE COMMUNITIES

#### Housing Affordability

- Housing + Transportation Cost Burden (KS)
- Affordable housing with access to the Frequent Transit Network (SP)

#### Housing Diversity

- Rental housing demand achieved in new supply (KS)
- Composition of the housing stock (C)
- Municipal housing action plans (P)

### **Complete Communities and Health**

- Walkability Index (KS)
- Air quality health index (SP)
- Health impacts in planning in development (P)

### **GOAL 5: SUPPORT SUSTAINABLE TRANSPORTATION CHOICES**

#### **Travel Mode Choice**

- Transit accessibility (KS)
- Mode share (KS)

#### **Road and Vehicle Use and Safety**

- Vehicle kilometres travelled (KS)
- Collision statistics (KS)
- Insured vehicles (C)





To: Regional Planning Committee

From: Lauren Klose, Regional Planner, Parks, Planning and Environment Department

Date: January 10, 2017 Meeting Date: March 10, 2017

Subject: ***Metro Vancouver 2040: Shaping our Future* Amendment to Section G Performance Measures**

---

#### **RECOMMENDATION**

That the MVRD Board:

- a) Initiate the *Metro Vancouver 2040: Shaping our Future* amendment process for a Type 3 amendment to Section G of the regional growth strategy;
  - b) Give first and second readings to "Greater Vancouver Regional District Regional Growth Strategy Amendment Bylaw No. 1243, 2017"; and
  - c) Direct staff to notify affected local governments and appropriate agencies as per *Metro Vancouver 2040: Shaping our Future* Section 6.4.2.
- 

#### **PURPOSE**

This report provides the GVRD Board with the opportunity to consider a proposed amendment to *Metro Vancouver 2040: Shaping our Future* Section G Performance Measures and the associated *Metro Vancouver 2040: Shaping our Future* Performance Monitoring Guideline.

#### **BACKGROUND**

Annual reporting of *Metro Vancouver 2040: Shaping our Future* (*Metro 2040*), the regional growth strategy, is required by Part 13 of the British Columbia *Local Government Act* and *Metro 2040* Section 6.13.3. Three annual reports have been produced to date, covering four years of implementation, including baseline and annual monitoring of the performance measures listed in *Metro 2040* Section G. Through the process of collecting and analyzing data and drafting these early annual reports, a number of opportunities were identified to improve performance monitoring.

Metro Vancouver undertook a review of the *Metro 2040* Performance Measures in 2015. At the May 6, 2016 Regional Planning Committee meeting, members were provided with the findings of the review in a report titled "*Metro 2040* Performance Measures Review Project: Findings and Next Steps". In this report, staff also noted next steps, including developing recommendations to update *Metro 2040* performance monitoring. Staff is now proposing a Type 3 amendment to update *Metro 2040* Section G with improved and more flexible measures based on the results of the review and further consultation with municipal and partner agency staff.

#### **PROPOSED METRO 2040 TYPE 3 AMENDMENT TO SECTION G PERFORMANCE MEASURES**

Through the proposed amendment, the existing Section G Performance Measures of *Metro 2040* would be replaced with Section G: Monitoring via a bylaw amendment (Attachment 1). The proposed Section G reduces the number of performance measures included in *Metro 2040* from 55 total measures to 15 Key Summary Measures.

These 15 Key Summary Measures were chosen because:

- they best illustrate progress toward strategies identified in *Metro 2040*;
- they measures are meaningful over the implementation of a long-range strategy; and
- data is available and can be regularly acquired in short or medium term intervals.

Additional performance measures, context measures, and participation measures are included in the associated Performance Monitoring Guideline (described in further detail in the following section) and would be reported out on as data is available. Annual reporting, however, will be primarily focused on the 15 Key Summary Measures that best depict progress toward the goals of the regional growth strategy. The Key Summary Measures include a few that are interim or proxy measures, and these may be replaced when new data is available for more robust indicators in the future.

### ***Metro 2040* Performance Monitoring Guideline**

The draft Performance Monitoring Guideline (Attachment 2) includes information about types of performance measures, reporting requirements, and communication mediums (e.g. online as available, or in annual reports). It provides detailed information about the intent, methodology, source, and reporting timeline for each performance measure. In addition to providing this information for the 15 Key Summary Measures proposed to be included in *Metro 2040*, the Guideline lists and describes additional technical / detailed measures for each *Metro 2040* goal that Metro Vancouver will track and report on as data is available or useful.

The intent of the Guideline is to provide a resource to those using the performance monitoring data, including regional and municipal staff and researchers. The Guideline also provides an added level of transparency and accountability in performance monitoring to politicians and the public.

### **Process for Amending *Metro 2040* and Adopting the Performance Monitoring Guideline**

In accordance with *Metro 2040* Section 6.3.4(h), the proposed amendment to performance measures is a Type 3 amendment requiring an amendment bylaw passed with a 50% + 1 weighted vote of the GVRD Board. In accordance with *Metro 2040* Section 6.4.2, if the GVRD Board resolves to proceed with the amendment process, it will notify all affected local governments and provide a minimum 30 day notice period for comments.

It is intended that the Performance Monitoring Guideline be adopted by the GVRD Board as an accompanying document, subject to approval of the proposed *Metro 2040* amendment. Adoption of the Guideline provides transparency to the performance monitoring program, and allows for updates to the broader performance monitoring program without triggering an amendment to *Metro 2040*.

### **Regional Planning Advisory Committee Review**

Regional Growth Strategy Procedures Bylaw No. 1148 sets out provisions for the Regional Planning Advisory Committee (RPAC) to receive information about, and comment on, all proposed amendments to *Metro 2040*. At its November 18, 2016 meeting, RPAC reviewed the proposed amendment to Section G of *Metro 2040* and the draft *Metro Vancouver 2040: Shaping our Future* Performance Monitoring Guideline. The Committee was provided with two options for updating Section G of *Metro 2040* with the 15 Key Summary Measures. One option included more detailed measures, as provided in the attached draft bylaw, while a second option (recommended at the time) included more generalized measures, allowing for greater flexibility in monitoring.



RPAC discussed the importance of accountability and transparency in performance monitoring and supported updating Section G with the 15 Key Summary Measures provided there would continue to be GVRD Board review of any amendments to measures, whether through an amendment to *Metro 2040* or through changes to the Performance Guideline. Following the RPAC meeting, staff continued review of the two options and the Performance Monitoring Guideline and determined the more detailed option is preferred and better addresses RPAC concerns regarding accountability and transparency. The amendment as proposed provides more clarity within *Metro 2040* itself, and the Performance Monitoring Guideline further ensures accountability and transparency.

#### **ALTERNATIVES**

1. That the MVRD Board:
  - a) Initiate the *Metro Vancouver 2040: Shaping our Future* amendment process for a Type 3 amendment to Section G of the regional growth strategy;
  - b) Give first and second readings to "Greater Vancouver Regional District Regional Growth Strategy Amendment Bylaw No. 1243, 2017"; and
  - c) Direct staff to notify affected local governments and appropriate agencies as per *Metro Vancouver 2040: Shaping our Future* Section 6.4.2.
2. That the MVRD Board receive for information the report dated January 10, 2017, titled "*Metro Vancouver 2040: Shaping our Future* Amendment to Section G Performance Measures".

#### **FINANCIAL IMPLICATIONS**

In accordance with *Metro 2040* Section 6.3.4(h), the proposed amendment to performance measures is a Type 3 amendment requiring an amendment bylaw passed with a 50% + 1 weighted vote of the GVRD Board. No regional public hearing is required; therefore, there are no associated costs with the proposed amendment.

Data acquisition and development for performance monitoring is a regular component of the annual Regional Planning budget. High quality performance monitoring requires regular maintenance of internal datasets and inventories, noted in long term budget planning.

#### **SUMMARY / CONCLUSION**

Following the development of three annual reports and a comprehensive review of *Metro 2040* Performance Measures, staff are proposing an update to the *Metro 2040* performance monitoring program. The update includes a proposed Type 3 amendment to *Metro 2040* to replace Section G, which currently includes 55 performance measures, with a new Section G which would include 15 Key Summary Measures.

Subject to approval of the proposed amendment to Section G, staff will advance an associated Performance Monitoring Guideline for Board consideration that, if adopted, would provide additional detailed / technical measures, as well as information about performance monitoring data sources, methodology, and intent. The Guideline also provides an added level of accountability and transparency.

#### **Attachments** (Orbit #20450535)

1. Greater Vancouver Regional District Regional Growth Strategy Amendment Bylaw No. 1243, 2017

2. Draft *Metro Vancouver 2040: Shaping our Future* Performance Monitoring Guideline



MAY 03 2017

File: WA-07-01- WSRP-004

Juli Kolby, Chief Administrative Officer  
Village of Anmore  
2697 Sunnyside Road  
RR1  
Anmore, BC V3H 5G9



Dear Ms. Kolby:

**Re: GVWD Water Shortage Response Plan**

This letter is to inform you that as of May 15, 2017 Stage 1 lawn watering restrictions contained in the *Water Shortage Response Plan* (WSRP) will go into effect. The restrictions apply to all residents and businesses in the region.

Lawn watering is restricted to the following times:

**Residential Addresses:**

- Even numbered residential addresses: Monday, Wednesday or Saturday mornings between 4 am and 9 am;
- Odd numbered residential addresses: Tuesday, Thursday or Sunday mornings between 4 am and 9 am.

**Non-Residential Addresses:**

- Even numbered non-residential addresses: Monday or Wednesday mornings between 1 am and 6 am, or Friday mornings between 4 am and 9 am;
- Odd numbered non-residential addresses: Tuesday or Thursday mornings between 1 am and 6 am, or Friday mornings between 4 am and 9 am.

The region's WSRP dated February 2016 (attached) approved by the GVWD Board, contains further details of measures for summer outdoor water management which are essential to managing the peak demands for drinking water during the summer period.

In accordance with the WSRP, Metro Vancouver will advertise the start date of the watering restrictions in all local papers, distribute a media release and provide support materials to members for distribution. GVWD member promotion and enforcement of the watering restrictions is important to ensuring success of these restrictions.

21187333

In addition to communication materials for lawn watering, Metro Vancouver produces a broader water conservation campaign which can be found at the website [WeLoveWater.ca](http://WeLoveWater.ca). Communication materials for this broader campaign are developed with input from GVWD members.

The GVWD Board has also directed staff to consult on changes to the WSRP. A comprehensive review is nearing completion and proposed changes to the Plan will be reported to the GVWD Board later in 2017 for implementation in spring 2018.

If you have any technical questions related to the *Water Shortage Response Plan* please contact Stan Woods, Senior Engineer, Utility, Policy and Planning, by phone at 604-436-6909 or by email at [Stan.Woods@metrovancover.org](mailto:Stan.Woods@metrovancover.org). Additionally, if you have questions with regard to water conservation campaign materials or communications please contact Larina Lopez, Division Manager, Corporate Communications, by phone at 604-451-6673, or by email at [Larina.Lopez@metrovancover.org](mailto:Larina.Lopez@metrovancover.org).

Yours truly,



Carol Mason  
Commissioner/ Chief Administrative Officer

CM/IS/na

Attachment: *Water Shortage Response Plan*, dated February 2016 (Doc# 17818771)

21187333



# **WATER SHORTAGE RESPONSE PLAN**

Includes amendments approved by the GVWD Board on  
November 27, 2015 and  
February 26, 2016

**February 2016**



## Preface

The purpose of the Water Shortage Response Plan (WSRP) is to manage demand for drinking water during the summer months, and if necessary during times of emergencies. This is important because:

- rainfall is lowest and demand is highest in the summer
- storage, transmission and distribution system capacities are limited
- continued population and industrial growth have led to increased demand
- water shortages may result from unforeseen emergency situations (e.g. earthquakes, major service disruptions, etc.)

The WSRP focuses on reducing demand for outdoor water use. If persistent drought conditions occur, the WSRP contains actions that will produce significant reductions in daily water demand in the region.

The WSRP uses a staged approach, ranging from an initial standard level of water restrictions combined with timely and effective public notification to be automatically implemented each summer season, through to a highest level of restrictions intended for emergencies affecting the delivery of water.

The WSRP defines water shortage assessment general guidelines which would trigger each stage. However, water supply systems are complex and cannot always be measured by a single set of numbers. For example, a WSRP action may be needed to respond to a deficiency in the supply system such as local transmission capacity limitations, a failure of a major transmission line or other unforeseen problems with water treatment and supply infrastructure. Therefore, if the GVWD Commissioner deems it necessary, any stage of the WSRP may be enacted or delayed at any time or enacted in any order as the Commissioner deems necessary.

In cases where summer drought conditions strain the source water storage capacity of the Capilano and Seymour watersheds, a more restrictive stage of the WSRP may be activated. The factors to be monitored and considered in determining if a WSRP action (e.g., moving from Stage 1 to Stage 2) might be warranted under summer drought conditions include the following:

- storage capacity of Capilano and Seymour watersheds and draw down rates. Most of this information is reflected in the Capilano and Seymour storage graphic;
- forecasts of Capilano and Seymour storage, based on assumptions about; inflows to the watersheds, weather, supply volumes from the Coquitlam source, and GVWD water demand;
- recent trends, and forecasts of the GVWD water demand taking into account customer compliance with current restrictions;
- trends and forecasts of precipitation, snowmelt, and climatic conditions and how they may influence inflows to the source watersheds and source reservoirs;
- current levels, and recent trends in water storage (usable, emergency, total) for the Coquitlam source and how they relate to the GVWD's nominations for Coquitlam water;
- expected reduction in GVWD demand associated with taking a WSRP action.

The WSRP applies only to the use of treated drinking water. The WSRP restrictions do not apply to the use of rain water, gray water, any forms of recycled water, or other sources of water outside the GVWD/municipal water supply system.



## Stage 1 Water Use Restrictions

Activated automatically on May 15 of each year, or at the discretion of the GVWD Commissioner, and remains in effect until October 15. This end date may be extended by direction of the GVWD Commissioner.

The WSRP restrictions do not apply to the use of rain water, gray water, any forms of recycled water, or other sources of water outside the GVWD/municipal water supply system.

Under Stage 1 of the WSRP:

- Municipalities will suspend hydrant flushing except for unscheduled safety or public health reasons. Routine system flushing will be scheduled outside the WSRP time frame.
- Lawn sprinkling will be restricted to three periods a week, mornings only, enforced by the member municipalities. Outdoor sprinkling of lawns using hose-connected or automatic in-ground sprinklers will be permitted only as follows:

Residential Addresses<sup>1</sup>;

Even-numbered addresses - Monday, Wednesday and Saturday mornings (4 - 9 am)

Odd-numbered addresses - Tuesday, Thursday and Sunday mornings (4 - 9 am)

Non-residential Addresses<sup>1</sup>,

Even numbered addresses – Monday and Wednesday mornings (1 - 6 am)

Odd numbered addresses – Tuesday and Thursday mornings (1 - 6 am)

All non-residential addresses – Friday mornings (4 - 9 am)

Cemetery lawns, ornamental lawns belonging to municipal facilities, and grassed boulevards will not be exempt and may be watered only within the three-weekly times noted above. Operation of sprinklers for children's play will not be exempt from these restrictions. Automated lawn sprinkler systems will not be exempt.

### EXEMPTIONS:

- Sports playing fields and school yards, because their size makes them difficult to irrigate within the time limits, they are generally built on sand bases which do not hold moisture, and because replacement costs are high. Some artificial turf also needs to be watered for safety reasons.
- Municipal parks, because their size makes them difficult to irrigate within the time limits. However, municipalities will reduce sprinkling of parks, playing fields, etc. to minimum levels required to maintain these areas in useable condition. E.g. sand-based fields may require more frequent watering.
- Lawns at golf courses and turf farms, because the restrictions are not intended to cause undue economic hardship or disruption to a business for which lawns are the primary product or service being provided. However, municipalities will request that golf course operators cut water use on fairways by as much as possible.
- Artificial turf requiring wetting and outdoor tracks requiring hosing for dust control or safety.

---

<sup>1</sup> In cases of mixed zoning or mixed use, where commercial or industrial components are included on the same property along with residential and subject to the landscaping being watered by an in-ground sprinkling system, the designation shall then be classified as "Non-residential".

- Newly-planted lawns will be allowed to be watered outside of restricted times, but will be required to obtain a municipal permit to be displayed on the lawn.
- Watering of flower and vegetable gardens, decorative planters, shrubs and trees will be allowed.
- Filling of pools, spas, water play parks, and fountains will be allowed.
- Washing of cars or boats will be permitted, but prudent use of water will be encouraged. Washing must be done using a spring-loaded shutoff nozzle.

---

## Stage 2 Water Use Restrictions

The GVWD Commissioner has the discretion to enact or delay this stage under different conditions if deemed necessary.

This stage remains in effect until October 15. However, this end date may be extended by direction of the GVWD Commissioner.

The WSRP restrictions do not apply to the use of rain water, gray water, any forms of recycled water, or other sources of water outside the GVWD/municipal water supply system.

Under Stage 2 of the WSRP:

- Lawn sprinkling will be restricted to one morning a week only, enforced by the municipalities. Outdoor sprinkling of lawns using hose-connected or automatic in-ground sprinklers will be permitted only as follows:

Residential Addresses<sup>1</sup>;

Even-numbered addresses - Monday morning only (4 – 9 am)

Odd-numbered addresses - Thursday morning only (4 – 9 am)

Non-residential Addresses<sup>1</sup>;

Even-numbered addresses – Wednesday morning only (1 – 6 am)

Odd-numbered addresses – Tuesday mornings only (1 – 6 am)

Municipal parks, cemetery lawns, ornamental lawns belonging to municipal facilities, and grassed boulevards will not be exempt and may be watered only within the once-weekly times noted above.

Hosing of outdoor surfaces (e.g. driveways, sidewalks, roofs) will not be allowed unless required to avoid public health and safety concerns or to prepare a surface for painting/sealing or similar treatment, and must be done using a spring-loaded shutoff nozzle. Hosing of outdoor surfaces for the purpose of aesthetic cleaning will be allowed if performed by a commercial cleaning service, and must be done using a spring-loaded shutoff nozzle.

Pressure washing is equivalent to hosing of an outdoor surface, and will not be permitted except to prepare a surface for painting, sealing or similar treatment. Pressure washing for the purpose of aesthetic cleaning will not be permitted, unless performed by a commercial cleaning service.

Ornamental fountains must be shut down. This includes residential, commercial, institutional and government fountains.



Only water play parks with user-activated switches will be permitted to operate.

#### EXEMPTIONS:

- Golf courses may water greens and tee areas normally; fairways may only be watered once weekly. Where applicable, signage indicating the use of non-GVWD water will be encouraged.
  - Sports playing fields, school yards and sand-based playing fields may be watered at minimum levels required to maintain areas in useable condition.
  - Artificial turf requiring wetting and outdoor tracks requiring hosing for health or safety reasons.
  - Newly-planted lawns will be allowed to be watered outside of restricted times, but will be required to obtain a municipal permit to be displayed on the lawn.
  - Watering of flower and vegetable gardens, decorative planters, shrubs and trees and turf at commercial turf farms will be allowed.
  - Washing of cars or boats will be permitted, but prudent use of water will be encouraged. Washing must be done using a spring-loaded shutoff nozzle.
- 

### Stage 3 Water Use Restrictions

The GVWD Commissioner has the discretion to enact or delay this stage under any condition as deemed necessary.

The WSRP restrictions do not apply to the use of rain water, gray water, any forms of recycled water, or other sources of water outside the GVWD/municipal water supply system.

This stage remains in effect until October 15. However, this end date may be extended by direction of the GVWD Commissioner.

#### Under Stage 3 of the WSRP:

All forms of lawn watering using treated drinking water will be banned completely, for sprinklers of any type. New lawns, cemetery lawns, ornamental lawns belonging to municipal buildings, and grassed boulevards will not be exempt.

Watering of shrubs and trees, flower and vegetable gardens, and decorative planters will not be permitted unless done by hand using a spring-loaded shutoff nozzle, containers or drip irrigation systems. Watering of gardens and planters using sprinklers or soaker hoses is prohibited.

Pressure washing is equivalent to hosing of an outdoor surface. Only commercial pressure washing to prepare a surface for painting, sealing or similar treatment will be permitted. Pressure washing for the purpose of aesthetic cleaning will not be permitted. Private pressure washing will be prohibited.

Exterior washing of vehicles (e.g. cars, motorcycles, recreational vehicles, trucks, boats and other marine vessels) will be prohibited, except for safety (windows, lights, licenses) and only then if using a spring-loaded shutoff nozzle. This includes residential, commercial, institutional and government vehicles.

Ornamental fountains must be shut down. This includes residential, commercial, institutional and government fountains.

Only water play parks with user-activated switches will operate.

Filling or refilling of garden ponds, hot tubs, or swimming pools will be prohibited.

#### EXEMPTIONS:

- Watering of turf at turf farms and flowers and vegetable at commercial gardens.
  - Commercial car washes may continue to operate in this stage, as studies have shown that commercial car washes use significantly less water per vehicle than manual washing.
  - Golf courses may water greens and tee areas at minimum levels required to maintain areas in useable condition; fairways may not be watered.
  - Sports playing fields (including sand-based) and school yards may be watered at minimum levels required to maintain areas in useable condition.
  - Artificial turf requiring wetting and outdoor tracks if required for dust control or safety reasons.
  - Newly-planted lawns or lawns being treated to control for European Chafer Beetle will be allowed to be watered provided the municipal permit was issued prior to the date on which the GVWD Commissioner declared Stage 3 restrictions to be in effect and must comply with municipal lawn sprinkling bylaw requirements.
  - Hosing of outdoor surfaces (e.g. driveways, sidewalks, roofs) only if required to avoid public health and safety concerns or to prepare a surface for painting/sealing or similar treatment.
- 

#### Stage 4 Emergency Water Use Restrictions

The measures listed in this Stage are intended for cases of EMERGENCY water shortages. The GVWD Commissioner has the discretion to enact or delay this stage under any condition as deemed necessary.

This stage remains in effect until October 15. However, this end date may be extended by direction of the GVWD Commissioner.

The WSRP restrictions do not apply to the use of rain water, gray water, any forms of recycled water, or other sources of water outside the GVWD/municipal water supply system.

Under Stage 4 of the WSRP:

Restrictions are the same as Stage 3 except for:

- Any form of watering (even if done by hand, containers, soaker hoses or drip irrigation) using treated drinking water will be prohibited for:
  - commercial flower gardens
  - residential flower gardens
  - residential vegetable gardens
  - trees and shrubs
  - golf courses



- turf farms
  - new lawns
  - sports playing fields (including sand-based)
  - municipal parks
  - cemeteries
  - ornamental lawns belonging to municipal buildings, residences or businesses
  - school yards
  - artificial turf
  - outdoor tracks
  - grassed boulevards
- Municipal permits for watering new lawns will be discontinued.
  - Commercial or private pressure washing and hosing of any outdoor surfaces will not be allowed unless ordered by a regulatory authority (e.g. WCB, public health inspectors) for health and safety reasons.
  - Filling or refilling of garden ponds, hot tubs, or swimming pools will be prohibited.
  - Municipal and commercial water parks will be shut down.
  - Municipal outdoor pools will be closed, and winterization of those pools will be deferred until Stage 4 is lifted by the GVWD Commissioner.
  - All commercial car washes will be shut down.
  - Municipalities will shut down faucets in parks and public spaces (does not apply to drinking fountains with spring-loaded shutoff nozzle).
  - In addition to the outdoor water restrictions of this stage, the GVWD will request that industries that consume large amounts of indoor water implement voluntary reductions/postponements in production during Stage 4.
  - Municipalities will increase their respective enforcement and penalties for violations of the water restrictions with each successive stage of the WSRP.
- 

### **Communication of the Water Shortage Response Plan:**

The GVWD supports the WSRP with region-wide communications initiatives. Advertising in the daily newspapers will be arranged by GVWD; advertising in community papers will be arranged by member municipalities. The GVWD and its member municipalities will coordinate annual public notification in newspapers, radio and other media as appropriate, including information on the frequency and amount of lawn sprinkling.

Public communications and notices by the GVWD and municipalities regarding water restrictions will be carried out in English and other languages as appropriate and increased with each successive stage of the WSRP.

Outdoor and indoor water use efficiency information and resource materials will be produced and distributed by the GVWD on behalf of the municipalities. This information will be in the most appropriate formats and media.

A staffed water conservation information service will be provided by the GVWD. Member municipalities will provide information services for inquiries on matters of enforcement and municipality-specific water issues using telephones and/or other media as appropriate.

## **Implementation of the Water Shortage Response Plan**

The GVWD Commissioner is responsible for activating different stages of the WSRP and will notify member municipalities of the need for implementing or discontinuing each of the successive phases of the plan through the regular WSRP update bulletins.

As much notice will be provided as practically possible.

The WSRP is adopted into bylaws by each GVWD member municipality to enable consistent implementation throughout the region. Municipalities are responsible for enforcement of the WSRP in their communities. Municipalities utilize a variety of measures for enforcement, including advisory letters, ticketing and water supply restrictions.