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TO:

His Worship Mayor Dan Ruimy

MEETING DATE: July 25, 2023

and Members of Council

FILE NO:

13-6440-20

FROM:

Chief Administrative Officer

MEETING:

Workshop

SUBJECT:

Proposed Approaches for the New City of Maple Ridge Off-Street Parking Bylaw

EXECUTIVE SUMMARY:

The City of Maple Ridge Off-Street Parking and Loading Bylaw No. 4350-1990, also referred to as the "Parking Bylaw", was adopted in 1990 and has been amended several times over the years. The current Parking Bylaw regulates the location, number, and size of off-street vehicle parking spaces, loading spaces, bicycle spaces, and passenger spaces, to balance the needs of residents, commuters, and visitors. The Parking Bylaw does not include on-street parking regulations as on-street parking is regulated through other bylaws, such as the Highways and Traffic Bylaw No. 6704-2009.

A comprehensive review of the Parking Bylaw has been underway since Spring of 2022. At the September 6, 2022, Council Workshop, Council received a report that introduced the project as well as identified eight topics within the existing Parking Bylaw that are likely to see the most change and what those changes might look like based on a preliminary review of regional best practices (Sept 6, 2022, report, see Appendix F).

Since September 2022, staff have retained Evolve Traffic Solutions, a parking consulting firm, to help provide guidance on current parking trends and approaches that would best meet Maple Ridge's current and future needs related to off-street parking of motor vehicles, bicycles, and other forms for rolling across the City. Evolve has prepared a draft directional report that provides recommendations for Maple Ridge regarding the topics covered in the September 2022 report. Evolve's report can found in Appendix B of this report.

The purpose of this report is to continue the discussion from September 6, 2022, Council Workshop, while providing an update on the approaches moving forward. This report is also seeking Council's feedback in advance of the draft of the new Parking Bylaw anticipated to be presented to Council in Fall 2023.

RECOMMENDATION:

For Information Only.

1.0 BACKGROUND:

1.1 Introduction to the Parking Bylaw

The City of Maple Ridge Off-Street Parking and Loading Bylaw No. 4350-1990, also referred to as the "Parking Bylaw", was adopted in 1990 and various components have been amended several times over the years. Currently, the Parking Bylaw generally contains the following regulations related to off-street parking:

- Minimum parking requirements that dictate the number of spaces that must be provided offstreet with a specific land use (including accessible spaces);
- Payment In-lieu requirement, rate, and the applicable area;
- Tandem parking requirements;
- Shared use parking requirements (for example if two businesses want to share a space);
- Electric Vehicle infrastructure charging requirements;
- Bike Storage and Parking (currently only for the Town Centre);
- Parking space design (including accessible spaces);
- Commercial Vehicles and Loading requirements; and
- Signage.

The approach taken for the Parking Bylaw when it was originally adopted largely followed best practices from the 1990's era and has evolved through the amendments to include more modern trends; however, it is time for a holistic review the entire Parking Bylaw to ensure modern approaches are consistent throughout the bylaw, such as facilitating sustainable and transit-oriented development; reducing greenhouse gas emissions, and supporting opportunities for walking, rolling, or transit use over transport by single-occupancy vehicle.

As a new Parking Bylaw is the anticipated outcome of this review, the goals of the new Parking Bylaw are to:

- support the vision and goals for Maple Ridge,
- better align the Parking Bylaw with best practices accepted in the transportation planning industry today,
- respond to emerging market trends,
- address the City's sustainability goal of net zero community greenhouse gas emissions by 2050 (Official Community Plan Policy 5-45), and
- improve layout, functionality, and clarity to be more user-friendly and effective in regulating offstreet parking.

The direction of the new Parking Bylaw will also align with the Official Community Plan (OCP) policies and the draft Strategic Transportation Plan (STP) that is nearing completion. Appendix A of this report summarizes some of the key OCP policies the new Parking Bylaw will be aligning with as well as key strategies from the draft STP.

1.2 Work to Date

The Parking Bylaw was identified as a Planning Department work item in the City's 2022 Business Plan and research began in Spring 2022. On September 6, 2022, at Council Workshop, Council received a report that introduced the Off-street Parking Bylaw project. This report summarized existing parking policies and recent parking studies conducted by Metro Vancouver. The report also identified eight topics within the existing Parking Bylaw that are likely to see the most change and what those changes might look like based on a preliminary review of regional best practices. Some of these topics included parking minimums, EV charging, and bicycle parking.

At the September 6, 2022, Council Workshop, Council provided comments and feedback regarding specific topics as well as overall direction. Generally, Council's feedback reflected finding a balance between changing regulations to encourage people to use a wide range of transportation and recognizing the limited transit available today. Council's feedback from this meeting is reflected in the approaches discussed in this report.

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Industry Trends and Field Data Collection

Since September 2022, staff retained Evolve Traffic Solutions, a parking consulting firm, to help provide guidance on current parking trends and approaches that would be suitable for Maple Ridge. Evolve has undertaken a literature review of off-street parking and loading best practices and conducted a municipal scan review within Metro Vancouver and the Fraser Valley.

In the Spring of 2023, Evolve conducted a field survey of on-and-off-street parking in 18 locations across Maple Ridge that included residential, industrial, and commercial uses. The goal of this survey was to gain a better understanding of parking utilization at these sites as well as the types of vehicles residents and visitors are driving in Maple Ridge. A summary of the research and data collected can be found in Evolve's draft directional report (Appendix B).

Advisory Committee Consultation

Over the course of the Spring 2023, staff also met with the Transportation Advisory Committee (TAC) and the Municipal Advisory Committee on Accessibility and Inclusiveness (MACAI) to gather input regarding topics related to off-street parking. These two committees were engaged through semi-structured activities to provide high level direction on the following nine topics:

- Different Areas & Different Parking Requirements
- Non-Market Housing & Parking Ratios
- Rental Housing & Parking Ratios
- Accessibility & Parking Ratios
- EV Charging Infrastructure & Parking
- Long/Short Term Bike Parking Location
- Long/Short Term Bike Parking Ratio
- · Shared Mobility & Parking
- Pedestrian Movement & Parking

The goal of the exercise was to facilitate conversation and provide additional insight on the nine topics (engagement content can be found in Appendix D). The feedback from these two committees can be found in Appendix E.

2.0 DISCUSSION:

Off-street parking requirements are sometimes viewed as a small technical detail connected to a larger development scheme, but parking requirements can greatly impact the design, form, and function of cities and neighbourhoods. When designing a development scheme, parking is often laid out prior to the design of a building since the form and function of parking spaces is relatively constant and cannot be molded and shaped like the architecture of a building.

Section 2.0 of this report builds on the September 6, 2022, Council Workshop (Appendix F) report by continuing the discussion on nine topic areas within the existing Parking Bylaw. New approaches not previously discussed in the September 6, 2022, Council Workshop report, but being considered for the new Parking Bylaw are outlined in Section 3.0 of this report.

Overall, the majority of approaches considered in September 2022 are being considered moving forward. The approaches discussed in this report are based on research, current policies, Council and committee feedback, as well as information provided by the consultant. Council's feedback on the approaches proposed in this report will guide the draft of the new Parking Bylaw as well as ongoing research and data collection.

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2.1. Parking Minimum Requirements

The term "Parking Minimums" refers to the approach of requiring a minimum number of parking spaces for each land use (such as retail, warehouse, and duplex). For example, all single detached houses require a minimum of two off-street parking spaces. An applicant or owner is able to provide more than two spaces, but not less than two. The City currently has reduced parking minimums for some uses within the Central Business District.

Many cities across the Lower Mainland are currently reducing parking minimums when a development is within or adjacent to a transit corridor and/or when a development proposes rental or non-market housing. Studies have shown that multi-family housing near transit typically have fewer cars per household as there is more of a reliance on transit.

Summary of Approaches Moving Forward

Below are the potential approaches to off-street parking minimums moving forward:

- Reducing parking minimums by approximately 20% for the Town Centre Area and within the Lougheed Transit Corridor Area.
- Reducing parking minimums by approximately 20% for non-market and/or purpose built rental multi-family apartments, and up to 50% with specific criteria, such as an apartment building that is significantly below market rental housing.
- Removing the required one parking space for secondary suites within the Town Centre.

2.2 Payment in-Lieu Requirements

The Payment In-Lieu provisions in the existing Parking Bylaw allow an applicant to pay (per parking space) to reduce the total number of constructed parking spaces. Currently, an applicant must pay \$20,000 per parking space not being provided. The goal of payment in-lieu provisions is to ensure that developers are not incentivized to seek the payment in-lieu options unless meeting the minimum parking space requirements is truly too great of a challenge as it is most effective for applicants to construct and operate parking through the development project, resulting in less financial burden to the City. The provisions should also not be cost prohibitive to applicants seeking to revitalize an existing building within the Town Centre, where a change in use requires additional parking spaces.

Summary of Approaches Moving Forward

Below are the potential approaches to the payment in-lieu program moving forward:

- A tiered approach based on the reduction percentage.
- Increasing the payment-in-lieu rate per parking space; proposed at \$35,000 per parking space.
- Indexing the rate according to the Construction Price Index for the Vancouver Region.

2.3 Tandem Parking Requirements

Tandem Parking refers to the placement of one parking space behind another parking space, which creates one parking space that has obstructed access to a drive aisle or driveway. Currently, the Parking Bylaw permits tandem parking within single detached and duplex zones and up to 30% to 50% of parking garage units within a RM-1 (Low Density Townhouse Residential) zone to be tandem. Most municipalities within Metro Vancouver and the Fraser Valley permit tandem parking to some extent. Allowing townhouses and other housing forms to have tandem parking permits a mix of different designs and layouts within a development.

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Summary of Approaches Moving Forward

Below are the potential approaches to the tandem parking provisions moving forward provided that both parking spaces are held by the same owner:

- Allowing up to 30% of Triplex, Fourplex, and Townhouse units outside of the Town Centre and Lougheed Transit Corridor Area to have tandem parking.
- Allowing up to 75% of Triplex, Fourplex, and Townhouse units within the Town Centre and Lougheed Transit Corridor Area to have tandem parking, subject to certain criteria.

2.4 Accessibility Parking Requirements

Maple Ridge has some accessible parking requirements within the Parking Bylaw, however, the requirements should be updated to meet the community's diverse needs and ensure that residents and visitors can comfortably and safety enter and exit a vehicle. For example, the Parking Bylaw does not have any requirements for vans that have a wheelchair lift and need wider parking space dimensions to ensure residents can enter and exit the vehicle. Updating the accessible parking requirements aligns with the City's broader equity and inclusion efforts that contribute to improved social health and well-being of residents.

Summary of Approaches Moving Forward

Below are the potential approaches to the accessible parking provisions moving forward:

- Lowering the thresholds for when an accessible space is required to:
 - One accessible parking space for 5-25 required parking spaces;
 - Two accessible spaces for 26-50 required spaces;
 - Three accessible spaces for 51-75 required spaces;
 - o Four accessible spaces for 76-100 required spaces; and
 - o One additional accessible space for each 100 additional required parking spaces.
- Increasing the number of accessible parking spaces based on use (such as medical clinics).
- Introducing van-accessible dimensions and requiring that 50% of the required accessible spaces be van-accessible.
 - o In the case of only one parking space being provided, it should be a van-accessible space
- Require a 1.2m wide access aisle beside each space.
- Updating signage requirements to reflect best practices.
- Require 100% of the accessible parking spaces to be fully energized.

2.5 Micromobility Parking Requirements

The term "Micromobility" refers to bicycles, standing scooters, skateboards and other forms of rolling to move around the City. Currently, the Parking Bylaw only requires bike parking within the Town Centre. To help meet the City's goal of reducing community greenhouse gas emissions, the Parking Bylaw provisions can encourage residents and visitors to walk, roll, or take transit by ensuring that there is safe and comfortable parking space for more modes of transportation in Maple Ridge.

Summary of Approaches Moving Forward

Below are the potential approaches to the micromobility parking provisions moving forward:

- Increase the long-term bicycle space requirement to at least one space per dwelling unit throughout the City.
 - o Require long term spaces to be energized.
- Increase the current rate for a long-term and short-term bicycle space in the Town Centre and include the same requirements along Lougheed Transit Corridor Area for all uses.
- Require short-term bicycle parking at all commercial, industrial, and institutional buildings.

- Long-term bicycle spaces should be provided in the P1 parking level and be easily accessible from the parkade gate without conflict with parked cars or other parking structures.
- Maintain the City's End of Trip facility requirements.
- Consider requirements for standing e-scooter parking and storage.

2.6 Electric Vehicle Infrastructure Requirements

Electric vehicle infrastructure refers to the charging system, whether at home or in public spaces, to fuel (and refuel) a vehicle. Moving towards higher adoption of zero emissions vehicles in BC, including electric passenger cars and trucks, is a component of achieving the City's GHG goals. Other forms of mobility, including electric bicycles, electric cargo bicycles, and electric scooters can also help lower greenhouse gas emissions by expanding the number and type of trips that are feasible by non-auto modes of transportation. These vehicles also benefit from electric outlets in parking lots, particularly where there is secure parking.

There are three general installation categories when discussing electric vehicle charging infrastructure:

- 1) Roughed-in infrastructure, which means providing sufficient panel capacity and conduit connecting the panel.
- Energized infrastructure, which means providing all the infrastructure needed to charge, including the outlet, however, drivers of electric vehicles would have to provide their own charging head.
- 3) Ready to Charge or "Fully Energized" means providing all the infrastructure, including the charging head.

Maple Ridge currently requires the following for EV Infrastructure:

- For Single Detached Residential, Duplex, Triplex, Fourplex, Courtyard Residential, Townhouse and Street Townhouse residential use a minimum of one parking space per dwelling unit with roughed-in infrastructure capable of providing Level 2 charging.
- For Apartment use, each resident parking space shall be provided with roughed-in infrastructure capable of providing Level 2 charging.
- For Apartment and Townhouse use, a minimum of 50% of required visitor parking spaces shall be provided with roughed-in infrastructure capable of providing Level 2 charging.
- For Commercial uses with 10 or more required off-street parking spaces, a minimum of 10% of the parking spaces shall each be provided with roughed-in infrastructure capable of providing Level 2 charging.

Summary of Approaches Moving Forward

Below are the potential approaches to the electric vehicle infrastructure requirements moving forward:

- Require 30% of the parking spaces for all residential developments to be energized at occupancy and the remaining residential units to have EV rough-in infrastructure available for future use.
- Require 10% of each non-residential development to be fully energized.

2.7 Shared Use Parking Requirements

The term "shared parking" refers to when facilities of two or more Commercial, Educational, Assembly, Civic and Institutional establishments (such as a daycare and a restaurant) may be allowed to share parking when the maximum demand for such parking facilities by the individual establishments occurs at different periods of the day. Applying shared use parking requirements on multi-use developments can result in a reduced parking footprint while still providing adequate parking for all uses. Currently, the parking spaces provided shall not be less than 75% of the total required by the individual uses.

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Summary of Approach Moving Forward

The only update proposed to this area of the Parking Bylaw is to update the wording to provide clarity.

2.8 Pedestrian Experience with Parking

Pedestrian experience provisions refer to lighting, signage, landscaping, and pathways requirements to help ensure a safe and comfortable experience to a destination and entrance/exit from a vehicle. For example, newer surface parking lots often have a pedestrian pathway that runs between parking spaces and ends by the entrance of the destination. These pathways often connect with accessible parking spaces, are lit, and have trees and shrubs to reduce the heat from the pavement. These types of provisions are currently not included within the Parking Bylaw. The new Parking Bylaw can also include provisions for aesthetic elements, such as climate resilient flowering shrubs, ornamental trees to reduce heat from a surface parking lot and in-ground irrigation to help ensure plantings survive and thrive. Including provisions to improve the pedestrian experience within parking lots contributes to residents' social health and well-being as well as aligns with the City's broader equity and inclusion efforts.

Summary of Approaches Moving Forward

Below are the potential approaches to enhance the pedestrian experience in parking areas:

- Introducing lighting requirements for shared surface and underground parking.
- Updating signage requirements for visitor, accessible, EV, and assigned parking spaces.
- Introducing pedestrian walkway requirements for parking areas that have more than one commercial or mixed-use building on the same lot or are of a certain size (such as big box retail parking lots), including landscaping.

2.9 Shared Mobility Provisions

Shared Mobility can be defined as transportation services and resources that are shared among users (such as Evo or Modo). Currently, there are no shared mobility provisions in the Parking Bylaw, however, car share companies have been working with developers and municipalities in Metro Vancouver to implement car share programs into new developments. Other municipality's provisions to permit car share programs in new developments are often another way to reduce the required number of parking spaces. For example, a municipality may permit five shared mobility parking spaces (including vehicles) in exchange for reducing the number of required parking spaces within a transit corridor.

Summary of Approaches Moving Forward

Below are the potential approaches to shared mobility provisions:

 Permit car sharing as a way to reduce parking requirements within the Town Centre and Lougheed Transit Corridor Area. For every car being shared (minimum of two), the total number of parking may be reduced by two to four spaces, up to a certain maximum).

3.0 NEW CONSIDERATIONS

New approaches not previously discussed in the September 6, 2022, Council Workshop report, but being considered for the new Parking Bylaw are outlined in the following section.

3.1 Small Car Parking Requirements

Small car parking requirements means that some spaces within a development are permitted to be smaller than the rest of the parking spaces. Most municipalities in the Metro Vancouver and the Fraser Valley have small car parking provisions, including Maple Ridge. However, there has been a trend of applying the small car parking provisions to residential development. This means that some occupants of

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a unit may end up with a small car parking space, but not drive a "small" vehicle. The Parking Bylaw currently allows 10% of all spaces to be "small car" parking, regardless of type of use.

Summary of Approach Moving Forward

The approach being considered moving forward regarding small car parking requirements is to increase the provision to allow up to 25% of commercial, industrial, and institutional developments to have small car parking spaces, but clearly prohibit small car parking where there is assigned residential parking spaces.

3.2 Parking Space Dimensions

The dimensions of off-street parking spaces typically include a minimum length, width, and height. These dimensions heavily impact the design of sites and how people and vehicles move through these spaces. Table 1 below provides an overview of current dimensions for various parking types in Maple Ridge as well as proposed changes moving forward.

Table 1: Summary of Approaches to Parking Dimensions Moving Forward

3.2	Parking Space Type	Current Parking Dimensions	Recommended Parking Dimensions Moving Forward
3.2.1	Regular parking space	2.5m wide x 5.5m long	2.6m wide x 5.5m long
3.2.2	Small car space	2.4m wide x 4.9m long	Keep dimensions the same.
3.2.3	Two car side by side garage	6.5m wide x 6.7m long (Only for Townhouses)	Keep dimensions the same; expand to all residential uses.
3.2.4	Single Car Tandem garage (one car in garage and one on apron)	3.7m wide x 6.7m long (Only for Townhouses)	Keep dimensions the same.
3.2.5	Two Car Tandem Garage (both cars fully enclosed in a garage)	None	3.7m wide x 12.2m long
3.2.6	Garage Apron	3.0m wide x 6.1m long	Keep dimensions the same.
3.2.7	Accessible Parking Space	3.8m wide x 5.5m long	3.8m wide x 5.5m long, plus a 1.2m aisle for regular vehicles, 4.6m wide x 5.5m long plus a 1.2m aisle for vans.
3.2.8	Long-term bicycle	0.6m wide x 1.8m long (Town Centre Only)	Keep dimensions the same; expand to other residential uses.

3.3 Vehicle Loading Requirements

The section on vehicle loading requirements refers to the provisions for larger commercial vehicles to load and unload goods and people. These requirements can include dimensions, access, design, and number of loading spaces for different land uses. Currently, the Parking Bylaw does not have clear loading requirements.

Summary of Approaches Moving Forward

Below are the potential approaches to vehicle loading requirements:

- Define "passenger zone" or "passenger loading" in the Parking Bylaw.
- Distinguish between "goods" and "passenger" loading policy.

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- Provide one loading space in residential buildings of 50 dwelling units or more.
- Provide a minimum of one loading space for general industrial and commercial uses for gross floor area between 400-2,000m² and increase to two loading spaces for gross floor area over 2,000m².
- Require that all loading and passenger activities take place off the street. In the case that a
 loading or a passenger zone cannot be provided off street, on-street locations may be considered
 at staff's discretion.

3.4 Committee Recommendations

When engaging with the Transportation Advisory Committee (TAC) and the Municipal Advisory Committee on Accessibility and Inclusiveness (MACAI) other considerations for the new Parking Bylaw were raised. Below are four of the committee's recommended topics to explore moving forward:

Accessibility

- Consider a requirement for pick up/drop off spaces in front of apartment buildings.
- Consider "senior" specific parking space that is also close to the establishment's entrance.

Micromobility

Consider long-term parking for scooters required for accessibility.

EV Charging Infrastructure

 Consider accessible parking provisions for residential developments. For example, for an apartment building, consider how many spaces should be accessible spaces.

4.0 NEXT STEPS

The comments and feedback received on this report from Council will help guide the next steps in the review process, as outlined in Figure 1. Once staff have finalized research and approaches moving forward a draft of the new Parking Bylaw will be presented to Council at Committee of the Whole. The draft Parking Bylaw is anticipated to be presented to Council in Fall 2023. In the Committee of the Whole report, staff will also provide an approach for instream applications and when the amendment to the Parking Bylaw would take effect.

Should Council move forward with the proposed bylaw, it will move forward for first reading. Should Council grant 1st reading, staff are proposing that the bylaw be sent to Urban Development Institute (UDI), Home Builders Association Vancouver (HAVAN), Maple Ridge Climate Hub, and the Cycling Hub for comment. Comments from these organizations will be included in the final reading report. Public Hearing is not required for bylaws that do not amend the Zoning Bylaw.

Figure 1: New Parking Bylaw Process



5.0 STRATEGIC ALIGNMENT

The Parking Bylaw aligns with four of the five pillars of the 2023-2026 City of Maple Ridge Strategic Plan.

- Updating the Parking Bylaw aligns with the "Livable Community" pillar as it will help facilitate housing diversity by allowing more flexibility in the amount of space dedicated to parking.
- Encouraging active transportation by increasing the minimum number of long- and short-term bike parking across the City helps reduce the community's greenhouse gas emissions, which aligns with the "Climate Leadership & Environmental Stewardship" pillar.
- Updating the Parking Bylaws accessibility requirements and including provisions to improve the pedestrian experience aligns with the "Engage, Healthy Community" pillar as it helps ensure the safety and enhances the well-being of residents.
- Lastly, the update to the Parking Bylaw aligns with "Governance & Corporate Excellence" pillar as the new bylaw will have an improved layout, functionality, and clarity to be more user-friendly and effective in regulating off-street parking.

6.0 INTERDEPARTMENTAL IMPLICATIONS:

Staff will continue to work collaboratively with various departments, including Engineering, Bylaw & Licensing Services, Building, and Fire on the new Parking Bylaw.

7.0 CONCLUSION:

The purpose of this report is to continue the discussion from the September 6, 2022 Council Workshop, and provide an update on the approaches being considered moving forward. This report is also seeking Council's feedback on the approaches proposed for the new Parking Bylaw. A draft of the new Parking Bylaw is anticipated to presented to Council in Fall 2023.

"Original Signed by Amanda Grochowich" for ____

Prepared by:

Krista Gowan, MA Planner 2

"Original Signed by Charles R. Goddard"

Reviewed by: Charles R. Goddard, BA, MA

Director of Planning

"Original Signed by Scott Hartman"

Concurrence: Scott Hartman

Chief Administrative Officer

The following appendix is attached hereto:

Appendix A - Alignment with OCP Policies and Draft STP

Appendix B – Draft Evolve Traffic Solutions Report

Appendix C – Map of Field Collection Locations

Appendix D - Committee Engagement Materials

Appendix E - TAC and MACAI Feedback

Appendix F - September 6, 2022, Workshop Report

APPENDIX A

This appendix outlines some key policies within the Official Community Plan and strategies within the draft Strategic Transportation Plan (nearing completion) that are guiding the direction of the new Parking Bylaw.

Alignment With the Official Community Plan

The Official Community Plan (OCP) provides the policy framework for creating compact communities in high density areas, such as the Town Centre and Lougheed Transit Corridor, as well as livable neighbourhoods with varying density levels throughout the rest of Maple Ridge. In Maple Ridge, the majority of the growth in population, jobs, and housing will be accommodated within the Urban Area Boundary where services are readily available, or the infrastructure is already in place. By concentrating growth and density in key areas, such as the Town Centre and the Lougheed Transit Corridor, it is more likely that transportation alternatives, such as, transit, rolling, and walking will become more viable and attractive.

Chapter 2 "Growth Management", Chapter 5 "Natural Features", and Chapter 7 "Transportation" of the OCP contains policies that encourage active transportation and support how the City should develop, including:

- 5–45 The City of Maple Ridge has a goal to reduce community greenhouse gas emissions to net zero by 2050 from 2010 levels, with an interim target of 45% reduction by 2030, in alignment with the Intergovernmental Panel on Climate Change (Chapter 5).
- **7-4** Maple Ridge will place an emphasis on increasing choice for non-automobile transportation modes.
- **7-11** Maple Ridge will support initiatives that reduce traffic demand and automobile trips such as:
 - a) encouraging more compact development in the Town Centre and around village commercial centres and community commercial cores;
 - b) supporting the Town Centre as the central node of the community linked to outlying areas;
 - c) locating the industrial and commercial land base in appropriate areas;
 - d) encouraging telecommuting and home-based business;
 - e) emphasizing more employment opportunities adjacent to residential developments, or more housing adjacent to employment generating uses;
 - f) encouraging transit use, bicycle use, and pedestrian travel;
 - g) promoting community education programs.
- **7-30** Maple Ridge will encourage the development of cycling infrastructure and support programs, such as 'end-of-trip' facilities for cyclists at key destinations and new developments.
- 7-38 Maple Ridge will continue to promote universal accessibility throughout the District.

The current direction of the new Parking Bylaw aligns with the OCP as the proposed approaches within this report propose changes to encourage the reduction of greenhouse gases by requiring more cycling infrastructure for complete trips and improving off-street parking accessibility.

Alignment With the Draft Strategic Transportation Plan

In 2014, the City's Strategic Transportation Plan (STP) was endorsed. However, since 2021 the City has been undertaking an update to the STP. At the July 11, 2023, Council Workshop, an update on the new draft STP was presented to Council. According to the data collected through the STP update process, the number, distance, and share of driving trips within Maple Ridge has increased. Therefore, there is an opportunity to increase electrification, while also making walking, rolling, and transit trips more safe, comfortable, and efficient in order to meet the City's greenhouse gas targets (OCP Policy 5-45). The draft STP presented at the July 11, 2023 Council Workshop contains strategies and Action Items related to the Off-Street Parking Bylaw, such as:

- **Strategy 4.1** Complete connections to community destinations to ensure that most residents and visitors can easily and comfortably access amenities across the City by bicycle.
 - Action 4.1.2 Implement support facilities such as wayfinding, secure bicycle parking and end-of-trip facilities to make cycling convenient.
- **Strategy 6.1** Use transportation demand management to reduce the demand on the road network, increasing efficiency.
 - **Action 6.5.2** Review parking requirements in Bylaw 4350-1990, including changes that encourage the use of car pooling and reduce parking minimums.
- Strategy 7.2 Explore the role of new ways of travelling, including car share (e.g. Evo, Modo), ride share (e.g. Uber, Lyft), micromobility (bike share, electric bikes, scooter share, etc.) in improving mobility for all.
 - Action 7.2.3 Ensure new developments provide for the secure storage and charging of electric bicycle, cargo bicycles, and scooters and improve storage amenities at City-owned destinations.

The current direction of the new Parking Bylaw aligns with the draft STP as the proposed approaches within this report propose changes to encourage active modes of transportation, electrification of vehicles, and carpooling.



Maple Ridge Off-Street Parking and Loading Bylaw Update Draft Report Rev.3

Prepared for

City of Maple Ridge

Prepared by

Evolve

Project Number

10151.04

Date

July 17, 2023



Date:

July 17, 2023

Project No.:

10151.04

Krista Gowan Planner – Community Planning City of Maple Ridge 11995 Haney Place Maple Ridge, BC V2X 6A9

RE: Maple Ridge Off-Street Parking and Loading Bylaw Update - Draft Report Rev.3

Dear Krista,

I am pleased to submit to you a revised draft report for Maple Ridge Off-Street Parking and Loading Bylaw Update. I trust that the following report meets your expectations. Please do not he sitate to call should you have any questions or comments.

Yours Sincerely, Alon Weinberger, P.Eng., PTOE, RSP1 Principal, Evolve





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1.0 INTRODUCTION

1.1 Context

City of Maple Ridge is seeking to update its Off-Street Parking and Loading Bylaw. Staff presented a report to council on September 6, 2022 at a Council Workshop, where the general plan for the proposed Bylaw Review was discussed. This report addresses all the points outlined in the September 2022 staff report, council feedback, and additional considerations that were not raised by staff.

The current City of Maple Ridge Off-Street Parking and Loading Bylaw ("Parking Bylaw") was adopted in 1990 and amended several times, most notably in 2010 when new parking standards were introduced for the Town Centre area. This large amendment followed the recommendations in a report prepared by Bunt & Associates in 2008 titled "Maple Ridge Town Centre Parking Study" which involved stakeholder engagement and a council workshop.

In the past 15 years since the "Maple Ridge Town Centre Parking Study" was completed, there have been many changes to parking best practices across Canada. These changes followed a deeper understanding of the role that parking plays in urban design, increased traffic congestion, and the general viability of housing development projects.

Locally, Lower Mainland municipalities, from Vancouver to Chilliwack, have been moving towards reducing parking minimums for new residential and non-residential buildings. These changes have been supported by regional reports such as the "Metro Vancouver Apartment Parking Study," published in 2012 and updated in 2018, which have shown an under-utilization of off-street parking in all land uses throughout the region. Parking requirements that were historically used only for Downtown Vancouver have now been applied across the Lower Mainland. Parking minimums recluctions in the Lower Mainland follow a general trend in Canada and the US which is supported by local occupancy studies, lower vehicle ownership in urban centres and frequent transit areas, and industry best practices.

The latest Official Community Plan ("OCP"), adopted in 2014, provided the framework for creating livable neighbourhood which support a healthy mix of land uses and density and support for alternative transportation modes. The ongoing work on the Strategic Transportation Plan ("STP"), expected to be finalized and adopted in 2023, identifies ideas and strategies of how the OCP goals can be met through long-term transportation investments. Setting the right off-street parking requirements is a key objective to achieve the OCP and STP goals.

Maple Ridge is bisected by a regional highway, Highway 7, which passes through the Town Centre as Lougheed Highway. Lougheed Highway west of the Town Centre is served by the R3 rapid transit route and is slated for major development outlined in the "Lougheed Transit Corridor Area Plan" which received First Reading on December 7, 2021. Maple Ridge is also connected to the Golden Ears Bridge, a major regional connection over the Fraser River which attracts traffic through the City. Maple Ridge is served by the West Coast Express through the Maple Meadows and Port Haney Stations. The combination of major east-west regional highway, a major north-west connection across the Fraser River, a rapid transit service, and a



connection to the only regional commuter train, provides opportunities and challenges which should be taken into consideration when updating the Parking Bylaw. Challenges include high pass-by traffic through Maple Ridge which puts a strain on local vehicle trips. Opportunities include great potential for increasing transit ridership and reducing parking minimums in high transit and urban areas.

1.2 Parking Bylaw Update Objectives

A typical parking bylaw update involves best practices research, reviewing parking bylaws of neighbouring and similarly sized municipalities, and aligning the changes with the City's policies, including the Official Community Plan and the Strategic Transportation Plan. The parking bylaw update must also consider the unique makeup of Maple Ridge, its local needs and challenges, which may not be relevant to other municipalities in the Lower Mainland.

Based on Council's feedback at the September 6, 2022 Council, this report will provide the following:

- Identify gaps to understand where the Parking Bylaw needs to follow best practices.
- · Provide direction that will carry Maple Ridge into the future.
- Understand and address the connection between off-street parking policies and on-street parking demand.
- Explore how modern vehicle dimensions correspond to existing parking space dimensions.
- Address the changes, some of which are likely permanent, which were caused by the COVID-19
 pandemic. These changes include, but are not limited to, different travel and parking demands
 that do not follow the traditional AM/PM peaks, and different loading patterns due to the
 increase in online shopping.

The update of the Maple Ridge Off-Street Parking and Loading Bylaw includes a review to the following provisions:

- Parking minimums for different areas of the City;
- · Consideration for below-market and rental housing;
- Accessible parking requirements;
- Tandem parking requirements;
- Small car parking allowance;
- · Preferential parking requirements (carpool, car share, etc.);
- EV charging infrastructure requirements;
- Cash in-lieu requirements;
- Shared parking allowance;
- Micro mobility requirements;
- End of trip facility requirements;
- · Loading requirements; and,
- Parking and loading space dimensions.



1.3 Study Scope of Work

The scope of work for this study includes the following:

- A review of publications and best practices from the US and Canada, such as the "Parking Generation Manual" by the Institute of Transportation Engineers ("ITE"), and "Shared Parking" by the Urban Land Institute ("ULI");
- A Review of local bylaws and studies such as other municipal bylaws and regional parking studies, and engagement with the City's advisory committees; and,
- Field data collection and observations at selected commercial nodes and residential neighbourhoods in Maple Ridge in order to get a sample of vehicle fleet size used around the City.





2.0 RESEARCH AND DISCUSSION

The research and discussion in this section provides a methodology to achieving the objectives presented in Section 1.2. Highlights from the literature review and research into comparable municipalities are presented in Section 3.0.

2.1 Literature Review

A literature review of industry parking practices was undertaken in order to understand where Maple Ridge's parking bylaw should be updated to follow current practices. The documents reviewed in preparation of this report include:

- Parking Generation Manual, 5th Edition (2019) by the Institute of Transportation Engineers;
- Shared Parking, 3rd Edition" (2020) by the Urban Land Institute and the National Parking Association;
- The Metro Vancouver Apartment Parking Study (2012) by Metro Vancouver;
- The 2018 Regional Parking Study Technical Report (2019) by Metro Vancouver and TransLink;
- 2018 Vancouver Panel Survey Summary Report (2019) By McElhanney and Mustel Group;
- The High Cost of Free Parking (2011) by Donald Shoup and the American Planning Association;
- A Business Case for Dropping Parking Minimums (June 1, 2022), an article in the Planning Magazine from the American Planning Association;
- Parking Requirement Impacts on Housing Affordability (May 9, 2023), an article by Todd Litman of the Victoria Transport Policy Institute;
- Average Car Length Guide (January 6, 2022), an article by Car Roar; and,
- How Wide Is The Average Car? (March 3, 2020), an article by VEHQ.

The above list can be divided into two groups:

- Documents based on extensive field and resident surveys, such as the Parking Generation Manual
 or the Metro Vancouver Apartment Parking Study; and,
- Documents providing strategic directions regarding off-street parking, such as *The High Cost of Free Parking*.

2.2 Municipal Bylaw Reviews

As typically done when updating an off-street parking bylaw, the parking bylaws of neighbouring and similarly sized municipalities are reviewed. For this report, all multiplicities in the lower mainland (Metro Vancouver and the Fraser Valley) were reviewed for comparison. Given the complexity and detail of each municipal bylaw, only eight municipalities were selected to be reviewed in detail. These municipalities include:

- City of Chilliwack
- · City of Abbotsford
- City of Mission



- City of Pitt Meadows
- City of Langley
- Township of Langley
- · City of Delta; and
- City of Vancouver.

The municipalities noted above (except Vancouver) vary in population size, from 19,000 in Pitt Meadows to 133,000 in the Township of Langley. However, they share several characteristics with each other and with Maple Ridge, which makes them good candidates for parking bylaw comparison. These characteristics are:

- Not served by SkyTrain and are not served by a large number of frequent transit routes;
- Suburban in nature;
- · A large car mode share; and,
- Not the key region's employment hub.

Vancouver, on the other hand, is the exact opposite of the above characteristics, and is able to have stricter parking requirements than the suburban municipalities, including detailed bicycle space requirements.

A comparison between these municipalities shows that Maple Ridge sits at about the middle compared to other municipalities. Some have larger parking minimums than Maple Ridge and no town centre reductions, while others have stricter parking minimum and parking reduction along frequent transit corridors. A full comparison of all the above municipalities and the Maple Ridge Parking and Loading Bylaw will be provided in the final report.

2.3 Field Data Collection

In the recent two decades there has been a well-document shift from cars into larger vehicles, such as SUVs and pick-up trucks. The average car dimensions, according to the analysis done by Car Roar VEHQ, are 14.7ft long by 5.8ft wide (4.48m long by 1.77m wide). A comparison done by Car Roar and VEHQ of different vehicle classes such as cars, SUVs, and pick-up trucks shows that in the past few decades. vehicles grew longer and wider in size, and in many cases on the same vehicle models. This shift has carried through the introduction large electric and hybrid vehicles. This growth in vehicle width in particular may make it more challenging to access the vehicle if parked in a narrow parking space.

As this issue has direct implications on determining an appropriate parking space dimensions, this report explores whether the required parking dimensions in the Maple Ridge Parking Bylaw are still adequate with a changing vehicle fleet size.

A first step in determining whether the Maple Ridge off-street vehicle parking spaces are adequate was to conduct a field data collection program. The data collection program included off-street and on-street parking on selected residential, commercial, and industrial locations during the peak parking periods for each location. The data was classified to cars, SUVs, and pick up trucks. These locations and data collection periods include the following:



- 16 industrial buildings + adjacent street parking along 113b Avenue were surveyed between noon and 3:00PM;
- Five retail areas in west, centre, and east Maple Ridge were surveyed three times each during the PM peak period, between 4:00PM and 7:00PM; and,
- Eight residential locations and adjacent street parking in the Town Centre, Albion, and Silver Valley Neighbourhood were surveyed during two weekday evenings, between 8:00PM and 9:30PM.

The field data collection results showed a consistent vehicle fleet mix consisting of 40% cars, 50% SUVs, and 10% pick up trucks.





3.0 PARKING AND LOADING DISCUSSION

This section discusses general trends and literature review findings of parking minimums for the provisions listed in Section 1.2, and provides recommendations for how each provision should be addressed in the updated Maple Ridge Parking Bylaw.

3.1 Parking

3.1.1 Parking Minimums Requirements

Parking minimums have traditionally been set by perceived parking demand for each land use, with some adjustments based on local studies and observations. For residential developments, parking minimums are typically set by the number of bedrooms in a dwelling unit, while non-residential development's parking minimums are typically set by the gross floor area ("GFA"). Generally, the perceived parking demand follows these two assumptions:

- A larger dwelling unit will produce more vehicle trips and will require more parking due to more
 occupants in the unit, regardless of its type or location; and,
- A larger commercial land use will require more parking, regardless of its time of operation.

From the research and data collection undertaken as part of this study, these two assumptions are not always reflective of Maple Ridge and should not be applied to all situations.

The review of neighbouring and comparable municipalities' parking minimum requirements generally shows the following trends:

- Single family homes, row homes, duplexes and townhomes typically require 2 parking spaces;
- Apartment and condominiums typically have at least 1 parking space per dwelling unit, and require as many as 2 parking spaces for units with more bedrooms;
- Visitor parking is almost always 0.2 spaces per dwelling unit;
- Accessory Dwelling Units, such as Secondary Suites, require 1 parking space;
- Dens are not considered bedrooms in parking calculations;
- Offices require 2-3 parking spaces per 100m²;
- Retail uses require 3-4 parking spaces per 100m²;
- Most municipalities that were reviewed do not provide parking reduction to rental or belowmarket housing, but do provide parking reduction for city centres and transit corridors;
- Most municipalities allow a certain percentage of parking to be small car and tandem parking; and,
- · Most reviewed municipalities require either EV charging rough-in or energized parking spaces.

Some municipalities had better and more detailed parking minimum reductions in urban centre and transit corridors than others, but none had specified reductions for private residences (single family home, duplexes, and townhomes).

While a proximity to a frequent transit service or multiple transit services is shown to correlate with a higher transit mode share and lower vehicle ownership rate, another key factor determining weather a



parking minimum reduction should be warranted is Internal Capture. Internal capture assumes that within a mixed-use development or a general area with many land uses, some of the would-be vehicle trips between the different land uses can be done in alternative modes such as walking and cycling. As this condition typically applies to urban centres and areas with high mixed-use developments, it also applies to the Maple Ridge Town Centre and the future redeveloped Lougheed Transit Corridor.

Maple Ridge should introduce a 20% parking minimum reduction for the Town Centre and the Lougheed Transit Corridor. This reduction should not apply to accessible parking spaces.

3.1.2 Below-Market and Rental Housing Requirements

BC Housing defines "Subsidized housing" or "Non-market Housing" as long-term housing for people with low and moderate income who permanently reside in British Columbia. The housing is managed in several ways, but in general, the rent is calculated based on 30% of the total household income. For the purpose of this report, "Rental Housing" is any market housing which is typically built in purpose-built rental buildings.

Studies and Transportation Impact Assessments ("TIA") completed in the Lower Mainland by Evolve and other consultants over the years have shown that below market and rental housing generate fewer vehicle trips per unit due to lower vehicle ownership rate, and therefore require less parking than other market dwellings. While reducing parking requirements for rental and below-market housing was not evident in most of the reviewed municipalities but City of Mission, it should be implemented in Maple Ridge to improve affordability.

As these types of housing are developed predominantly in urban area, close to transit and services, Maple Ridge should allow for a 20% parking minimum reduction across the City. It is recognized that with this type of housing, some developments may not be financially viable even with a 20% reduction. As the region is dealing with housing and affordability crisis, such applications can be addressed on a case-by-case basis, but should be accompanied with a parking study by a registered Transportation Engineer that shows that a proposed development can be supported by less parking.

Maple Ridge should implement a reduction of up to 20% of the market parking minimums to rentals and below market housing, or up to 50% reduction if accompanied by a comprehensive parking study and at the discretion of the Director of Planning. This 50% should not be added to other parking reductions.

3.1.3 Accessible Parking Requirements

Accessible parking spaces allow people who use wheelchairs or other mobility devices to get in and out of their car or van. Accessible parking has historically been calculated as a percentage of the total required parking spaces, and typically follows a 2% rate or one accessible space per 50 required parking spaces. This approach should be revised with an emphasis on accessibility and equity for all residents.

Most reviewed municipalities require up to two accessible parking spaces per the first 100 parking spaces and one additional accessible parking space for each additional 100 require spaces. Maple Ridge currently



requires 3 accessible parking spaces per up to 200 required spaces, and 1% for each additional 100 spaces. City of Delta has the most detailed accessible parking requirements: it has highest accessible parking requirement with 4 accessible spaces for the first 100 required parking spaces, it clearly underlines the accessible parking space design with a joint aisle between spaces (which allows for smaller footprint), and it also requires that 50% of the required accessible spaces should accommodate a van. An accessible van is a modified vehicle with larger interior and a lift to allow for easier wheelchair access. Maple Ridge currently does not specify requirements for accessible vans.

City of Delta's Accessible Parking requirements are as follows:

- 1 accessible parking space for 10-25 required parking spaces;
- 2 accessible spaces for 26-50 required spaces;
- 3 accessible spaces for 51-75 required spaces;
- 4 accessible spaces for 76-100 required spaces; and,
- 1 additional accessible space for each 100 additional required parking spaces.

Given that some developments, such as small retail and commercial developments, have 10 or fewer parking space requirements, Maple Ridge should adopt the City of Delta example but set the minimum requirement at 1 accessible space for 5 required spaces. This measure would further increase equity for all residents.

It is recommended that Maple Ridge revises its accessible parking space requirements and applies the following rates:

- 1 accessible parking space for 5-25 required parking spaces;
- 2 accessible spaces for 26-50 required spaces;
- 3 accessible spaces for 51-75 required spaces;
- 4 accessible spaces for 76-100 required spaces; and,
- 1 additional accessible space for each 100 additional required parking spaces.

In addition, Maple Ridge should require that 50% of the required accessible spaces will accommodate a van.

3.1.4 Tandem Parking Requirements

The general definition of tandem parking is any parking arrangement where two vehicles are parked one behind the other, and one of these vehicles is blocked by the other. Tandem parking can be found in some valet facilities and underground parkades but is used predominantly in townhouses and duplexes. While tandem parking has advantages, most notably the ability to build townhomes with smaller footprints and thus reduce the overall cost of the homes, they also have disadvantages. The obvious disadvantage is the need to move one vehicle in order to drive the other vehicle. In two-vehicle households where both vehicles are used regularly, this disadvantage deters residents from using their garage in a tandem arrangement, and many choose to park one vehicle on the street. This, in turn, can yield a high on-street



parking demand which in many cases trickles to nearby streets that have their own residential and commercial parking needs. For that reason, most municipalities limit the number of tandem parking.

Tandem parking allowance at neighbouring municipalities ranges from 10% of total require parking to no limit (100%). Maple Ridge allows up to 30% tandem parking across the City. The majority of municipalities in the Lower Mainland also have one tandem parking rate that applies to all areas of that municipality. This practice is not ideal, as research has shown that households within town centres and in proximity to transit corridors have fewer vehicles than households in suburban neighbourhoods. Therefore, parking issues caused by tandem parking in suburban neighbourhoods due to household's car dependency may not have the same impact in neighbourhoods that are close to transit and are walkable to many amenities. City of Port Moody for example, currently allows up to 75% tandem parking in the City Centre.

Maple Ridge should apply three tandem parking rates:

- Allow up to 30% tandem parking in suburban neighbourhoods (current policy);
- · Allow up to 75% tandem parking in the Town Centre; and,
- Allow up to 50% tandem parking in the Lougheed Transit Corridor, or up to 75% tandem parking on a case-by-case basis.

Higher tandem parking percentage in urban and frequent transit areas will allow greater density and better home affordability in urban areas.

3.1.5 Small Car Parking Allowance

A parking space designated as "Small Car" is defined by smaller overall dimensions (length and width) than a standard parking space and allows to maximize parking supply in a smaller footprint. Small car parking allowance exists in all reviewed municipalities. Maple Ridge allows up to 10% of the required parking spaces to be designated as small car, which is lower than the 20-25% average rate in the Lower Mainland. As small car parking can satisfy parking requirements on a smaller footprint, it allows a reduction of the overall cost of a building and reducing the area needed solely for parking. However, some developers use small car space allowance in ways that, while may satisfy the overall parking requirements, are not practical for everyday use. For example, small car spaces are currently allowed in residential parking, which can be a problem if a certain small car space is assigned to a resident driving a larger vehicle.

Maple Ridge should apply a small car rate limit of 25%, but without allowing small car spaces in all uses with assigned residential parking spaces (except visitor parking).

3.1.6 Preferential Parking Requirements

Car share programs, such as Evo or Modo, have been part of the local landscape in the past two decades. Car share companies have been working with developers and municipalities to implement car share programs into new developments in order to achieve a reduction in the total required number of parking spaces. This practice is recommended in town centres and transit corridors as it reduces the need for residents to own a vehicle and also results in fewer vehicles on the road. Currently, there are no provisions



for preferential parking in the Maple Ridge Parking Bylaw. There are no preferential parking requirements in any of the reviewed suburban municipalities, but City of Vancouver allows developers to provide 1 car share parking space instead of 5 required parking spaces. Car share companies, like Modo, work directly with developers to provide car share vehicles to residential projects.

Maple Ridge should apply a parking reduction in the range of 3-5 parking spaces per one car share vehicle, up to a certain amount determined on a case-by case basis, for the Town Centre and Lougheed Transit Corridor. Car share parking spaces should be clearly marked and energized.

3.1.7 EV Charging Infrastructure Requirements

EV charging requirements are becoming a standard for parking bylaws in the Lower Mainland and rest of Canada. Around the Lower Mainland, more and more new developments come standard with energized parking spaces, some of which are not yet required by the municipality but rather supplied by the developers for better unit marketability.

Most neighbouring municipalities are already asking for energized parking spaces, while some, like Port Coquitlam, require 100% EV rough-ins for all residential dwelling types. EV rough-ins include installation of 240V breakers on a building's or unit's electrical panel and conduits running from the electrical panels to a conduit box for each parking space. An energized parking space includes a physical 240V outlet that can be used to connect to a Level 2 charging station. While an energized parking space requirement certainly addresses projected future needs for EV charging stations, it may also affect home affordability as the costs to energize a parking space will be passed to the consumer, which may or may not own, or plan to own, an electric vehicle. A balanced approach may be to require all new parking spaces to have a rough-in charging infrastructure, including all visitor and all commercial parking spaces, but require only a fraction to be energized on opening day.

Maple Ridge should maintain the 100% rough-in requirements for all residential developments but require that 30% of the parking spaces in each residential development type to be energized. 100% of the accessible parking spaces and car share spaces should be energized.

3.1.8 Cash in Lieu Requirements

"Cash in-lieu" or "Payment in Lieu" allows a developer to reduce the total required number of parking spaces by paying the municipality for each parking space reduction. Maple Ridge currently charges \$20,000 per parking space reduction in the Town Centre area. Most reviewed municipalities charge a range of \$15,000 to \$25,000 payment in lieu, with Coquitlam charging up to \$35,000 per parking space. Both the amount Maple Ridge and other municipalities charge are likely much lower than the true cost of a parking space. This discrepancy may lead to developers using the payment in lieu system solely to cut construction costs but without passing the savings to buyers or providing a suitable parking alternatives/TDM measures.

The cost of construction in the Lower Mainland goes up every year and has gone up sharply since the beginning of the COVID-19 Pandemic. Between 2017 and 2022, the Construction Price Index for the Vancouver region (CPI, not to confuse with the Consumer Price Index) has gone 27.1% (from 100.4 in 2017).



to 127.6 in 2022) for non-residential construction. In the same five years, the CPI has gone 44.8% (from 101.3 in 2017 to 146.7 in 2022) for residential construction. These increases do not reflect the last year which saw record-breaking inflation. It is safe to assume that the cost per one parking space has also gone up, yet no municipality applies the CPI on determining the payment in lieu.

While the increase in construction costs is one factor that should determine the amount of payment in lieu, another factor is the reason a developer will seek this method.

Maple Ridge should increase the payment in lieu to a range of \$35,000-\$40,000 and add a provision in the bylaw that this amount will be updated annually, based on the CPI increase. The payment in lieu allowance should apply to developments in the Town Centre and the Lougheed Transit Corridor.

3.1.9 Shared Parking Allowance

Shared parking is the use of a parking space to serve two or more individual land uses without conflict or encroachment. One example for shared parking approach is sharing event space which is typically active in the evenings with office parking which is typically active in the weekday daytimes only. Applying shared parking approach on multi-use developments can result in reduced parking footprint while still providing adequate parking for all uses.

Maple Ridge already allows for shared parking between two land uses which peak at different times. Shared parking can become harder to apply in small developments that do not have a high number of parking spaces to begin with, so development size should be taken into consideration.

Recent changes that are likely to affect shared parking analysis are related to post COVID trends which include working from home and running errands or shopping at different times of the day. These trends may yield to parking activities that may not fit previous shared parking assumptions. Among the reviewed municipalities, only Delta specifies shared parking allowance in its Parking Bylaw.

Given that this updated bylaw will apply to new developments, and shared parking allowance already exists in Maple Ridge, there are no recommended bylaw revisions for these provisions. Any shared parking analysis should reflect post-COVID parking trends and any reduction based on shared parking analysis should be done on a case-by-case basis.

3.1.10 Micro-mobility Requirements

Micro-mobility include bicycles, electric standing scooters and other devices used for personal travel. Throughout BC and other places across Canada, new micro-mobility trends like standing scooters are almost used exclusively in urban areas. There are several key factors that may encourage (or deter) people using a bicycle and should be addressed in an update bicycle parking policy, such as:

- · Ease of access to a bicycle parking space/bike room;
- · Safety and theft prevention; and,
- Adequate bicycle parking at the destination.



Bicycle space requirements in Maple Ridge are not consistent with vehicle parking requirements. For example, since every land use has vehicle parking requirements, one can expect a parking space in their destination (an office, a store, etc.). That cannot be said about bicycle trips, which have limited parking requirements, and therefore do not guarantee a comparable "destination parking space" as vehicles have. In addition, Maple Ridge has a low bicycle parking rate of 1 long-term space per 4 units (only applicable in the Town Centre), far lower than even Abbotsford and Chilliwack which require 1 long-term bicycle space per dwelling unit.

The City of Vancouver has comprehensive bicycle parking requirements which not only require a higher rate per dwelling unit and non-residential uses, but also address ease of access to bike rooms and overall bike room safety. Maple Ridge should adopt similar objectives as City of Vancouver.

It is recommended that Maple Ridge makes the following revisions to the bicycle parking requirements:

- Increase the long-term bicycle space requirement to at least one space per dwelling unit throughout the City;
- Consider a higher rate for a long-term bicycle space in the Town Centre and along Lougheed Transit Corridor area (Long-term bicycle spaces are considered safer by design than short-term spaces);
- Long-term bicycle spaces should be provided in the P1 parking level and be easily accessible from
 the parkade gate without conflict with parked cars or other parking structures. If bicycle spaces
 cannot be provided in the P1 level, they should be provided in another parking level and be easily
 accessible via an elevator;
- For residential buildings, long-term bicycle spaces should be located either in a safe and secured bike room or in bike lockers.

3.1.11 End of Trip Facilities Requirements

"End of trip facilities" refer to amenities available to cyclists in non-residential developments, such as lockers, washrooms, wash basins and showers. These amenities act to encourage active transportation in different types of weather as they allow cyclists to clean up and change their clothes before starting the workday. End of Trip Facilities, combined with increase in long-term bicycle space described in the previous section, should be considered a Transportation Demand Management ("TDM") measure. TDM is defined as a set of strategies aimed at maximizing the utility of sustainable transportation choices. TDM is used to manage parking demand and enhance the effectiveness of active transportation. In the case of End of Trip Facilities, TDM is achieved by providing the comfort, safety and choice for persons who wish to cycle to their destination.

Maple Ridge currently requires End of Trip Facilities as part of section 402 in the Zoning Bylaw (Regulations for Permitted Use of Land, Buildings, and Structures). The requirement covers non-residential buildings and large residential buildings which employ staff, and is calculated based on the require number of long-term bicycle spaces.



As noted in Section 3.1.10, the current requirements for long-term bicycle parking are lower than other municipalities and do not cover the whole City nor provide enough bicycle spaces. Since the end of trip facilities are directly linked to the bicycle parking requirements, there is a low number of these facilities provided in Maple Ridge.

It is recommended that the End of Trip Facilities, as listed in section 402 in the Zoning Bylaw, should be moved or duplicated to the Parking Bylaw section. There are no further recommendations to revise the ratio of End of Trip Facilities to the number of long-term bicycle spaces, as their number will increase with the increase in the long-term bicycle parking requirements.

3.2 Loading Requirements

Loading activities are an essential part of every land use, from heavy industrial to residential. A designated loading space provides a safe area for goods movement away from traffic and pedestrian activities, and therefore should be considered with any development application. For the purpose of this report, the term "loading" refers to good loading only.

Maple Ridge does not have clear loading requirements, but rather general language that loading is required for any land use requiring the delivery of goods. This may cause issues where a development provide a loading space that is not adequate to the type or size of the development. In addition, Maple Ridge does not define "goods loading" and "passenger loading/passenger space," both of which has seen significant changes in recent years since the increase in online shopping and deliveries, and introduction of ride share services such as Uber.

Most reviewed municipalities have loading rates for non-residential uses, where Chilliwack and Delta also have loading rates for residential buildings.

Maple Ridge should clarify its loading policy, define "goods" and passenger" loading zones, and require a loading space in residential buildings. It is recommended that Maple Ridge requires the following:

- 1 loading space per residential building of 50 dwelling units or more;
- A minimum of 1 loading space should be provided for GFA between 400-2000 m² and increase to 2 loading spaces for GFA over 2000m² for general industrial and commercial ιses; and,
- A passenger loading space should be provided for residential and non-residential buildings (off street, if possible).

While this report only covers off-street parking and loading, it is recognized that both goods and passenger loading activities cannot always take place off the street. Therefore, adding loading and passenger zones on-street for existing development may be considered, at staff's discretion, if no off-street zone can be provided.



4.0 PARKING AND LOADING SPACE DIMENSIONS

This section discusses current and recommended parking and loading space dimensions based on rates found in other municipalities' Bylaws.

4.1 Current Dimensions

As part of this report, parking and loading space dimensions and definitions were reviewed. Maple Ridge currently uses the following dimensions:

- A regular parking space: 2.5m x 5.5m
- A small car space: 2.4m x 4.9m
- A single residential garage (townhouse only): 3.7m x 6.7m
- A side-by-side residential garage (townhouse only): 6.5m x 6.7m
- Tandem residential garage: 3.7m x (length not defined)
- Garage apron parking space: 3.0m x 6.1m
- Accessible Parking Space: 3.8m x 5.5m (defined as 2.5m regular space + 1.3m aisle)
- Long-Term bicycle space: 0.6m x 1.8m
- · Loading space: Not defined

4.2 Recommended Dimensions

4.2.1 Parking Space Dimensions

As part of the municipal bylaw reviews described in Section 2.0, parking and loading space dimensions in other municipalities were also reviewed. The 5.5m parking space length is consistent across all the suburban municipalities reviewed except for van accessible space. The 2.5m parking space width currently in use in Maple Ridge is lower than all municipalities except Vancouver. Given the field data results and the general trend of moving into larger vehicles, it is recommended that Maple Ridge updates the parking space width to 2.6m. A wider parking space is also helpful in order to better accommodate people, especially young families, entering and existing a vehicle.

Maple Ridge's single/tandem garage width at 3.7m. This width provides adequate maneuvering space around a vehicle and opening doors, and we recommend that this dimension remains the same. Small car dimension is consistent with all other suburban municipalities and should also remain the same.

As described in Section 3.1.3, City of Delta has clear provisions for accessible parking space dimensions and layout. Delta defines a standard accessible space as a 2.5m wide space + an adjacent aisle. Delta's aisle width is 1.5m, which is above industry accessible space width. Delta also defines an accessible van parking space as 3.4m width + 1.5m aisle. We recommend that Maple Ridge maintains a standard accessible parking space as 3.8m wide x 5.5m long and defines a new accessible van parking space as 4.6m wide x 5.5m long. These dimensions are for stand-alone parking spaces. Two adjacent accessible parking spaces may share an aisle 1.2m wide and clearly marked with the appropriate yellow paint markings.



4.2.2 Loading Space Dimensions

As for loading space dimensions, Maple Ridge should require a minimum size of 3.2m x 9.0m for good loading purpose. For developments which require larger loading spaces (large grocery store, distribution centres, etc.), Maple Ridge should address these loading requirements on a case-by-case basis, as each land-use and truck requirements may vary.





5.0 SUMMARY OF RECOMMENDATIONS

5.1 Vehicle Parking Requirements

- Introduce a parking minimum reduction of 20% along the Lougheed Transit Corridor. This reduction should not apply to accessible parking spaces.
- Implement a 20% parking reduction for below-market and rental housing. This reduction can further increase to 50% if accompanied by a comprehensive parking study and by the Director of Planning's discretion.
- Revise accessible parking rates to the following rates:
 - o 1 accessible parking space for 5-25 required parking spaces;
 - 2 accessible spaces for 26-50 required spaces;
 - 3 accessible spaces for 51-75 required spaces;
 - o 4 accessible spaces for 76-100 required spaces; and,
 - o 1 additional accessible space for each 100 additional required parking spaces.
- Require that 50% of the required accessible spaces will accommodate a van.
- Revise Tandem Parking allowance to the following rates:
 - Up to 30% tandem parking in suburban neighbourhoods (current policy);
 - Up to 75% tandem parking in the Town Centre; and,
 - Up to 50% tandem parking in the Lougheed Transit Corridor, or up to 75% tandem parking on a case-by-case basis.
- Allow for up to 25% of the total required parking spaces to be designated as "Small Car". This
 allowance should not apply to assigned residential parking spaces.
- Allow for parking reduction measure for the Town Centre and Lougheed Transit Corridor for 3-5
 parking spaces per each car share vehicle provided by the developer, up to a certain amount
 decided on a case-by-case basis.
- Maintain the maintain the 100% EV rough-in requirements for all residential developments.
- Require that 30% of the parking spaces in each residential development type to be energized.
- Requires that all accessible parking and car share spaces to be energized.

5.2 Payment in Lieu

- Increase the current required payment in lieu amount to a range of \$35,000-\$40,000 per required parking space.
- Add a provision that the payment in lieu amount will be updated annually local Construction Price Index (CPI).



5.3 Shared Parking Allowance

- Maintain the current shared parking practice to all new developments where shared parking can be applied.
- Any shared parking analysis should reflect post-COVID parking trends.

5.4 Bicycle Parking Requirements

- Increase the long-term bicycle space requirement to at least one space per dwelling unit throughout the City.
- Consider a higher rate for a long-term bicycle space in the Town Centre and along Lougheed Transit Corridor area.
- Long-term bicycle spaces should be provided in the P1 parking level and be easily accessible from the parkade gate without conflict with parked cars or other parking structures.
- If bicycle spaces cannot be provided in the P1 level, they should be provided in another parking level and be easily accessible via an elevator.
- For residential buildings, long-term bicycle spaces should be located either in a safe and secured bike room or in bike lockers.
- · Move the End of Trip Facilities requirements to the Parking Bylaw section;
- Maintain current End of Trip Facilities requirements.

5.5 Loading Requirements

- · Define "passenger zone" or "passenger loading" in the Parking Bylaw.
- Distinguish between "goods" and "passenger" loading policy.
- Provide 1 loading space in residential buildings of 50 dwelling units or more.
- Provide a minimum of 1 loading space for general industrial and commercial uses for GFA between 400-2000 m² and increase to 2 loading spaces for GFA over 2000m².
- Require that all loading and passenger activities take place off the street. Should a loading or a
 passenger zone cannot be provided off street, on-street locations may be considered at staff's
 discretion.

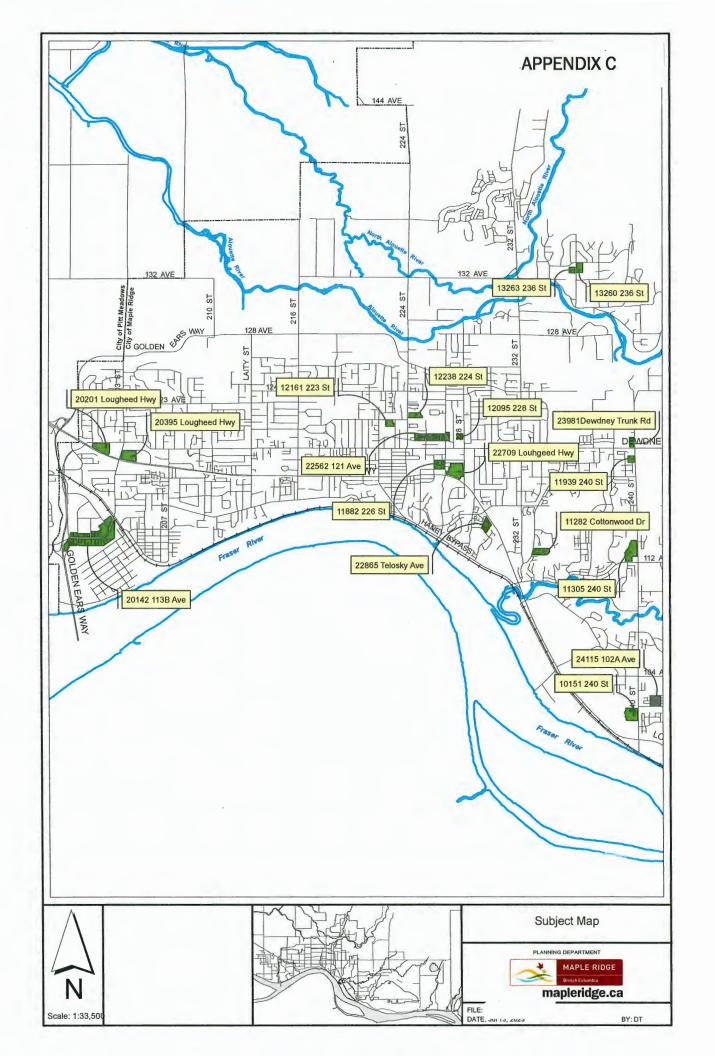
5.6 Revised Parking and Loading Dimensions

- Implement or update the following parking and loading space dimensions as follows:
 - o A regular parking space: 5.5m long by 2.6m wide;
 - Maintain the small car space dimensions of 4.9m long by 2.4m wide;

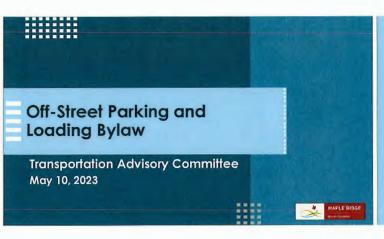


- o A single residential garage: 6.7m long by 3.7m wide;
- o A side-by-side residential garage: 6.7m long by 6.5m wide;
- o Tandem residential garage: 12.2m long by 3.7m wide (if fully enclosed in a garage);
- Garage apron parking space: 6.1m long by 3.0m wide;
- Maintain the accessible parking space dimensions of 5.5m long by 3.8m wide for regular accessible vehicles, and add an accessible van dimension of 5.5m long by 4.6m wide. Two adjacent accessible spaces may share a 1.2m aisle;
- o Long-Term bicycle space: 1.8m long by 1.8m wide; and,
- o Minimum size of loading space: 9.0m long by 3.2m wide.





APPENDIX D



Agenda

• Intro To Parking In Maple Ridge

- · On Street Parking
- · Off-Street Parking Municipal Property
- · Off-Street Parking Private Property

Project Overview

- · What is the Off-Street Parking Bylaw?
- · What regulations are currently within the Off-Street Parking
- · What else can be within an Off-Street Parking Bylaw?

Discussion

- · 9 targeted questions
- · Quick motion break after 1 hour
- · 1 open ended question
- Wrap Up



Why is Parking Important?

Parking impacts design, form, and function of our cities and our neighborhood's.

It also has a huge effect on the environment, economics, affordability, resiliency, equity, and overall success of how we build our city.

Parking in Maple Ridge







Off-Street Parking -**Municipal Parking Lots**



Off-Street Parking -Private Property



On-Street Parking

- · Means parking your vehicle on a street.
- · There is approximately 1,500 on-street parking spaces in the Town Centre
- · There are various tools available to the City to balance flow of traffic and neighbourhood convenience, such as permit parking and time limits.



Off-Street Parking - Municipal Parking

· Comprised of 7 parking lots comprising 863 parking spaces.



Off-Street Parking - Private Property

- · Off-Street Parking means parking a vehicle off a street; such a driveway or parking lots.
- · These spaces are regulated by the Off-Street Parking Loading bylaw No. 4350-1990.
- · This bylaw is being reviewed and updated to ensure rates and provisions meet our communities needs and align with best practices in the region.



What is the "Off-Street Parking Bylaw"?

- • Municipalities can regulate off-street parking to balance the needs of residents, commuters, and visitors through a bylaw.
- ■ The Parking Bylaw applies to vehicle parking spaces, loading spaces, bicycle spaces, and passenger spaces.
- ■ The bylaw can regulate location, number and size of off-street parking spaces



What is in the current Parking Bylaw?

- ■■■ Minimum spaces per use Schedule A of the Bylaw
 - · Residential, such as apartments, secondary suites, townhouses
 - · Commercial, such as retail, restaurants, other services
 - · Industrial, such as breweries, warehousing, manufacturing
 - · Institutional, such as schools, places of worship, assisted living
 - · Agriculture, such as farming, specific manufacturing





What is in the current Parking Bylaw?

- ■ Payment In-lieu and applicable area (Town Centre)
- Tandem Provisions (Townhouse Only)
- "" Shared Parking Provisions (ex, if two businesses want to share a space)
- ■ Bike Parking and Storage (Town Centre Only)
- ■ EV Charging and Infrastructure Regulations
- Parking Stall Design (including accessibility)
- ■ Commercial Vehicles and Loading Regulations



What else can be included in a Parking Bylaw?

- ■ Car Sharing Provisions
- --- Landscaping
- ■ Space Labels
- --- Lighting
- ■ Signage







How Your Feedback Has Impact

- Seeking your direction and input on broad topics relating to off-street parking.
- ■ Discussion will be summarized in a future Council Report





- Different Areas & Different Parking Requirements
- 2. Non-Market Housing & Parking Ratios
- 3. Rental Housing & Parking Ratios
- 4. Accessibility & Parking Ratios

Motion Break

- 5. EV Charging Infrastructure & Parking
- 6. Long/Short Term Bike Parking Location
- 7. Long/Short Term Bike Parking Ratio
- 8. Shared Mobility & Parking
- 9. Pedestrian Movement & Parking
- 10. Additional Feedback (Open Ended Discussion Apple RID



#1 Different Areas & Different Parking Requirements

- ■ Traditionally, off-street parking requirements took the approach of "one-size-fits-all", but municipalities are shifting towards considering different parking requirements for different areas.
- For example, the City of Maple Ridge has different minimum parking space requirements for the Central Business District within the Town Centre.



#1 Different Areas & Different Parking Requirements

■ ■ The City is considering different parking requirements for different areas of the City - such as close to the Rapid Bus Route.



Where on the scale do you think Maple Ridge should be - in terms of developing different parking requirements for different areas?





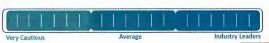
#2 Non-Market Housing & Parking Ratios

- Many municipalities are encouraging development of non-market (affordable) housing by lowering parking minimums.
- For example, the City of Coquitlam requires:
 - · 1.0 space for each Non-Market Housing unit across the City;
 - 0.65 spaces for each Non-Market Housing unit close to the Evergreen Line Core & Shoulder Station Areas
- Currently, the City of Maple Ridge only has non-market parking ratios in the Town Centre, which are:
 - · Bachelor = 0.8 space/unit
 - 1 bedroom = 0.9 space/unit
 - Each additional bedroom = 0.1 space/unit



#2 Non-Market Housing & Parking Ratios

- --- The City is considering lowering the parking minimum to further encourage the development of non-market housing in the City.
 - Where on the scale do you think Maple Ridge should be in terms of encouraging non-market housing through parking requirements?



#3 Rental Housing & Parking Ratios

- ■ Many municipalities are encouraging development of rental housing by lowering parking minimums. This includes purpose built rental and other nonstrata units (such as secondary suites)
- ■ For example, the City of Mission requires:
 - · 0.75 spaces for Market Rental unit
 - · 0.5 space for Affordable (non) Market Rental unit
- ■ Currently, the City of Maple Ridge only has specific parking ratio for secondary suites and detached garden suites, which can be used as rental units.



#3 Rental Housing & Parking Ratios

- ■ The City is considering creating a low parking minimum to help encourage the development of rental housing in the City.
- Where on the scale do you think Maple Ridge should be in terms of encouraging rental housing through parking requirements?





#4 Accessibility & Parking Ratios

- Many municipalities are lowering the threshold to when an accessible space is required; and some are requiring at least 1 space for specific uses (such as a medical office).
- For example, the City of Langley requires: 5% of the total parking spaces to be accessible spaces (minimum of 4 spaces if 75 spaces are required)
- Currently, the City of Maple Ridge requires:
 - · 0 spaces if the development requires 25 parking spaces or less
 - 1 space if the development requires 26-75 parking spaces
 - · 2 spaces if the development requires 76-125 parking spaces



#4 Accessibility & Parking Ratios

- ■ The City is considering increasing the required number of accessible parking spaces.
- Where on the scale do you think Maple Ridge should be in terms of increasing the number of accessible parking spaces?









#5 EV Charging & Parking

- -- Many municipalities are requiring some or all parking spaces to be energized or fully EV ready (including charging equipment).
- For example, the City of Surrey requires an energized electrical outlet for 100% of residential parking spaces, 50% of visitor parking spaces, and 20% of commercial parking spaces. Each energized electrical outlet must be capable of providing Level 2 or a higher level of electric vehicle charging
- Currently, the City of Maple Ridge requires roughed-in infrastructure for: residential units, 50% of visitor parking spaces, and 10% of commercial spaces (over 10 stalls).

#5 EV Charging & Parking

- The City is considering every residential space to be fully EV ready and requiring a certain percentage of spaces for other uses to be fully EV ready, including accessible spaces.

Where on the scale do you think Maple Ridge should be - in terms of requiring off-street parking spaces to be fully EV Ready?





#6 Long & Short Term Bike Parking Location

- • Many municipalities require short and long term bike parking across the City. Some only require bike parking in specific locations.
- • For example, the City of Pitt Meadows requires long and short term bike parking across the City for apartment, assisted housing, office, commercial, restaurant, recreation, hotel, and industrial uses.
- • Currently, the City of Maple Ridge only requires long and short term bike parking within the Town Centre.



#6 Long & Short Term Bike Parking Location

- The City is considering expanding the requirement for long and short term bike parking city wide.
 - Where on the scale do you think Maple Ridge should be in terms of requiring more long and short term bike parking across the city?





#7 Long & Short Term Bike Parking Number

- • Many municipalities are increasing the number of short and long term bike parking spaces to encourage cycling as a mode of transportation.
- • For example, the City of Pitt Meadows requires 0.5 long term bicycle parking spaces per every apartment unit in a building, and 6 short term bicycle parking spaces for every 20 apartment units.
- Currently, the City of Maple Ridge requires 1 long term bicycle parking space for every 4 apartment units (0.25) and 3 short term bicycle parking space for ever 20 units.



#7 Long & Short Term Bike Parking Number

- The City is considering increasing the minimum number of long and short term bike parking.
 - Where on the scale do you think Maple Ridge should be in terms of requiring more long and short term bike parking?





#8 Shared Mobility and Parking

- • Context: Some municipalities are beginning to include off-street parking requirements for transportation services that are shared among users, such as car sharing (EVO) and bike sharing.
- = = For Example, the City of Surrey allows for the residential parking spaces to be reduced by 5 parking spaces for each shared vehicle that is provided for multiple unit residential buildings with underground parking on lots located within City Centre.
- = = Currently, the City of Maple Ridge does not have any shared mobility provisions within the Off-Street Parking Bylaw.



#8 Shared Mobility and Parking

- The City is considering including a provision in the new off-street parking bylaw to encourage shared mobility.
 - Where on the scale do you think Maple Ridge should be in terms of



including provisions to encourage shared mobility?



#9 Pedestrian Movement & Parking

- = = Context: Municipalities are beginning to include provisions to assist people entering and existing their vehicle or establishment.
- For example, the City of Mission requires at least one unobstructed pedestrian walkway that aligns with a major entrance when 40 parking spaces are required for non-residential uses.
- Currently, the City of Maple Ridge does not have any provisions that accommodate pedestrian movement within the Off-Street Parking Bylaw.



MAPLE RIDGE

#9 Pedestrian Movement & Parking

- The City is considering including a provision in the new off-street parking bylaw assist residents entering and existing their vehicle.
 - bylaw assist residents entering and existing their ve
 - Where on the scale do you think Maple Ridge should be in terms of including provisions for pedestrian movement?





#10 Additional Feedback

• • • Anything else the committee would like to comment/provide direction on regarding off-street parking?









- Your feedback will be included in a future Council report
- A report is anticipated to go to Council in Summer 2023
- Contact:

Krista Gowan, Community Planner 604-467-7402

kgowan@mapleridge.ca



Background: The Transportation Advisory Committee (TAC) and the Municipal Advisory Committee on Accessibility and Inclusiveness (MACAI) were asked nine questions that reflect various off-street parking topics as presented in the September 6, 2022, Council Workshop report. The goal of the exercise was to facilitate conversation and provide high-level direction for these nine topics based on the scaling below:

- Very Cautious cautiously consider changes.
- Average- consider following what the neighbouring local governments around us are doing.
- **Industry Leaders** be a leader in the Lower Mainland.

The committees also provided feedback and considerations on the high-level direction provided.

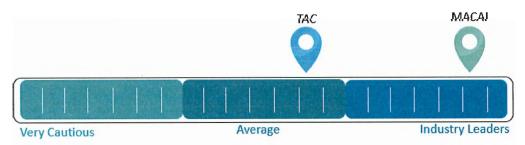
Committee	Transportation Advisory Committee (TAC)	Municipal Advisory Committee on Accessibility and Inclusiveness (MACAI)
Meeting	May 20, 2023 &	June 15, 2023
Date(s)	June 12, 2023 (Quorum Not Met)	

For questions 5-9, the Transportation Advisory Committee did not provide feedback or comments. The June 12, 2023, was scheduled as a Special Meeting to complete the remaining questions, however, quorum was not met for this meeting.

#1 Different Areas & Different Parking Requirements

Question: Where on the scale do you think Maple Ridge should be – in terms of developing different parking requirements for different areas?

Figure 1: Committee High-Level Direction for Question 1

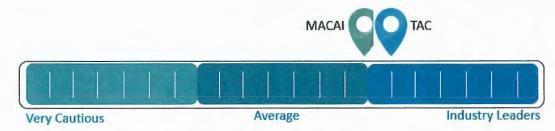


MACAL Comments **TAC Comments** Recognizes that different neighbourhoods in Recognizes that different neighbourhoods in Maple Ridge have different levels of car Maple Ridge have different levels of car dependency, but accessible parking spaces dependency. should not be reduced. In neighbourhoods that have many community Specific areas may require more accessible amenities (such as groceries, restaurants, shopping, doctor offices, etc) as well as transit, parking. more opportunity to be industry leaders in Opposed to considering "hard" terms of having different parking requirements. neighbourhood boundaries, prefers focusing on the types of amenities available and Would be more cautious in neighbourhoods frequency of transit. that are not close to transit or many community amenities.

#2 Non-Market Housing & Parking Ratios

Question: Where on the scale do you think Maple Ridge should be – in terms of encouraging non-market housing through parking requirements?

Figure 2: Committee High-Level Direction for Question 2

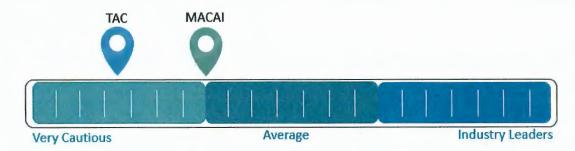


TAC Comments	MACAI Comments
 Supports lowering parking minimums in locations that are close to transit and amenities. Would like to ensure that the savings that come from not providing parking are passed onto the occupant of the unit. 	 Supports lowering parking minimums for non-market housing in locations that are close to transit and amenities. Concerns about on-street parking and flow of traffic when dwellings are not close to transit. Consider additional visitor parking or requiring a pick/up drop off area for multi-family dwellings located far from transit.

#3 Rental Housing & Parking Ratios

Question: Where on the scale do you think Maple Ridge should be – in terms of encouraging rental housing through parking requirements?

Figure 3: Committee High-Level Direction for Question 3

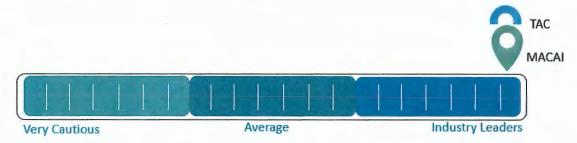


MACAI Comments **TAC Comments** Supports a cautious to average Prefers a cautious approach when considering parking minimums for rental housing. approach when considering parking minimums for rental housing. Depends on the form of housing, secondary suite vs Does not support reducing parking multi-family. minimums for accessory dwelling o Should be very cautious when considering units, like secondary suites. changing to the accessory dwelling unit parking Supports an average approach to requirements; less cautious when it is a purpose reducing parking minimums for built rental. apartment buildings in locations In neighbourhoods that have many community that are close to transit and amenities as well as transit, more opportunity to be community amenities. average in approach.

#4 Accessibility & Parking Ratios

Question: Where on the scale do you think Maple Ridge should be – in terms of increasing the number of accessible parking spaces?

Figure 4: Committee High-Level Direction for Question 4



TAC Comments	MACAI Comments	
 Accessibility requirements should meet the community's needs. Defers comments to the Municipal Advisory Committee on Accessibility and Inclusiveness 	 Supports being an industry leader in increasing the number of accessible spaces where needed, as well as the size and location of spaces. Interested in whether there could be a "senior" specific parking space that is also close to the establishments entrance. Accessibility requirements should meet the community's needs. 	

#5 EV Charging & Parking

Question: Where on the scale do you think Maple Ridge should be – in terms of requiring off-street parking spaces to be fully EV Ready?

Figure 5: Committee High-Level Direction for Question 5

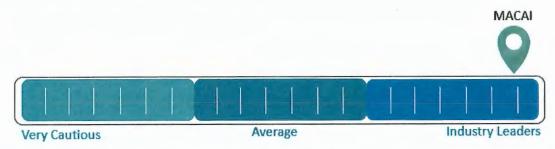


TAC Comments	MACAI Comments		
Not Provided	 Supports an average approach to providing EV ready spaces. Supports making it easier for the end user to charge their vehicle, bike, or 		
	 scooter. Meaning, Maple Ridge should be requiring more than Roughed-In. For residential units, the parking space does not have to have the charging head; but should for commercial. 		

#6 Long & Short-Term Bike Parking Location

Question: Where on the scale do you think Maple Ridge should be – in terms of requiring more long- and short-term bike parking across the city?

Figure 6: Committee High-Level Direction for Question 6



TAC Comments	mments MACAI Comments	
Not Provided	 Supports being an industry leader when considering the location of short- and long- term bike parking. 	
	 It was recognized that those who bike are not just commuters, but many people and families have bikes for recreational purposes. 	
	 Requiring more long- and short-term bike parking across the City would encourage people to maybe get a bike and use it. 	
	 Electrifying long term and maybe some short-term bike parking should be considered; however, affordability of the units should also be considered. 	
	 Consider geographical location of places when considering how much bike parking should be required. 	

#7 Long & Short-Term Bike Parking Number

Question: Where on the scale do you think Maple Ridge should be – in terms of requiring more long- and short-term bike parking?

Figure 7: Committee High-Level Direction for Question 7

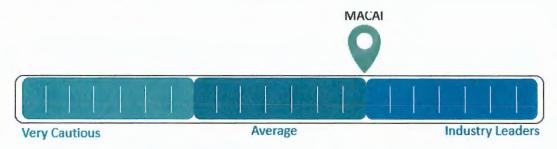


TAC Comments	MACAI Comments	
Not Provided	 Supports an average approach to how many short- and long-term bike parking shapes should be required. being an industry leader when considering the location of short- and long-term bike parking. 	
	 Consider geographical location of places when considering how much bike parking should be required. 	
	 Consider sit down scooter parking in some residential units as scooter sizing is not universal and sometime challenging to store in a residential unit. 	

#8 Shared Mobility and Parking

Question: Where on the scale do you think Maple Ridge should be – in terms of including provisions to encourage shared mobility?

Figure 8: Committee High-Level Direction for Question 8

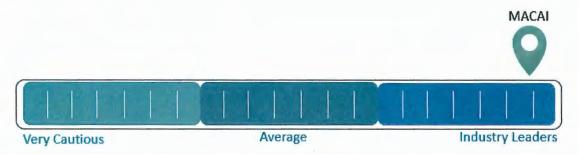


TAC Comments	MACAI Comments	
Not Provided	 Supports an average approach to shared mobility resources in the City (such as Modo), as the City doesn't have any provisions currently. 	
	 Supports in larger developments, also helps viability of shared mobility resources. 	

#9 Pedestrian Movement & Parking

Question: Where on the scale do you think Maple Ridge should be – in terms of including provisions for pedestrian movement?

Figure 9: Committee High-Level Direction for Question 9



TAC Comments	MACAI Comments	
Not Provided	 Supports an industry leader approach as it assists with universal design measures. For pathways, consider roll over curbs to allow for more accessible use. Pathways should lead to the entrance, straight path that is well lit. Consider requiring trees on pathways to help cool the parking lots temperature. Pathways should have clear signage. 	

Additional Comments

TAC Comments	s MACAI Comments	
Not Provided	 Supports increasing the size of accessible parking spaces and requiring aisles to ensure the space meets the community's needed. For accessible spaces requiring signage on the paved areas as well as posted on a post in front of the spot Consider signage to have both a universal symbol and language. Ensure accessible spaces can access pathways, such as requiring roll over/let 	
	 Ensure accessible spaces can access pathways, such as requiring roll over/let down of curbs. 	



City of Maple Ridge

TO:

His Worship Mayor Michael Morden

FILE NO:

MEETING DATE: September 6, 2022

FROM:

and Members of Council Chief Administrative Officer

MEETING:

13-6440-20 Workshop

SUBJECT:

Parking Bylaw Review

EXECUTIVE SUMMARY:

A full review of the Off-Street Parking and Loading Bylaw No. 4350-1990, also known as the "Parking Bylaw" is identified as a Planning Department work item in the City's 2022 Business Plan. The current Parking Bylaw, originally adopted in 1990, regulates the location, number, and size of off-street vehicle parking spaces, loading spaces, bicycle spaces, and passenger spaces, to balance the needs of residents, commuters, and visitors. This review of the Parking Bylaw does not include on-street parking regulations as on-street parking is regulated through other bylaws, such as the Highways and Traffic Bylaw No. 6704-2009.

A new Off-Street Parking Bylaw is the anticipated outcome of this review and the goals of the new Parking Bylaw are to:

- better align the Bylaw with best practices accepted in the transportation planning industry,
- respond to emerging market trends,
- address the City's sustainability goal of net zero community greenhouse gas emissions by 2050 (Official Community Plan Policy 5-45), and
- improve layout, functionality, and clarity to be more user-friendly and effective in regulating offstreet parking.

This report identifies eight topics within the existing Parking Bylaw that are likely to see the most change and what those changes might look like based on a preliminary review of regional best practices (Section 2.0). Some of the topics that are discussed in this report include parking minimums, payment in-lieu rate and eligible area, tandem parking provisions, accessibility, electric vehicle charging, and bike parking and storage.

The purpose of this report is to seek Council's high-level comments at this stage in the review process, such as:

- What additional items should be considered?
- What areas would Council like to have additional information on?
- What potential changes or approaches should be reconsidered?

Council's feedback will help guide the next steps and refine the list of potential changes. Staff will be seeking feedback from the community in the Fall 2022 and anticipate bringing a draft of the new Parking Bylaw to a future Committee of the Whole meeting in early 2023.

RECOMMENDATION:

For Information Only.

1.0 BACKGROUND:

1.1 Introduction to the Parking Bylaw

The City of Maple Ridge Off-Street Parking and Loading Bylaw No. 4350-1990, also known as the "Parking Bylaw", was adopted in 1990 and various components have been amended several times over the years. Maple Ridge's current approach to parking regulations is to require a minimum number of parking spaces for every kind of development – large residential buildings, low density residential houses, commercial spaces, retail, office buildings, industrial buildings and everything in between. The approach taken for the parking requirements of this Bylaw largely follows best practices from the 1990's era and the more modern approach has evolved to include trends in facilitating sustainable and transit-oriented development, reduction in greenhouse gas emissions, and more opportunities for walking, rolling, or transit use over transport by single-occupancy vehicle.

In addition to incorporating current best practices in transportation planning and ensuring alignment with the objectives, goals, and policies of the OCP (see Section 1.2 below), it is intended that the Parking Bylaw review will incorporate the broader goals of Metro Vancouver's Regional Growth Strategy, Translink's Strategic Transportation Plan, as well as recent studies completed on parking provision within the region.

Currently, the Parking Bylaw generally contains the following regulations related to off-street parking:

- Minimum parking requirements that dictate the number of spaces that must be provided offstreet with a specific land use (including accessible spaces);
- Payment In-lieu requirement, rate, and the applicable area;
- Tandem parking requirements;
- Shared use parking requirements (example- if two businesses want to share a space);
- Electric Vehicle charging and station requirements;
- Bike Storage and Parking (currently only for the Town Centre);
- Parking space design (including accessible spaces);
- Commercial Vehicles and Loading requirements; and
- Signage.

1.2 Official Community Plan

The Official Community Plan provides the policy framework for creating compact communities in high density areas, such as the Town Centre and Lougheed Transit Corridor, as well as livable neighbourhoods with varying density levels throughout the rest of Maple Ridge. Chapter 2 "Growth Management", Chapter 5 "Natural Features", and Chapter 7 "Transportation" of the Official Community Plan contains policies that support how the City should develop, including:

- **2-3** Within the Urban Area Boundary, growth will be directed to the Town Centre (through Town Centre Area Plan policies), Community Commercial Nodes, areas with Area Plans, and to other locations where Official Community Plan policies are satisfied.
- 5-45 The City of Maple Ridge has a goal to reduce community greenhouse gas emissions to net zero by 2050 from 2010 levels, with an interim target of 45% reduction by 2030, in alignment with the Intergovernmental Panel on Climate Change (Chapter 5).
- **7-30** Maple Ridge will encourage the development of cycling infrastructure and support programs, such as 'end-of-trip' facilities for cyclists at key destinations and new developments.

In Maple Ridge, the majority of the growth in population, jobs, and housing will be accommodated within the Urban Area Boundary where services are readily available, or the infrastructure is already in place for their provision. By concentrating growth and density in key areas, such as the Town Centre and the Lougheed Transit Corridor, it is more likely that transportation alternatives, such as, transit, rolling, and walking will become more viable and attractive.

1.3 Parking Regulations for High Density Neighbourhoods

1.3.1 Town Centre Area

The Town Centre Area Plan (TCAP) outlines the long-term vision for growth and development in this high-density neighbourhood that is anticipated to accept a large portion of the municipal population growth over the long-term. Section 3.2 of the TCAP provides the framework for the general development of the Town Centre by identifying policies that encourage increasing transit modes and making the Town Centre a distinct, attractive, and vibrant urban environment. Policies, such as 3-15 and 5-1, that encourage below grade parking structures to create a more attractive Town Centre and encourage development to design with accessibility in mind, are included in Town Centre Area Plan and the supporting Development Permit Guidelines (in Section 8.11 of the OCP).

- 3-15 Concealed parking structures are encouraged in all commercial, mixed-use, multifamily uses, and institutional uses in the Town Centre. Below grade parking structures are particularly encouraged for Low-Rise, Medium, and High-Rise Apartment, Mixed-Use, Flexible Mixed-Use/Live-Work, Commercial, and Institutional buildings. Above grade concealed parking is a viable option where building height (six or more storeys) coupled with challenging site conditions make it cost prohibitive to provide all required parking spaces in an underground structure. Above grade parking structures should be designed in such a manner that the pedestrian realm, streetscape façade, and protected views of the Town Centre are not impaired.
- 5-1 Universal accessibility is encouraged in transportation planning and design within the Town Centre. Wherever possible, the accessibility needs of wheelchairs, the visually impaired, strollers, scooters, and other mobility devices used by pedestrians with disabilities, as well as by families, teenagers, and seniors will be accommodated in the design of sidewalks, public plazas, and other public spaces throughout the Town Centre.

The Town Centre's Central Business District (CBD) (Appendix A) has a separate section in the Parking Bylaw, which contains the lowest minimum parking space requirements for residential and non-residential uses (including, retail, office, hospital, and tourist accommodations). The separate Town Centre CBD section was incorporated into the Parking Bylaw at the same time the TCAP was adopted in 2008. These changes to the Parking Bylaw reflect the OCP policies and vision for the area and incorporated the findings from the 2008 Town Centre Area parking study that was undertaken to support implementation of the Town Centre Area Plan.

Town Centre Parking Study Findings

The 2008 Parking Study was undertaken during development of the Town Centre Area Plan and incorporated the vision and principles of the Town Centre Concept Plan, endorsed by Council in 2005. The study looked at parking demand for current and anticipated future uses/densities and found that the Town Centre was oversupplied with parking and that efficiencies could be created with the current parking supply if businesses were willing to share parking and create local economic synergies through allowing customers the ease of parking in one location and walking or cycling to multiple destinations. The study also found that the majority of the parking in the Town Centre was at-grade and the payment

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in-lieu parking alternative option was rarely used by developers at the time. However, the study also noted at the time that once underground parking becomes more prevalent, due to redevelopment in the form of higher density mixed-use development, developers may start choosing the payment in-lieu parking alternative option more frequently (which has been the case more recently as redevelopment of the area occurs).

1.3.2 Lougheed Transit Corridor Area

The Lougheed Transit Corridor Concept Plan, endorsed November 10, 2020, includes "Mobility Choice is Enhanced" as one of the guiding principles. The concept plan identifies opportunities that can be explored to support mobility choice through:

- Investigating strategies for public parking near rapid transit;
- Building complete communities to make walking and cycling more viable; and
- Reducing parking standards for commercial and residential development.

The proposed Commercial Mixed-Use Land Use Designation in the Concept Plan promotes greater flexibility of uses within the commercial land use designation, along with allowing building height greater than six storeys. With this land use designation, any new development for this area is encouraged to be a high-density built form with parking spaces provided within an underground parking structure.

1.4 Metro Vancouver Parking Studies

In 2012, Metro Vancouver published the findings from their Apartment Parking Study. The entire Metro Vancouver Area was part of the study, including a strata building in Maple Ridge, and found that parking supply exceeded parking demand in the range of 18% to 35% in the 80 study apartment sites.

In 2018, Metro Vancouver conducted and published the findings from their Regional Parking Study, which broadened the scope from the 2012 study by including on-street parking. For this study, a different strata building in Maple Ridge was selected. Overall, this 2018 parking study largely corroborates the findings from the 2012 Apartment Parking Study. Some of the key findings from the 2018 Regional Parking Study are:

- For both rental and strata buildings, apartment parking supply exceeds use across the region;
- Apartment parking supply and use is lower for buildings closer to frequent transit areas;
- Transit use is generally higher where apartment parking use is lower, especially for rental buildings; and
- The ineffective design and capacity of current bicycle parking facilities in apartment sites appear to discourage use by many residents.

Metro Vancouver is anticipating an update the Regional Parking Strategy by the end of 2023.

2.0 DISCUSSION:

Off-street parking requirements are sometimes viewed as a small technical detail connected to a larger development scheme, but parking requirements impact the design, form, and function of cities and neighbourhoods. When designing a development scheme, parking is often laid out prior to the design of a building since the form and function of parking spaces is relatively constant and cannot be molded and shaped like the architecture of a building.

Traditionally, off-street parking requirements took the approach of "one-size-fits-all" where the same off-street parking regulations for each use applied to the entire city, however, one of the best practices

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accepted in the transportation planning industry is shifting away from a "one size fits all" off-street parking strategy and considering different parking requirements for different neighbourhoods. With transit corridors, multi-use paths, and varying levels of car dependency, off-street parking approaches that may have a positive effect in one neighbouhood may not have the same effect in another.

The City of Maple Ridge has been considering differences in neighbourhood needs since the adoption of the Town Centre Area Plan (TCAP) in 2008, which is when different minimum parking space requirements were incorporated into the Parking Bylaw at the same time the TCAP was adopted. With the Parking Bylaw review, this approach of considering different neighbourhood needs, such as how close people live to places of employment, commercial areas, educational institutions and public transit, will be reviewed and considered.

Section 2.0 of this report discusses the eight topics within the existing Parking Bylaw that are likely to see the most changes and what those changes might look like based on a preliminary review of regional best practices. The Parking Bylaw review is looking to enhance the existing regulations, as outlined in this report, but also include shared mobility provisions, such as ride sharing, bike sharing (Section 3.0).

2.1. Parking Minimums

Many cities across Canada are currently shifting from requiring a minimum number of parking spaces, that can result in an oversupply of parking, to parking minimums that are much more closely aligned to actual parking demand. Additionally, many cities are introducing maximums, or the outright removal of some off-street parking requirements all together and allowing the market to dictate the number of parking stalls.

In the Lower Mainland, the majority of municipalities still use the parking minimums approach, however, many have taken the step to reduce parking minimums in specific areas. One of the most common ways municipalities are reducing parking minimums is to require fewer parking spaces when a development is within or adjacent to a transit corridor and/or when a development proposes rental or non-market housing (reflecting the research findings that parking demand is lower in these scenarios). Reducing parking minimums also incentivizes developers to build a greater range of housing types (based on need and demand rather than sticking with more traditional housing forms in order to rationalize the profit/parking construction cost ratios), which also helps to incentivize transit use. Additionally, many municipalities base the minimum number of required parking spaces on the number of bedrooms in a dwelling unit, specifically for more denser forms of housing, such as apartment buildings and stacked townhouses.

Another approach is parking maximums, as used by the City of Vancouver for non-residential uses in the downtown. Parking maximums set the maximum number of parking spaces that the new development is permitted to construct. If a parking minimum is in place, it doesn't stop developers from providing more parking spaces than required, which can lead to an oversupply of parking spaces. With a parking maximum, a developer can, if they choose, provide fewer parking spaces than the maximum requirement. Ultimately, the number and use of parking spaces required in new developments influences vehicle ownership and travel choices, as well as affordability. Ultimately, parking maximums can help ensure that the City's vision and policies for the area are being met.

From the information collected though the Strategic Transportation Plan that was presented at the September 27, 2021 Workshop, Maple Ridge residents predominately use single occupancy vehicles to move around the City and the number, distance, and share of driving trips has increased. As neighbourhoods within the Urban Area Boundary continue to become more pedestrian-oriented, compact, and high-density, particularly in the Town Centre and Lougheed Corridor, it is more likely that transportation alternatives, such as, transit, rolling, and walking will become more viable and attractive.

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The recent addition of the R-3 Rapid Bus to the City greatly increases the potential and practicality of more transit use by residents.

The new Parking Bylaw regarding parking minimums may include:

- Expanding the minimum parking requirements for the Central Business District to all multifamily developments in the Town Centre;
- Maximum parking requirements for commercial uses (over a certain size) on the ground floor in the Town Centre;
- No minimum parking requirement for secondary suites in the Town Centre;
- Introducing different minimum parking requirements for the Lougheed Transit Corridor;
- Adjusting parking minimums for denser housing forms within the Urban Area Boundary to reflect best practices;
- Move away from requiring a number of parking spaces per bedroom, and simplifying minimum requirements to whether the unit is market, non-market and/or rental, and/or located close to urban amenities, such as shopping/services, and public transit.

2.2 Payment in-Lieu

The current provisions within the Parking Bylaw permit a payment in-lieu option for the required number of parking stalls on a property zoned for multi-family, commercial, or institutional use located within a 930m radius of City Hall (see Appendix B). The current area that is eligible for payment in-lieu includes areas within the Town Centre Area Plan and the Lougheed Transit Corridor, but does not directly align with either of the boundaries.

On January 11, 2022, Council approved a payment in-lieu rate increase to \$20,000 for all uses in the Town Centre except for single-detached, duplex, triplex, fourplex and courtyard uses. This increase is intended as an interim rate until the Parking Bylaw review is completed.

The monies collected from the payment in-lieu option go into the City's "Parking Reserve Fund". The Parking Reserve fund was established in 1992, by Bylaw No. 4686-1992, when the payment in-lieu program began. At the time of adoption, Provincial legislation stipulated that payment received in-lieu of providing parking spaces could only be used for the provision of off-street parking facilities and this was written into the 1992 Bylaw. Today, Provincial legislation permits municipalities to collect monies for transportation infrastructure, such as walking, bicycling, public transit, or other alternative forms of transportation. These alternative transportation options can be incorporated into the Parking Reserve Fund Bylaw by amending the bylaw.

The Metro Vancouver 2012 Apartment Parking Study found that the average construction cost per parking stall within a structure was noted to be in the range of \$20,000 to \$45,000, depending on site conditions and whether the parkade was at grade or below grade (based on two-levels of underground parking). The construction cost per parking stall increases with the number of below grade parking levels that are provided.

Most municipalities in Metro Vancouver have a flat rate per parking space, ranging from \$20,000 to \$40,000 per parking space, and include a maximum percentage of permitted parking reduction (such as parking requirements can only be reduced by 15%). However, the City of Coquitlam has taken a different approach. The City of Coquitlam's payment in-lieu rate is tied to the parking reduction percentage that is being requested. For example, if an applicant was seeking a 10% reduction to the required parking spaces, the rate per parking space would be \$30,000. Table 1 provides the City of Coquitlam's payment in-lieu rate for the Evergreen Line Core Area for visualization purposes only.

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Table 1 - City of Coquitlam's Payment In-Lieu Rate for the Evergreen Line Core Area

Allowable Off-Street Parking Reduction	Payment for each Off-Street Parking Space
Up to 5%	\$20,000
Next 5% up to 10%	\$30,000
Next 5% up to 15%	\$35,000

The rate of payment in-lieu parking needs to ensure that developers are not incentivized to seek the payment in-lieu options unless meeting the minimum parking stall requirements is truly too great of a challenge, since it is most effective for a developer to construct and operate parking through the development project, resulting in less financial burden to the City. A tiered approach, based on percentage of parking reduction, is being considered in the new Parking Bylaw as it may be effective in discouraging large parking reductions.

In addition to potentially creating a tiered approach to payment in-lieu, potential changes to the Payment In-Lieu provisions, include:

- Expanding the area where payment in-lieu is eligible within the entire Town Centre and the Lougheed Transit Area (part of the Frequent Transit Network); and
- Expand the provisions for the parking reserve fund, in order for the funds to be used for transportation infrastructure for walking, bicycling, public transit, or other alternative forms of transportation.

2.3 Tandem Parking

Tandem Parking means the placement of one parking space behind another parking space, such that only one parking space has unobstructed access to a drive aisle or driveway. Currently, the City of Maple Ridge permits 30% of parking garage units within a development, zoned RM-1 (Low Density Townhouse Residential), to be tandem. As per Policy No. 6.35, should site-specific conditions, such as geotechnical, watercourse or natural features significantly impact the developable area of the site, up to a maximum of 50% tandem parking garage units may be permitted at the discretion of the Director of Planning.

Municipalities, such as Mission and Pitt Meadows, permit tandem parking provisions in townhouses, and apartment developments with similar maximums as Maple Ridge. With the new Parking Bylaw, potential changes to the tandem parking provisions may include:

- Permitting Tandem Parking in all Duplex zones (RT-1) provided that both parking spaces are held by the same owner;
- Permitting Tandem Parking in all Triplex and Fourplex zones (RT-2) provided that both parking spaces are held by the same owner; and
- Permitting Tandem Parking in all Townhouse zones, provided that both parking spaces are held by the same owner.

2.4 Accessibility

In December 2018, accessible parking requirements were removed from the BC Building Code Regulations and municipalities were left to adopt their own design standards and supply rates within their respective bylaws for off-street parking. Maple Ridge has accessible parking requirements within the Parking Bylaw, however, the requirements likely fall short of the community's needs and should be updated to align with best practices.

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Accessibility is a part of the City's broader equity and inclusion efforts that contribute to improved social health and well-being of residents. Accessibility of a parking space is based on several factors, including the:

- 1. number of spaces;
- 2. dimensions of the space;
- 3. location of spaces; and
- 4. path of travel, including access aisle and proximity to an accessible entrance.

Currently, the City's Parking Bylaw identifies the number of spaces required, dimensions of the spaces, and signage. However, the Parking Bylaw does not account for van-accessible stalls, access aisles, or specify location of the spaces or requirements for path of travel (such as ensuring the route from exiting the vehicle to entering a business is accessible).

When reviewing the Parking Bylaw to better align with best practices and respond to emerging trends, one of the most challenging and critically important details for consideration is the effect on accessible parking. For example, requiring less parking in a transit corridor should not come at the expense of a sufficient supply of accessible parking. It is therefore important to consider ensuring a sufficient accessibility parking supply if the overall total supply is reduced.

The new Parking Bylaw regarding accessible parking spaces may include:

- Requiring one accessible space regardless of total number of spaces being required;
- Increasing the number of accessible parking spaces based on use (such as medical offices);
- Introducing two types of requirements for standard accessibility space size and aisles (to include van-accessible stalls) and aligning the dimensions of each type to reflect best practices;
- Including signage requirements that reflect best practices; and
- Requiring accessible EV charging stations.

2.5 Micromobility Parking and Storage

On May 25, 2021, the City of Maple Ridge amended the Official Community Plan to set the goal to reduce community greenhouse gas emissions to net zero by 2050 from 2010 levels, with an interim target of 45% reduction by 2030, in order to be in alignment with the Intergovernmental Panel on Climate Change (Official Community Plan Policy 5-45). To reduce transportation emissions, the number of vehicle kilometres traveled must be reduced and a greater share of those trips must be made by electric vehicles. According to the data collected through the Strategic Transportation Plan, the number, distance, and share of driving trips has increased. Therefore, there is an opportunity to increase electrification, while also making walking, rolling, and transit trips more safe, comfortable, and efficient.

Micromobility, such as electric scooters, bicycles, segways, etc., is becoming a growing share of trips in the region. Micromobility can be privately owned, or owned and operated as part of shared transportation systems. It can be used for personal travel or play a role in goods movement via cargo e-bikes. Development in the Town Centre and along Lougheed Corridor will create opportunities to move more people with less reliance on single occupancy vehicles. However, the City only requires bike parking and storage in the Town Centre, which limits the incentive for residents to bike to other locations within the City and does not include parking for other micromobility options.

The bike parking space ratios and storage requirements for the Town Centre are currently separated into two general categories. The first category is long-term spaces that are geared towards multi-family residential occupants or commercial use employees who intend to stay at their destination for a longer period of time (typically more than two hours), and have access to secured locations on the property;

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and the second category is short term spaces that are geared towards visitors or customers who are likely to have a shorter stay at their destination (typically less than two hours), with such spaces typically found in the public realm and typically considered significantly less secure.

The perceived safety of accessing micromobility parking and the level of security within a parking facility are typically factored into the decisions that people make about cycling. For example, if a long-term bicycle parking area is located in a secluded and dark area of an underground parkade, where it feels unsafe and/or is a hassle to get in and out, potential riders may feel discouraged from biking to work, running errands, or even for recreation.

The safety of the micromobility users and security of the micromobility parking are the two main factors when updating the section of the Parking Bylaw that identifies bike parking. The new Parking Bylaw regarding micromobility may include:

- Expanding the requirement of long and short term bike parking and storage city wide;
- Specifying desired location of long-term storage within a development;
- Specifying the desired form of long term micromobility storage;
- Requirement for "end of trip facilities" (such as showers and change rooms);
- Requirements for electrified electric bike parking and storage; and
- Requirements for e-scooter parking and storage.

2.6 Electric Vehicle Charging and Stations

Metro Vancouver's Climate 2050 Strategic Framework (2019) estimates that 31% of greenhouse gas emissions in the region are a result of cars and trucks. Moving towards higher adoption of zero emissions vehicles, including electric passenger cars and trucks, is an important component of achieving the City's Climate Action Goals. Demand for electric vehicles is increasing and the Province of BC has a goal to reach 100% of passenger zero-emissions vehicle sales by 2040.

Other new forms of mobility, including electric bicycles, electric cargo bicycles, and electric scooters can also help lower greenhouse gas emissions by expanding the number and type of trips that are feasible by non-auto modes of transportation. These vehicles also benefit from electric outlets in parking lots, particularly where there is secure bicycle parking. Since 2019, the City has required "roughed-in" electric vehicle (EV) infrastructure as per the following in Table 2:

Table 2 - Current EV Charging Requirements

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Ground Oriented Residential Development	Apartment Residential Development	Commercial Development	
Require 1 space for each principal	Require all off-street	Require 10% of parking	
dwelling unit of single family,	residential parking spaces in	spaces to be roughed-in (Level	
duplex, triplex, fourplex, courtyard	apartment developments to	2).	
and townhouse developments to	be roughed-in (Level 2).	Applicable to	
be roughed-in (Level 2).	 50% visitor parking be 	developments with 10 or	
Secondary suites and	able to achieve a	more off-street parking	
detached garden suites	minimum of Level 2	spaces.	
exempt.	charging		

'Roughed-in' means some of the infrastructure required for EV charging is provided, including panel capacity and conduit, making it easier to retrofit the building to provide for EV charging in the future. Circuit breakers, wiring, outlet and charging stations (and the costs to acquire and install these) is the responsibility of the property owner(s) to deal with at some point in the future in order to fully energize and operationalize each space.

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Since the adoption of the City's roughed-in requirements, more municipalities have adopted bylaws requiring new parking spaces to be fully energized. To fully energize each space, all of the infrastructure would need to be required for the charging of an EV, including the charging stations. Every municipality requires a different proportion of parking spaces to be energized, however, many municipalities require energizing spaces instead of permitting roughed-in infrastructure. Table 3 presents which municipalities require roughed-in or energized requirements or both.

Table 3 - Municipal scan of "energized" parking space requirements

Municipality	Requires "Roughed-in" or "Energized" infrastructure
City of Abbotsford	Energized
City of Chilliwack	Energized
City of Coquitlam	Energized
City of Delta	Energized
Township of Langley	Energized
City of Mission	Roughed-In (some energized requirements)
City of Port Coquitlam	Roughed-In
City of Surrey	Energized
City of White Rock	Energized

The new Parking Bylaw may include the following changes to the EV charging requirements may include:

- Requiring a specific number of energized outlets capable of providing Level 2 Charging or higher for residential, commercial, institutional and industrial development;
- Requiring some EV charging spots to be to accessibility standards;
- Provisions for fast charging stations that are added post development (such as tesla stations);
 and
- Provisions for electric bike and scooter charging stations.

2.7 Shared Use Parking Provisions

The current Section 3.7 of the Parking Bylaw sets out regulations for developments that have multiple uses, also known as shared parking facilities. Currently, shared parking facilities of two or more Commercial, Educational, Assembly, Civic and Institutional establishments may be permitted when the maximum demand for such parking facilities by the individual establishments occurs at different periods of the day, and is supported by a parking study. The parking spaces provided shall not be less than 75% of the total required by the individual uses.

The Town Centre Parking Study (2008) supported this provision in the Parking Bylaw as the study found that that efficiencies could be created with the current parking supply if property owners were willing to share parking and create local economic synergies through ease of parking in one location and walking or cycling to multiple destinations.

When reviewing and updating this section of the Parking Bylaw, the main goal is to clarify the requirements (for example, two businesses on adjacent properties can utilize each other's parking lots) and potentially reduce the parking stall requirements for individual properties in the Town Centre if Town Centre businesses were willing to capitalize on the collective parking space provision benefits.

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2.8 Landscaping and Screening

The Zoning Bylaw includes landscaping requirements for unconcealed surface parking spaces. For example, unenclosed off-street parking for commercial zones, the landscape screening is required to be at least 1metre high and 1.5 metres wide. These requirements will be reviewed in conjunction with the Parking Bylaw to ensure that surface parking areas are required to add aesthetic elements, such as climate resilient flowering shrubs, ornamental trees, grasses, in-ground irrigation to help ensure plantings survive and thrive, while also ensuring sightlines are kept clear and principles of Crime Prevention Through Environmental Design (CPTED) are considered to address safety considerations. The Parking Bylaw may also potentially include lighting requirements, updated signage requirements, and pedestrian walkway requirements for parking areas that have more than one commercial or mixed-use building on the same lot or are of a certain size (such as large retail parking lots).

3.0 Shared Mobility Provisions

Currently, there are no shared mobility provisions in the Parking Bylaw. It is anticipated that the new Parking Bylaw may include provisions for some shared mobility. Shared Mobility can be defined as transportation services and resources that are shared among users, either concurrently or one after another. Shared mobility provisions often include regulations for:

- taxi pick up stations;
- car sharing (such as Modo or Evo parking);
- shared micromobility (such as bike sharing or scooter sharing), and
- bus parking provisions.

4.0 NEXT STEPS

The comments and feedback received on this report from Council will help guide the next steps in the review process, as outlined in Figure 1. Once staff have refined the list of potential changes, staff will be seeking feedback from the community in the Fall 2022. Staff will be engaging with the City's advisory committees, specifically the Transportation Advisory Committee and the Municipal Advisory Committee on Accessibility as well as with the development community through Urban Development Institute (UDI) and HAVAN. Additionally, staff will be providing the opportunity for all residents to provide feedback by identifying the changes on the City website and promoting the opportunity through the typical communication channels.

Figure 1: New Parking Bylaw Process



In early 2023, staff anticipate bringing forward the draft new Parking Bylaw to a future Committee of the Whole meeting. In the Committee of the Whole report, staff will also provide an approach to instream applications and when the amendment to the Parking Bylaw would take effect.

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5.0 STRATEGIC ALIGNMENT

Achieving long term sustainability through thoughtful planning and policy work, such as the subject review of the Off-Street Parking Bylaw, is established under the Growth pillar of Council's 2019-2022 City of Maple Ridge Strategic Plan.

6.0 INTERDEPARTMENTAL IMPLICATIONS:

Staff will continue to work with various departments, including Engineering, Bylaw & Licensing Services, Building, and Fire on the new Parking Bylaw.

7.0 CONCLUSION:

A full review of the Off-Street Parking and Loading Bylaw No. 4350-1990, also known as the "Parking Bylaw" regulates the location, number, and size of off-street vehicle parking spaces, loading spaces, bicycle spaces, and passenger spaces, to balance the needs of residents, commuters, and visitors. Onstreet parking is regulated through other bylaws and is not included within this review. A new Off-Street Parking Bylaw is the anticipated outcome of this review.

This report identifies eight topics within the existing Parking Bylaw that are likely to see the most change and what those changes might look like based on a preliminary review of regional best practices (Section 2.0). Staff are seeking Council's high-level comments at this stage in the review process to guide next steps. Staff will also be seeking feedback from the community throughout the Fall and anticipate bringing forward the draft new Parking Bylaw to a future Committee of the Whole meeting in early 2023.

"Original signed by Krista Gowan"

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Reviewed by:

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Concurrence: Scott Hartman

Chief Administrative Officer

The following appendix is attached hereto:

"Original signed by Scott Hartman"

Appendix A - Central Business District Area Map

Appendix B - Payment In-Lieu Area Map

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