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1. Overview

The Township of Esquimalt is undertaking the *Integrated Parking Strategy and Regulations Framework* project as an opportunity to pursue high-level strategic directions around land use and built form, multi-modal transportation, and parking management.

Refreshed parking strategies, policies, regulations, and management approaches will better reflect the Township's goals and values, resulting in more certainty and a greater level of confidence to residents, the business, development community, and Council

A comprehensive process will be undertaken that results in two key outcomes:

- 1. A new **On-Street Parking Strategy** to guide decision making and implementation for publicly provided parking including electric-vehicle charging, bicycle parking and accessible parking.
- An updated and modernized **Parking Bylaw** that ensures appropriate and desirable parking conditions are achieved through future land development.

Research, analysis, and community engagement activities are being undertaken to better understand parking needs in Esquimalt and support updated regulations. These activities will be documented in "working papers" and draft materials over the course of the project, as follows:

Local Understanding + Best Practices, Working Paper no.1

Working Paper no.1 (this document) provides a general overview of the Township's current policy objectives related to transportation and parking, as well as current offstreet parking requirements and public parking management tools and how they compare to other communities. Consideration is given to best practices related to bicycle parking, accessible parking, electric vehicle (EV) charging and transportation demand management (TDM).

"What We Heard" Engagement Summary, Working Paper no.2

Working Paper no.2 will be a summary of the public and stakeholder engagement activities undertaken to understand parking needs in Esquimalt and to test new policy and regulation options.

Full Draft Documents

Both the Public Parking Strategy and Parking Bylaw document will be prepared as full drafts to reflect the key directions and feedback from the community, stakeholders, and Township staff. A two-week review period will be provided to allow the community to review the draft documents and provide feedback.

Why Manage Parking?



Land Use + Urban Form

Land use and urban form are influenced by the quantity and configuration of parking. Greater parking supply and surface parking lots reduce opportunities to increase density, establish pedestrian connections, and create great public spaces.



Environmental Sustainability

On-road transportation is a key contributor to our overall community greenhouse gas (GHG) emissions. Managing parking to support a shift to active travel and transit helps reduce GHG emissions and support environmental sustainability objectives.



Affordability

Housing affordability is directly impacted by parking supply, where costs associated with parking are generally passed on in the form of a higher rent or purchase price. Managing parking supply coupled with improvements to active transportation and public transit helps make our community more affordable.



Congestion + Road Safety

Convenient, readily accessible parking supports more people driving more often. More vehicles on the road leads to increased congestion and concerns over road safety. Through strategic parking management, traffic congestion is reduced as more people engage in active transportation and use public transit.



Health + Well-Being

Active transportation (including walking to/from transit) presents the opportunity to engage in physical activity and social interaction. An inexpensive and plentiful supply of parking encourages people to drive more and facilities a sedentary lifestyle without the social benefits of active transportation.

2. Background

Parking has a broad and profound impact on communities in terms of form of development, rate of growth, how people travel and the health of people and the environment.

Understanding the relationship between parking and the various aspects that make up the Esquimalt community, as well as recognizing the impact of various parking regulation and management options, is critical for the development of the Integrated Parking Strategy and Regulatory Framework.

2.1 Community Profile

Esquimalt is a growing, diverse, and highly recreational community. With 17,533 people (as of the 2021 census), and a total land area of 7.08 km², Esquimalt has the second highest population density among municipalities in the Capital Region with 2,494 persons per square kilometre (second to Victoria).

The compact geography lends itself well to easy access to parks and green space, recreational facilities, walkways, trails, and various commercial and institutional amenities in the core of the community, including libraries, schools, restaurants, and retail outlets.

About 26% of the population in Esquimalt is above the age of 60. This is a significant portion of the total population, who also have unique transportation needs and travel patterns.

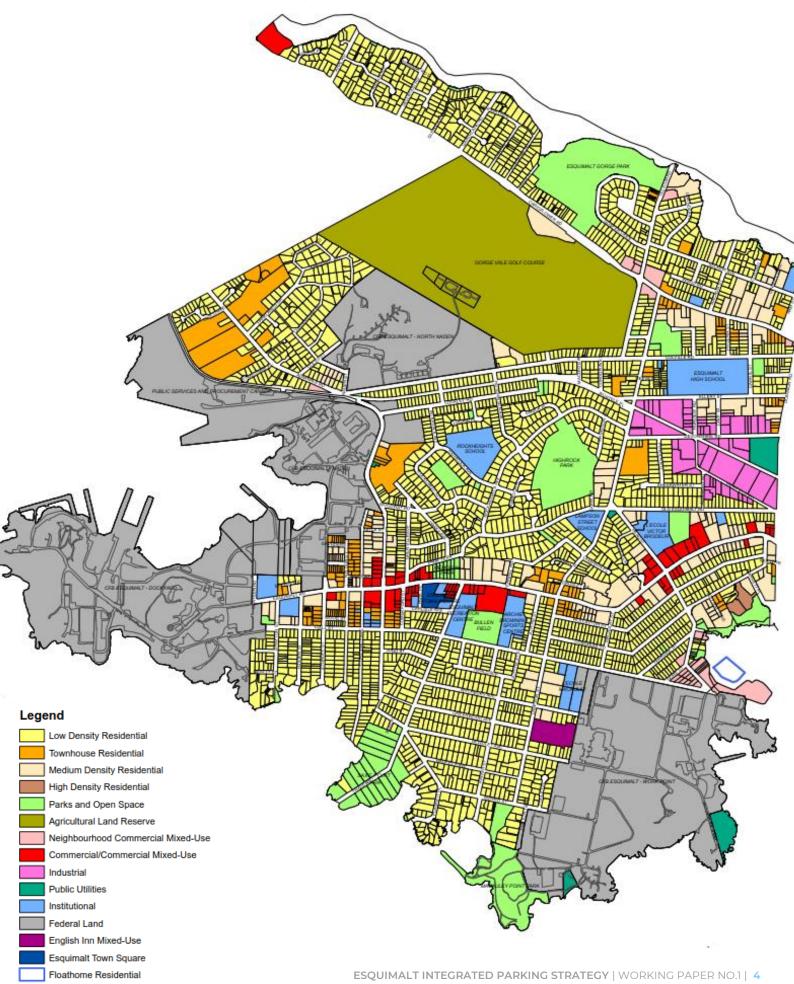
2.2 Land Use

Community land use is predominantly single-family residential, with large established residential neighbourhoods in the South Esquimalt / Saxe Point, Rockheights, and Craigflower / Gorge areas. Land use designations contained in the OCP are identified in Figure 1.

The bulk of the Township's commercial lands are focused on the Esquimalt Road corridor, either between Admirals Road and Lampson Street, or focused on the Head Street intersection. The Township has recently redeveloped the Esquimalt Town Centre immediately adjacent from Municipal Hall, with further planned intensification in the vicinity.

The Canadian Forces Base (CFB) Esquimalt is also a defining community feature, with lands both focused on Esquimalt Harbour and Work Point / McLoughlin Point.

FIGURE 1. LAND USE DESIGNATIONS, OFFICIAL COMMUNITY PLAN



2.3 Transportation Behaviour

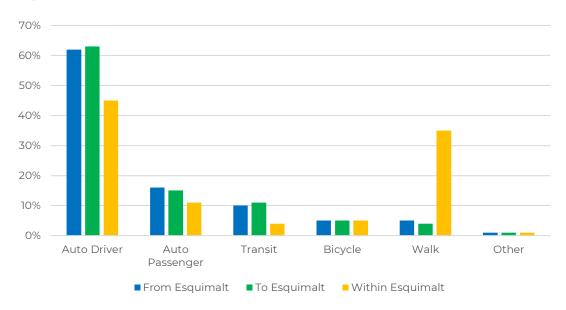
The transportation choices made by Esquimalt residents reflect the transportation options made available to them. Where considerable investments are made in building road infrastructure and providing ample free parking, residents and visitors will be inclined to make single-occupant vehicle trips.

According to the 2016 Census data, 61% of residents use a private automobile as their main mode of commuting* (see **Figure 2**).

Through the CRD Origin & Destination Household Travel Survey (2017), the survey reported that approximately 76,190 trips are made daily to, from, or within Esquimalt daily. Of those trips, approximately 30,050 trips leave Esquimalt, 30,070 trips enter Esquimalt, and 16,070 trips both begin and end in the Township.

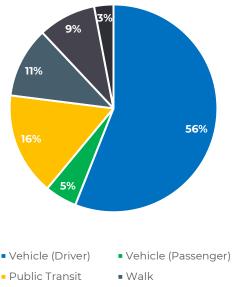
Figure 3* provides a summary of the mode split for all trips taken to, from, and within Esquimalt. Of the trips made outside of the Township of Esquimalt, travel patterns indicate downtown Victoria, Saanich, and Colwood as among the most common destinations.

Figure 3: Mode Split by Travel Mode



*Data reflects pre-pandemic travel behaviour

Figure 2: Mode Share



Bike Other

Our Transportation Profile



1.2

Vehicles per household



3.23

Daily trips per household



Bicycles per household



\$8,730

Average annual household transportation costs

3. Policy + Regulatory Framework

The Township is guided by policy and regulations set at the local, regional, and provincial levels that establish direction for the future. This section identifies the key policies that will help inform the project and understand regulations that may be required to be updated through the *Integrated Parking Strategy and Regulatory Framework* process.

3.1 Official Community Plan, 2018

The Township's Official Community Plan (OCP) sets the goals and policies intended to provide direction for the growth and development of Esquimalt. The OCP sets goals that encourage sustainable transportation and planning through:

- Encouraging better infrastructure that promotes walking and cycling
- Supporting compact, efficient medium density and high-density residential development
- Encourage the viability of the business sector within Esquimalt

These goals are aided through specific policy development which directly impact how parking is managed and regulated. The specific identifying policies in the OCP are:

- Developing transportation demand management plans with major employers (Policy 3.8)
- Encourages the installation of electric vehicle charging infrastructure in medium and high-density residential developments (Policy 5.3)
- Consider parking relaxations or other development variances where a development proposal includes affordable, special needs or seniors housing (Policy 5.4)
- Reductions in off-street parking requirements may be considered in new industrial
 and business developments where the following are provided: an appropriate
 number of secure bicycle storage spaces; shower and change rooms; visitor bicycle
 parking spaces; and building location within short walking distance of a regional bus
 route (Policy 7.2)
- Improve mobility and access for local and regional travel and reduce intrusion on local streets (Policy 11.6)

- Increase the minimum requirements, and set design guidelines, for bicycle parking facilities in all new developments for residents, workers, and visitors (Policy 13.3)
- increase the amount and diversity of infrastructure available to cyclists, such as public bike racks and public bike repair stations (Policy 13.3)
- Support the reservation of on-street parking for car share vehicles (Policy 13.3)
- Underground parking should be encouraged for any multi-unit residential buildings exceeding four storeys (DPA #6)

Policy direction from the OCP clearly demonstrates the Township's desire to prioritize sustainable transportation modes in the public and private supply of parking. Bicycle parking, EV charging, transportation demand management (TDM) and car share are key considerations for updated parking policy.

3.2 Active Transportation Network Plan, 2022

Esquimalt's Active Transportation Network Plan (ATNP) is the first comprehensive plan that identifies how active transportation can play a multifaceted role in achieving Esquimalt's broader strategic priorities including being a healthy, livable, and diverse community. The document covers both active transportation networks and end-of-trip facilities and references the design guidelines identified in the B.C. Active Transportation Design Guide as the standards to follow.

As the active transportation network builds out, following the guidance of the ATNP, existing public parking could be impacted as a result of creating space for active transportation infrastructure. For example, Lampson Street and Esquimalt Road are part of the "Quick Build" Network that will require the removal of on-street parking to realize planned cycling facilities.

In addition to building out a cycling network, the ATNP identifies the importance of high quality, convenient, and secure bicycle parking and its implementation as an integral piece to enable people in using cycling as their primary mode of transportation. The ATNP sets clear direction for bicycle parking in new developments that is to be considered as part of the Parking Bylaw update, including:

Long-term Bicycle Parking

Also referred to as "Class A" or "Class I" bicycle parking, this refers to a secure weather protected bicycle parking facility used to accommodate long-term parking, such as for residents or employees, usually within a room or a covered, fenced area.

Short-term Bicycle Parking

Also referred to as "Class B" or "Class II" bicycle parking, this refers to a short-term visitor bicycle parking facility, which may offer some security and be partially protected from the weather.

Location & Access

Short-term bicycle parking spaces should be as close as possible (15 m or less) from the primary entrance of a building, so it is accessible to visitors / customers. It should also be located at the surface level and physically separated from vehicle parking facilities. Longterm bicycle parking is intended to offer increased security, weather protection, and higher bicycle parking capacity. As such, it should be in a secure and weather protected facility.

Dimensions & Layout

The BC Active Transportation Design Guide provides detailed design guidance for both long-term and short-term bicycle parking. The dimensions and layout for short-term bicycle parking typically including the rack type, material, dimensions, and placement. The racks should be spaced out 1.8 m and 0.9 m from the curb. For long-term bicycle parking, consideration needs to be given to ground anchored versus vertical racks and the overall design of the bicycle parking room.

Oversized Bicycle Parking Spaces

Oversized (or non-standard) bike parking spaces should have a minimum distance of 3.0m in length and 0.9 m in width. At least 10% of the required long-term and short-term bicycle parking spaces should be designed as oversized spaces. All oversized bike parking spaces should be provided as ground anchored racks. Oversized bicycles, especially electric cargo bikes, are heavy, long, and challenging to park in a vertical bike rack. At least 50% of the required long-term oversized bike parking spaces should have access to a 110V wall receptable for charging.

Cycling End-of Trip Facilities

Cycling end-of-trip facilities typically contain change rooms and showers, bicycle repair tools, personal lockers, water closets, bike wash areas, and a sink / wash basin.

3.3 Parking Bylaw, 2011

Where most communities have embedded off-street parking requirements in the land use regulations (i.e., Zoning Bylaw or Land Use Bylaw), the Township regulates off-street parking through a separate *Parking Bylaw*. The Bylaw was originally prepared in 1993, with amendments being made since that time. The Bylaw includes requirements for vehicle parking supply and design, accessible parking, and loading spaces.

Vehicle parking requirements are specific to land use and are calculated based on floor area, number of dwelling units or anticipated number of users. Current minimum off-street vehicle parking supply rates are identified in **Table 1** on the following pages.

In comparison to the direction established in the OCP and ATNP, several important gaps are evident between the Township's established policies and the requirements contained in the Parking Bylaw:

Bicycle Parking + End-of-Trip Facilities

Requirements for bicycle parking are not included in the Parking Bylaw, nor are they set out elsewhere in Township regulations. While policy is in the OCP supporting provision of bicycle parking and land development applications have come forward using bicycle parking to support reduced vehicle parking support, inclusion of requirements in a bylaw is common in most communities and would ensure appropriate bicycle parking provision in future land development.

Similarly, regulations requiring end-of-trip cycling support facilities are lacking. Identified through the ATNP, the amenities support increased cycling, particularly among commuters.

Accessible Parking

Although amended in 2019, accessible parking supply requirements are lower than those found in most other communities that have recently revisited accessible parking requirements, leading to potential under-supply of accessible parking. The current supply requirement is shown below:

In any Development requiring 25 or more Parking Spaces, Parking Spaces for Persons with Disabilities shall be provided in a ratio of 1 for every 50 required Parking Spaces, plus 1 space for any remainder in excess of the required number of spaces divided by 50.

Electric Vehicle (EV) Charging

The Parking Bylaw does not include requirements for electric vehicle (EV) charging, as have been pursued in other communities in recent years. EV charging regulations may require EV-readiness (i.e., pre-wiring parking spaces for future charger install) and/or the provision of EV charging infrastructure.

Transportation Demand Management (TDM)

Only modest provisions are provided in the Parking Bylaw to allow for reduced parking supply where TDM is pursued. Opportunities may include bicycle parking, bicycle end-oftrip facilities, transit infrastructure, transit fare subsidy, carshare provision, carshare subsidy, rideshare initiatives, and other TDM opportunities.

Consistency with the Zoning Bylaw

Currently the land uses in the Zoning Bylaw do not correlate with the Parking Bylaw land uses. Updates to the Parking Bylaw should ensure there is consistency in land uses between both regulatory policies.

TABLE 1. MINIMUM OFF-STREET VEHICLE PARKING SUPPLY RATES

Use, Building or Structure	Required Parking Spaces
(a) RESIDENTIAL	
(i) Single Family(ii) Single Family Bed and Breakfast(iii) Two Family	1 space per dwelling unit 3 spaces per dwelling unit 1 space per dwelling unit
(iii) Low, medium and High-density Townhouse and low-density Apartment (RM-1, RM-2, RM-3)	2 spaces per dwelling unit
(iv) Medium and High-density apartment (RM-4 and RM-5)	1.30 spaces per dwelling unit
(v) Senior Citizens apartments	0.50 spaces per dwelling unit
(b) COMMERCIAL	
(i) Convenience Store	1 space per 35 sq. m. of gross floor area with a minimum of 4 spaces
(ii) Restaurant	1 space per 5 seats with a minimum of 1 space per 14 sq. m. of gross floor area
(iii) Entertainment (theatres, halls, arcades)	1 space per 5 seats with a minimum of 1 space per 14 sq. m. of gross floor area
(iv) Retail Sales of goods and services	1 space per 25 sq. m. of gross floor area
(v) Mixed Commercial/Residential	Commercial requirement per use plus residential requirement
(vi) Business and Professional Offices	1 space per 30 sq. m. of gross floor area
(vii) Financial Institutions	1 space per 25 sq. m. of gross floor area
(viii) Hotels	1 space per guest room
(ix) Motels	1 space per rental unit

(x) Service Station, including automobile repair, servicing and body shops and car wash	3 spaces per service bay
(xi) Museum	1 space per 10 sq. m. gross floor area
(xii) Licensed liquor establishments	1 space per 5 seats with a minimum of 1 space per 14 sq. m. of gross floor area
(xiii) Other Commercial	1 space per 25 sq. m. gross floor area
(c) INDUSTRIAL	
(i) Warehouse - storage	1 space per 250 sq. m. gross floor area
(ii) Warehouse - wholesale outlet	1 space per 25 sq. m. gross floor area
(iii) Manufacturing - light	1 space per 100 sq. m. gross floor area
(iv) Manufacturing - heavy	1 space per 50 sq. m. site area
(v) Repair Shops (other than automobile repair, servicing and body shops)	1 space per 100 sq. m. gross floor area
(vi) Electrical Substations and Gas Pressure Reduction Facilities	1 space
(vii) Regional Sewage Pumping Facility which may include a Sewage Screening Facility	4 spaces
(viii) Other Industrial	1 space per 25 sq. m. gross floor area
(d) PUBLIC INSTITUTIONAL	
(i) Schools - Elementary and Junior Secondary	1.5 spaces per classroom
(ii) Schools - Senior Secondary	3.5 spaces per classroom
(iii) Churches	1 space per 10 seats
(iv) Golf Course - 18 hole	150 spaces plus 1 space per tee for driving range

3.4 Streets and Traffic Bylaw, 2017

The Township manages the supply of on-street parking to support the demands of a growing community, while also managing the impacts of parking in neighbourhoods. *The Streets and Traffic Bylaw No. 2050* designates approximately 14 different parking restrictions, most notably time restrictions and residential parking permits:

- **No Stopping Zones** Designating certain streets or portions of streets as "No Stopping" zones and designating the hours of the day during which stopping is prohibited within such zones
- No Parking Zones Designating certain streets or portions of streets as a "No Parking" zone and designating the hours of the day during which parking is prohibited within such zone
- **Limited Time Parking Zones** Designating certain streets or portions of streets as "Limited Time Parking" zones and designating the length of time during which vehicles may be continuously parked within such zones and designating the hours of the day during which the regulations in respect of any such zone or zones are to apply
- **Loading Zones** Designating certain streets or portions of streets as "Loading" zones and designating the hours of the day which such zones are to be in effect as loading zones
- **Taxi Stands** Designating certain streets or portions of streets as "Taxi Stands" for the exclusive use of taxis or any class of taxis
- **Bus Zones** Designating certain streets or portions of streets as "Bus" zones for the exclusive use of buses or any class or classes thereof and designating the day or days and the hours of the day during which the stopping, standing or parking therein of vehicles other than such buses or class or classes thereof is prohibited
- **Safety Zones** Designating certain streets or portions of streets as "Safety" zones for the exclusive use of pedestrians and providing for the erection upon such safety zones of such platforms, curbing or structures as the Municipal Engineer may deem advisable for the greater convenience or safety of pedestrians
- Angle Parking Designating certain streets or portions of streets as "Angle Parking"
 zones within which vehicles shall be parked only at an angle with the curb or edge of
 the roadway and generally designating certain streets or portions of streets and the
 hours and days within and during which stopping, standing or parking of the vehicles
 otherwise than in the manner prescribed by the Motor Vehicle Act is permitted or
 required and the conditions and restrictions applicable thereto
- Reserved Parking Setting apart and allotting certain portions of streets adjacent to any Federal, Provincial or Municipal public building for the exclusive use of officials and officers engaged therein for the parking of vehicles and providing that certain portions may be used exclusively by certain officials and officers and designating the hours of the day during which such portions of streets shall be so set apart and allotted

- **Special Parking** Designating the streets or portions of streets where the drivers of vehicles shall not be required to park the vehicle in the manner prescribed by the *Motor Vehicle Act* and providing that the driver shall park the vehicle in the manner indicated by the lines or other markings or signs displayed in each of such places and designating the type or types of vehicles to which such orders shall apply
- Parking Vehicles over 7 metres Designating the streets or portions of streets where the drivers of vehicles having, together with any load carried thereon or any trailer attached thereto, an overall length in excess of seven metres may not park such vehicle except for the purpose of loading or unloading merchandise or freight
- **Passenger Zones** Designating the streets or portions of streets which shall be "Passenger" zones for the exclusive use of vehicles while engaged in the loading or unloading of passengers
- **'Residential Parking Only' Zones** Designating the streets or portions of the streets which shall be "Residential Parking Only" zones and designating the time or times when such streets or portions of such streets shall be so set apart and allotted
- **Residential Permit Zones** Designating the streets or portions of the streets which shall be 'Residential Permit Zones' and designating the time or times when such streets or portions of such streets shall be so set apart and allotted;
- Intersection No parking Restriction On each leg of an intersection, a no parking restriction shall be established nine (9) metres back from the property line that is perpendicular or near perpendicular to the leg of the intersection. This restriction shall be applied to all legs of the intersection. The implementation of this restriction does not cancel or suspend any existing traffic order within the designated area of this restriction.
- Car Share Parking Only Zone Designating the streets or portions of the streets which shall be "Car Share Parking Only."

Enforcement of the STB is undertaken by both the Victoria Police Department and the Community Safety Services (Bylaw) Division of the Township. The enforcement takes place by the issuing of either a municipal ticket or provincial ticket. The type of ticket issued is dependent on the restriction violated and the issuing authority

3.5 Capital Region Electric Vehicle + Electric Bike Infrastructure Planning Guide, 2018

The Capital Regional District (CRD) *Electric Vehicle + Electric Bike Infrastructure Planning Guide* contains strategies for local governments and electoral areas, as well as private development, to expand EV and E-Bike charging infrastructure in the Capital Region. It provides:

- An overview of existing EVs and E-bikes, charging station technology, trends in EVs and E-bike ownership in the Capital Region and elsewhere, and key barriers to uptake;
- 2. Prioritized locations for future installation of public EV charging infrastructure and improved management of public EV charging stations;
- 3. Opportunities to increase EV and E-Bike charging infrastructure in new development; and,
- 4. Recommended approaches for retrofitting existing buildings for EV charging.

Of importance to this initiative, the Regional Guide provides recommended requirements for EV and e-bike charging in off-street parking regulations, as follows:

Residential EV-Ready Requirements

For new buildings, structures and uses, all residential parking spaces, excluding visitor parking spaces, shall feature an energized outlet capable of providing Level 2 charging or higher to the parking space.

Energized outlets shall be labelled for the use of electric vehicle charging. Where an electric vehicle energy management system is implemented, the Director of Engineering may specify a minimum performance standard to ensure a sufficient rate of electric vehicle charging

Commercial EV-Ready Requirements

For new buildings, structures and uses, 10 percent of all commercial parking spaces shall be provided with an energized outlet capable of providing Level 2 charging or higher to the parking space.

E-Bike Parking Requirements (Multi-Unit Residential & Commercial)

Long-Term Bicycle Parking:

One 110V electrical outlet must be provided for every two long-term bicycle spaces.

Short-Term Bicycle Parking:

10% of bicycle parking spaces must have access to an 110V electrical outlet

4. Public Parking Assessment

To understand utilization of public parking in Esquimalt, on-street parking and public parking lot utilization data was collected and analyzed. This will help to identify current parking restrictions, existing pressures on public parking, and understand the relationship of time of day and land use, which will ultimately inform recommendations for parking management contained in the *Integrated Parking Strategy and Regulatory Framework*.

4.1 Approach

Public parking was assessed from three perspectives:

- 1. **Restrictions** Using the Township's Traffic Orders Map, digital mapping files were brought into GIS and used as the basis for project mapping. This included incorporating changes in restrictions or inconsistencies identified during on-street parking observations.
- 2. Inventory A desktop exercise was undertaken to identify the Township's on-street parking supply by segment (or block), for the purposes of understanding utilization on key street segments. Key public parking lots nearby the Esquimalt Town Centre, including at Municipal Hall, Memorial Park, Esquimalt Recreation Centre, and Archie Browning Sports Centre were also be inventoried. Parking supply for these lots and segments was confirmed or adjusted during the on-street parking observations.
- **3. Utilization** In-field parking observations were completed to establish measures of parking utilization. Observations were focused on the selection of approximately 160 street segments identified in the desktop inventory throughout Esquimalt that represent a mix of land use contexts and neighbourhoods in the Township.

Public parking observations were carried out over two (2) observation periods on Thursday June 16, 2022. The first observation period took place over mid-day hours from approximately 11:00 AM to 3:00 PM. The second observation was conducted during the evening from 7:00 PM to 8:00 PM. These two periods typically capture hours of peak on-street parking demand, with the specific peak demand varying with the surrounding land uses.

42 Results

On-Street Parking Restrictions

Roads in Esquimalt feature several on-street parking restrictions, shown on Map 1, that are a key parking management tool to benefit residents, businesses, and their patrons and ensure safety for all road users. The Township's on-street parking restrictions will be discussed in this section and are discussed in more detail in Section 3.4.



No Parking – An absolute restriction on all on-street parking regardless of day or time, no parking restrictions are most often indicated by yellow paint along the curb or signage. These restrictions are found throughout the community, but most commonly on high-traffic roads such as Esquimalt Road, Lampson Street, Craigflower Road, or Admirals Road or in areas where parked cars could create a safety concern for road users.



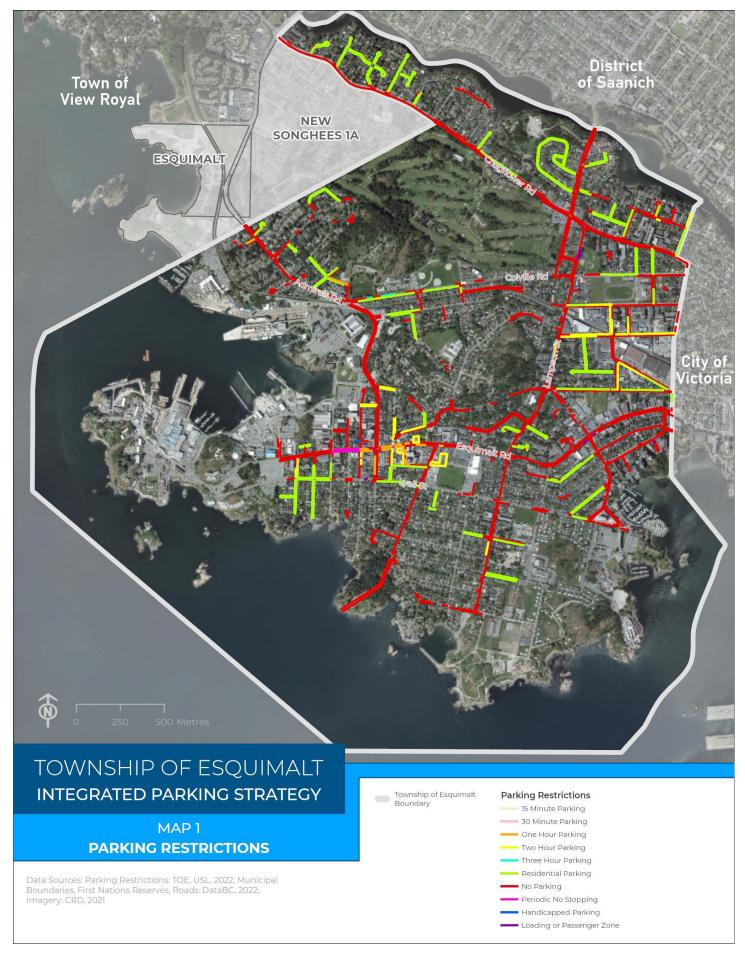
Limited Time Parking Zones – Several time-based restrictions can be found throughout Esquimalt from 15-minute maximum stays to three-hour parking zones and are employed to prevent all-day parking in key areas. These restrictions are largely focused in areas with high parking demand or where regular turnover can benefit local businesses, with the specific restrictions indicated by signage. As a result, most time-base restrictions are found on streets near the Esquimalt Town Centre and Viewfield Industrial Area.



Residential Parking – Residential parking zones restrict on-street parking for the exclusive use of the residents of adjacent homes. Most residential parking zones in Esquimalt can be found on residential streets near high parking demand areas such as commercial, employment, and recreation centres, or near major roads. These restrictions therefore help prevent parking spillover from adjacent uses and ensure there is ample on-street parking for residents, guests, or trades persons working in abutting dwellings. These restrictions are implemented at the request of residents with sufficient support from neighbours in a resident-generated petition.



Other Restrictions - Several other on-street parking restrictions can be found in Esquimalt, serving unique users, uses, and contexts. These include on-street parking dedicated to accessible, passenger and loading zones, and restrictions for specific times of day or days of the week. By incorporating these restrictions, the Township can help provide ready access to key businesses and services for persons with disabilities, facilitate convenient loading near commercial uses, and limit parking utilization in specific areas on a temporary basis.



Public Parking Utilization

Mid-Day Count

The mid-day count between 11:00 AM and 3:00 PM produced several key trends, as shown in **Map 2**. In primarily residential areas, on-street parking utilization was typically less than 50%, particularly in low-density residential neighbourhoods such as north of Craigflower Road. Utilization during the first observation was generally higher in areas with a great mix of land uses or near employment centres, most notably in areas close to Esquimalt Town Centre, industrial and commercial centres near Devonshire and Viewfield Roads, some construction sites, and along Federal lands like those on the western end of Colville Road. In these areas, most street segments without residential restrictions were typically utilized more than 50%. Many of the most convenient locations to these centres were functionally full, or 85% utilized.

Evening Count

The results of the evening count, as shown in **Map 3**, showed several key differences to the mid-day observations. After business hours, many of the most highly utilized street segments near employment centres were less utilized or had no occupants. Many highly utilized segments at mid-day, such as those near the Esquimalt Town Centre, Viewfield Industrial Area, along Colville Road, and outside of Victor Brodeur school, were below 50% occupied. Increases in utilization were observed in some residential areas, and near recreation centres and parks, often in excess of 70%.

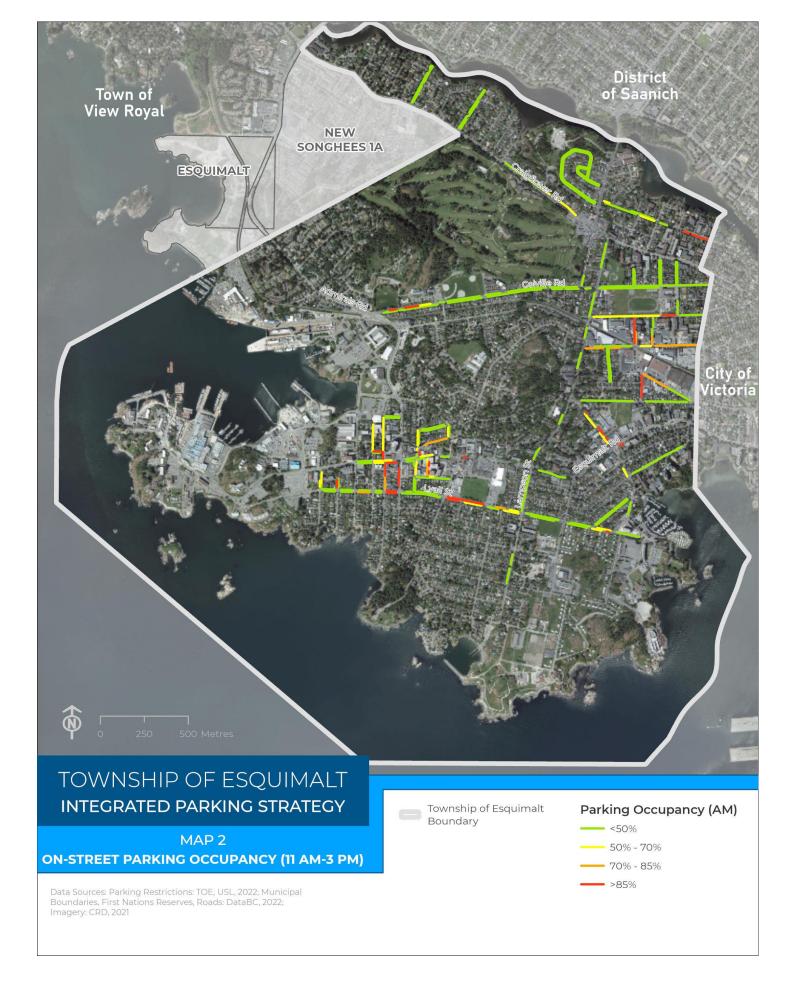
Many of these differences can be seen on **Map 4**, which shows the degree to which on-street parking utilization changed between the two observation periods. From this analysis we can see that many of the largest changes in occupancy are seen in the key locations mentioned above, in addition to on-street parking along Lyall Street.

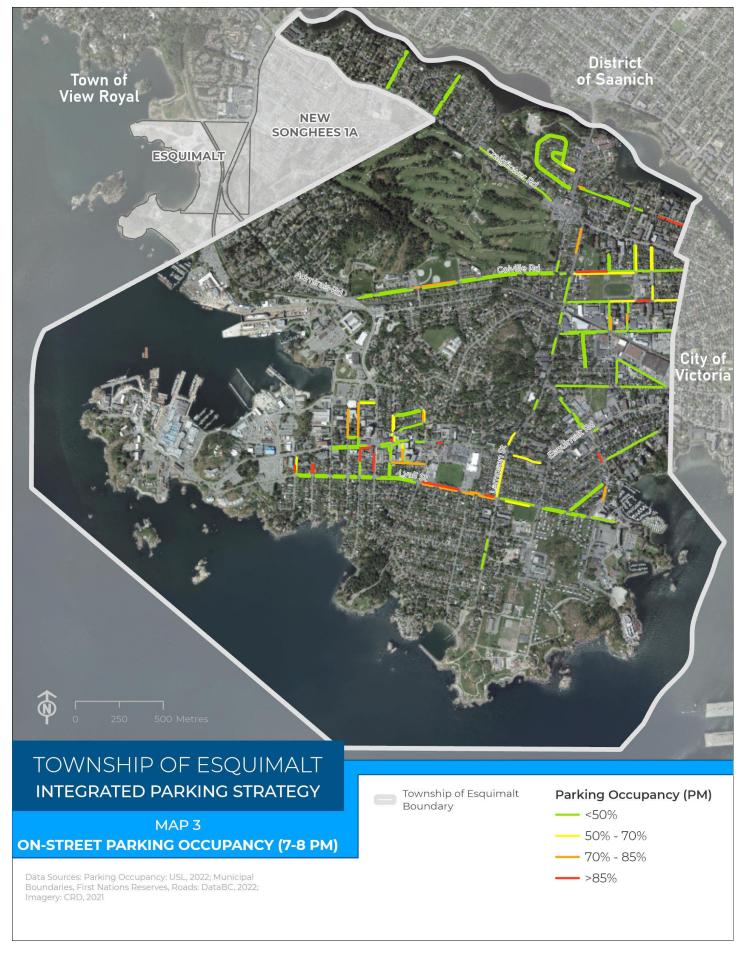
Public Parking Lots

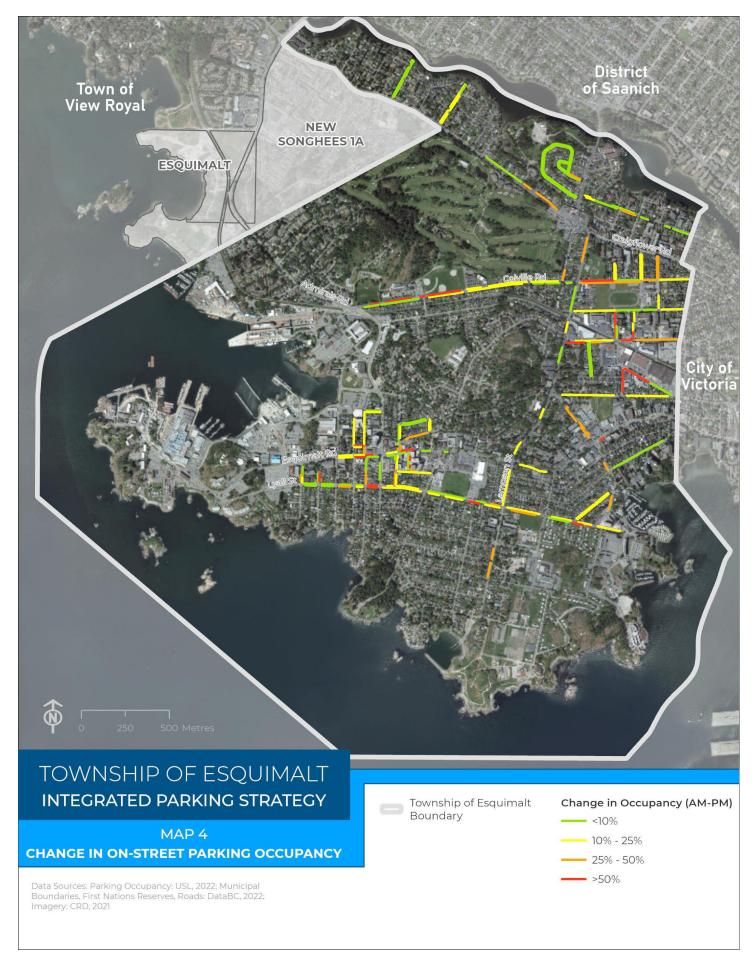
During the mid-day on-street parking observation period, counts were conducted of the four major public parking lots in the Esquimalt Town Centre: Municipal Hall, Memorial Park, Esquimalt Recreation Centre, and Archie Browning Sports Centre between 11:30 AM and 12:00 PM. As shown in **Table 2**, results indicate that parking occupancy at these sites varies widely, with Esquimalt Recreation Centre experiencing over 85% occupancy, whereas the lot adjacent to Municipal Hall was only 23% occupied. Overall, parking supply across these four lots was 287 stalls with an observed occupancy of approximately 57%.

TABLE 2. PARKING SUPPLY AT PUBLIC PARKING LOTS (TOWN CENTRE)

Site	Parking Supply	Observed Vehicles (Thursday, June 26, 2022 @ 11:30 AM – 12:00 PM)	Observed Occupancy	
Esquimalt Recreation Centre	87	76	87%	
Memorial Park	11	7	64%	
Municipal Hall	22	5	23%	
Archie Browning Sports Centre	167	77	46%	







5. Off-Street Parking Demand Assessment

Local off-street parking demand information is summarized in the following section. This is intended to provide an understanding of current off-street parking demand characteristics in Esquimalt and to establish a baseline for appropriate parking supply rates in the updated parking regulations.

5.1 Approach

Off-street parking demand was assessed using two data sources, described below:

1. Pre-existing Data

Existing parking demand information was reviewed using counts from previous consultant parking studies, provided by the Township and available through Council agendas. Past parking studies are focused on multi-family residential uses and include observations for both market rental and strata owned condominium sites.

2. Off-Street Parking Observations

The second means of collecting off-street parking demand data are in-field observations. The focus of in-field observations is to supplement and confirm observations from the pre-existing data for multi-family residential sites, and to provide new observations of sites including other key land uses such as retail, office, restaurant, industrial, and institutional development.

Multi-Family Residential Uses

All observations of multi-family residential uses were completed on the evening of June 16, 2022, between 8:30-9:30 PM. Peak occupancy for multi-family residential uses is typically around 12:00 AM - 4 AM, so utilization for collected and pre-existing data has been factored to reflect peak demand using the International Transportation Engineer's Parking Generation Manual, 5th Edition. The factor applied is between 7% and 17% depending on the time of the observation.

Other Uses

Parking demand observations were completed for other key land uses to support understanding of parking demand. This generally includes weekday afternoon for retail, office and institutional uses, and evenings for restaurant uses. Attention has been given to identifying study sites where parking demand is generally being satisfied off-street and that counted vehicles represent the bulk of the site parking demand.

52 Results

Parking demand data was analyzed using the approach outlined above. Results are presented in the following sections. See Appendix A for a summary of all parking demand data used in this section.

Residential Parking Demand, Overall

The overall parking demand among all multi-family residential units was found to be approximately 0.80 vehicles per unit. This accounts for 32 multi-family residential sites in Esquimalt and represent approximately 1,079 total units.

Residential Parking Demand, by Housing Type

Studies in other communities have demonstrated a clear difference in parking demand among multi unit residential buildings of differing ownership or tenure. To test this theory in Esquimalt, parking demand data was analyzed based on housing type for two distinct housing types - Condominium and Apartment. As shown in Table 3, the average parking demand in condominium units (0.80 vehicles per unit) was found to be nearly identical to that of apartments (0.80 vehicles per unit). The sample size for condominium developments, was significantly lower than those in apartment buildings, with only six condominium sites versus twenty-six apartment sites.

TABLE 3. AVERAGE PARKING DEMAND AT REPRESENTATIVE SITES

	Study		Vehicles	
	Study Sites Units		Average (per unit)	Range (per unit)
Apartment	26	903	0.80	0.48 - 1.22
Condominium	6	176	0.80	0.35 - 1.05
Overall	32	1,079	0.80	0.35 - 1.22

Residential Parking Demand, by Unit Size

Various established research sources have quantified the difference in parking demand between units of a different size / number of bedrooms. The study found to be most representative of conditions in the Capital Region was a comprehensive study completed in King County, WA¹. This was verified by a survey of a small number of local sites conducted as part of the City of Victoria's review of off-street parking regulations which found that parking demand ratios by number of bedrooms were found to be the following:

- One-bedroom units have a 20% higher parking demand than bachelor units
- Two-bedroom units have a 60% higher parking demand than one-bedroom units; and,
- Three-bedroom units have a 15% higher parking demand than two-bedroom units.

Several BC municipalities have structured parking requirements by the number of bedrooms in dwelling units. The typical variation in requirements among select communities is highlighted below and in **Table 4**:

- Bachelor / Studio 0.86 vehicles per unit
- One-Bedroom 0.96 vehicles per unit
- Two-Bedroom 1.29 vehicles per unit
- Three-Bedroom 1.56 vehicles per unit

TABLE 4. AVERAGE PARKING DEMAND IN REPRESENTATIVE COMMUNITIES, BY NUMBER OF BEDROOMS

				MUNIC	CIPALITIES					
Unit Size		City of Langford	City of Duncan		City of Victoria		City of Colwood			
	Town of View Royal		Downto wn Area	All Other Areas	Core Area	Village Centre	Urban Centre	All Other Areas	Average	Change in Average Parking Demand
Bachelor / Studio	1.0	1.25	0.5	1.0	0.65	0.70	0.80	1.0	0.86	-
One- Bedroom	1.0	1.25	0.5	1.0	0.80	0.85	1.0	1.25	0.96	11%
Two- Bedroom	1.5	1.25	1.0	1.2	1.20	1.30	1.30	1.60	1.29	35%
Three- Bedroom	2.0	2.25	1.0	1.2	1.20	1.30	1.5	2.0	1.56	20%

¹ King County Metro, Right Size Parking Model Code, December 2013, available online at: https://metro.kingcounty.gov/programs-projects/right-size-parking/pdf/140110-rsp-model-code.pdf

Residential Parking Demand, by Proximity to Transit

Access to reliable transit service has also been found to result in reduced parking demand in other communities. A study of residential parking demand in Metro Vancouver, as an example, found that access to frequent transit within 400m reduced parking demand by approximately 11% in condominiums and 27% in market rental sites².

A similar assessment was undertaken for the multi-family residential parking demand data in Esquimalt. Sites within 200m of the existing Frequent Transit Network were isolated from those beyond 200m. Results showed that the average parking demand for the twenty-six sites within 200m of the Frequent Transit Network was only 6% lower than those beyond 200m, a difference of <u>0.77 vehicles per unit</u>, to <u>0.83 vehicles per unit</u>. This reinforces the generally low parking demand at multi-family residential developments in Esquimalt, and the strong transit service provided along many other major corridors, such as Admirals Road and Lampson Street.

While this analysis applies only to multi-family residential sites, a similar rationale for lower parking demand could be applied to employment land uses adjacent to transit corridors, particularly among land uses where parking demand is largely associated with commuting such as Office and Post-Secondary uses. It is also necessary to note that the Frequent Transit service levels in Esquimalt have yet to be implemented on Admirals Road and Lampson Street, however the long-term visions of the OCP and Victoria Transit Future Plan do include these corridors as shown in Figure 4 below.

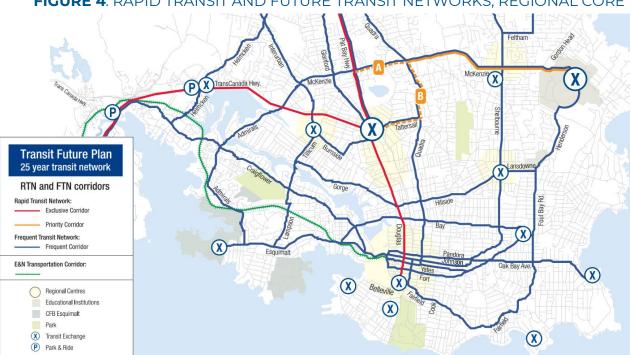


FIGURE 4. RAPID TRANSIT AND FUTURE TRANSIT NETWORKS. REGIONAL CORE

Non-Residential Parking Demand

² Metro Vancouver. 2018 Regional Parking Study, Technical Report. Retrieved from http://www.metrovancouver.org/services/regional-planning/PlanningPublications/RegionalParkingStudy-TechnicalReport.pdf

Alongside multi-family residential parking, utilization data was also collected for nonresidential developments, including various commercial and industrial sites throughout the community. While sufficient data for analysis of parking demand by land use type was not collected, this information does provide a snapshot of parking utilization that will help inform the development of supply rates and other management strategies developed as part of this process. Results for non-residential parking counts are included in **Appendix A**.

6. Emerging Trends in Mobility + Parking

The ways people move, drive, and park are adapting to the emerging trends in technology, human behaviour, and climate goals of our communities. The following categories demonstrate the emerging trends in parking design and accommodation to provide adequate parking for the evolving needs of our communities:

6.1 General

E-Mobility

Electric mobility refers to the use of electric cars, electric bikes and other micromobility technologies (e-scooters, e-skateboards, etc.) to get around.

Electric, hybrid, and alternative energy vehicles are becoming more common and more affordable. While the overall number of electric vehicles (EV) remains relatively low, uptake has increased significantly throughout the Capital Region. This trend is highly likely to continue, with the costs of batteries declining, charging stations becoming more prevalent, government subsidies, and the federal and provincial governments each banning the sale of new gas-powered vehicles by 2040.

Further, e-bikes have significant potential to replace motor vehicle trips and this has been found in research especially for commuting-based trips. E-bikes sales in B.C. went up 85% in 2019³. This aligns with global trends which have seen a large spike in e-bike purchases and usage. However, to encourage people to use e-bikes as a daily means of transport, they need safe and comfortable facilities in which to ride, park, and charge them. Section 7.4 provides best practice information on how to accommodate e-bikes through parking management.

Esquimalt has one public EV charging station at Memorial Park. The availability of EV charging is key to facilitating the adoption of EVs. Best practice policy for EV charging and parking is further explored in **Section 7.7**.

³ E-Bike BC (2020). COVID-19 Sees Climb in E-Bike and E-Scooter Sales. From https://ebikebc.com/covid-19-sees-climb-in-e-bike-and-e-scooter-sales/

Active Transportation

Active transportation in the context of parking can be used as a Transportation Demand Management (TDM) tool to incentivize the use of other modes other than single-occupancy vehicles. Further, active transportation needs to be considered in the design and supply of parking to accommodate mobility devices.

Local governments play a key role in ensuring that high-quality bicycle parking is available in sufficient quantities in their communities. Where there is not enough bicycle parking, or the racks are low quality and poorly located, people are less likely to cycle.

End-of-trip amenities are equally important in facilitating active travel. End-of-trip amenities include any amenity provided in a development that makes cycling easier, more convenient, and more comfortable, particularly for commuting. Basic end-of-trip amenities typically include:

- Change rooms
- Storage lockers
- Showers
- Sink/wash basin
- Bicycle repair equipment (tools, tire pump, workbench or stand)

The Township can ensure the provision of bicycle parking and end-of-trip facilities in new developments through the Parking Bylaw (see Section 6.2) and through providing publicly provided bicycle parking in the public right-of-way.

Ride-Hailing

Ride-hailing is an app-based service where users enter their origin and destination, as well as other optional trip specifications, and are matched with a driver within the ride-hailing fleet willing to complete the requested trip for the specified price. The prevalence of ride-hailing and ride-hailing service providers – also known as Transportation Network Companies (TNCs) - have grown significantly over the past decade in communities around the world, with Uber and Lyft being the most notable TNCs operating in North America.

Although ride-hailing is still a lingering business model in the Capital Regional, it is important to prepare for these services, especially related to parking and curbside management.

Like traditional taxi services, an effective ride-hailing service can enhance personal mobility by providing an additional transportation option, which may support individuals without access to a private vehicle. However, research has shown that ride hailing can increase congestion and vehicle kilometres driven while pulling trips away from sustainable transportation modes such as transit, walking, and cycling.4

⁴ Henao, A. The impact of ride hailing on parking (and vice versa). Journal of Transport and Land Use, 2019; 12 (1) DOI: 10.5198/jtlu.2019.1392

Ride-hailing may also lead to reduced parking demand: a study from the University of Colorado in Denver found that people who use ride-hailing are willing to pay more to avoid driving, including the stress of finding parking⁵, potentially leading to reduced parking demand.

Shared Mobility

Transportation is evolving rapidly, with new technology and socio-behavioural shifts leading to exponential growth in new mobility services such as carsharing and micromobility (e.g., bikeshare and e-scooter sharing services). With the growth of these shared mobility services, parking demand is expected to decrease over time. However, with the introduction of shared mobility, increased demand for curbside space is expected.

Curbside management policies will be needed to facilitate this increased demand. Section **8.1** discusses emerging best practice to accommodate competing needs for curbside space.

Universal Access

As communities work to create more accessible and inclusive communities, accessible parking standards, design guidelines, and supply rates in the public and private realm are modernizing. In 2019, the Township of Esquimalt amended its Parking Bylaw to update rates and design dimensions for accessible parking stalls, however best practices continue to evolve since the adoption of these revised standards.

A review of best practices specifically with respect to accessible parking design standards that can be applied to both the publicly and privately provided supply includes considerations for:

- 1. Accessible parking provision as two distinct types, with each meeting the general spatial and proximity requirements of the following accessible parking user groups:
 - a) Accessible (or Accessible Parking) Accessible parking accommodates users with limited mobility, which includes people that experience challenges with vision, strength, or dexterity. This group requires close proximity to primary building entrances but does not need a wider parking space.
 - b) Van Accessible (or Van Accessible Parking) Van accessible parking accommodates people who rely on mobility assist devices. A mobility assist device generally includes a wheel mobility device, such as a wheelchair (manual or motorized) or mobility scooter. This group requires a wider parking space to allow for maneuvering a mobility device in and out of a vehicle, but does not necessarily require close proximity to the building entrance.

LIMITED MOBILITY

An emerging classification for accessible parking - limited mobility car users include persons with heart or respiratory problems, or those with aids such as canes or crutches, who would appreciate and benefit from a parking space close to the facility entrance, but do not require a side access aisle to enter the vehicle. Use of a limited mobility stall would be based on an honour system, not requiring an accessible parking placard.



- 2. Provision of a pavement sign and vertical sign with the Dynamic Symbol of Access which enhances the visibility of accessible parking spaces and discourages inappropriate use (see Figure 5).
- 3. Accessible parking stalls must be located within 30 m of an accessible entrance.
- 4. Providing access to EV charging equipment and ensuring removal of barriers to access electric vehicle (EV) charging stations.

Accommodating mobility scooters is also an emerging best practice that communities are addressing through updated parking regulation. Mobility scooters are an electric-powered scooter, similar in use to a wheelchair, that are typically used by people with mobility limitations. These devices may not be desired in all locations but may have important context-specific applications (e.g., space for mobility scooters at senior centres or hospitals).

Specialty racks or parking areas can be designed and designated for these devices. Best practice across communities has been to integrate mobility scooter parking in conjunction with bicycle parking.

Additional best practices applicable to a modernized Parking Bylaw are discussed further in Section 7.6.

FIGURE 5. ACCESSIBLE PARKING SYMBOLS





Autonomous Vehicles

Autonomous Vehicle (AV) technology is rapidly emerging: major auto manufacturers and tech companies such as Tesla, Waymo, and Uber are refining autonomous technology, with vehicles already being trialled to varying degrees on city streets. In fact, all new Tesla vehicles come standard with advanced hardware capable of providing Autopilot features, with full self-driving capabilities possible in the future via software updates designed to improve functionality over time.

Industry analysts expect fully autonomous vehicles to be commercially available and legal in some jurisdictions by the late 2020s, with broader market adoption occurring over the next 30 years. The scale of technological change amounts to a revolution in urban transportation that could radically reshape the way we live and move. However, while autonomous vehicle technology may be right around the corner, the most significant impacts - including major changes to traffic patterns and parking demand - are not expected to be realized until the widespread adoption of AVs occurs, potentially in the 2050s or 2060s.6

⁶ Litman, T (2022). Automonous Vehicle Implementation Predictions. Report from: https://www.vtpi.org/avip.pdf

7. Best Practices in Off-Street Parking Regulations

Off-street parking regulations refer to the requirements set out by a local government for the supply and provision of parking that must be met by development applications. Provincial legislation enables the local government to establish development regulations to determine the requirement for off-street parking associated with land development. The enabling legislation from the Local Government Act, Section 525 is included on the following page.

The Township's current off-street parking regulations are contained in the Parking Bylaw (Bylaw 2011). They focus largely on vehicle parking and loading requirements. Through this project, consideration will be given to modernizing regulations and expanding the scope of the existing regulations to address other parking-related matters that align with the Township's over-arching policy objectives.

The following are some of the opportunities to revisit the Township's existing off-street parking regulations that have been explored in the following sections:

- Vehicle Parking Supply (including maximum rates or removing minimums)
- Parking Variances (i.e., where requirements are not met)
- Shared Parking
- Bicycle Parking (including supply and facility design requirements)
- Accessible Parking
- Electric Vehicle (EV) Charging
- Transportation Demand Management (TDM)
- Cash In-Lieu of Parking

Township of Esquimalt, Parking Bylaw (Bylaw 2011)

Parking Bylaw (Bylaw 2011) can be viewed on the Township's website: www.esquimalt.ca/government-bylaws/bylaws-enforcement/bylaws/parking-bylaw-consolidated

B.C. Local Government Act. Section 525

Off-Street Parking and Loading Space Requirements

- (1) A local government may, by bylaw, do the following:
 - (a) require owners or occupiers of any land, or of any building or other structure, to provide off-street parking and loading spaces, including spaces for use by disabled persons,
 - (i) for the building or other structure, or
 - (ii) for the use of the land, building or other structure;
 - (b) establish design standards for spaces required under paragraph (a), including standards respecting the size, surfacing, lighting and numbering of the spaces;
 - (c) permit off-street parking spaces required under paragraph (a) to be provided, other than on the site of the building or other structure or use, under conditions that are specified in the bylaw;
 - (d) as an alternative to complying with a requirement to provide off-street parking spaces under paragraph (a), permit, at the option of the owner or occupier of the land or the building or other structure, the payment to the municipality or regional district of an amount of money specified in the
- (2) Money referred to in subsection (1) (d) is payable
 - (a) at the time the building permit is issued for the applicable building or other structure, or
 - (b) if no building permit is required, at the time the use that requires the parking space specified in the bylaw begins.
- (3) A bylaw under this section may make different provisions for one or more of the following:
 - (a) different classes of uses, or of buildings or other structures as established by the bylaw;
 - (b) subject to subsection (4), different activities and circumstances relevant to transportation needs that are related to
 - (i) a use,
 - (ii) a building or other structure, or
 - (iii) a class of use or of buildings or other structures as established by the bylaw;
 - (c) different areas:
 - (d) different zones;
 - (e) different uses within a zone.
- (4) A provision under subsection (3) (b) must not increase the number of off-street parking spaces required under subsection (1) (a).
- (5) A provision under subsection (3) that establishes requirements with respect to the amount of space for different classes does not apply with respect to
 - (a) land, or
 - (b) a building or other structure existing at the time the bylaw came into force, so long as the land, or the building or other structure, continues to be put to a use that does not require more off-street parking or loading spaces than were required for the use existing at the time the bylaw came into force.
- (6) A bylaw under this section may exempt one or more of the following from any provisions of such a bylaw:
 - (a) a class of use, or of buildings or other structures, as established by the bylaw;
 - (b) an activity or circumstance relevant to transportation needs that is related to
 - (i) a use,
 - (ii) a building or other structure, or
 - (iii) a class of use or of buildings or other structures as established by the bylaw;
 - (c) a use, or a building or other structure, existing at the time of the adoption of a bylaw under this section.
- (7) If money is received by a municipality or regional district under subsection (2), the municipality or regional district must
 - (a) establish a reserve fund for the purpose of providing
 - (i) new and existing off-street parking spaces, or
 - (ii) transportation infrastructure that supports walking, bicycling, public transit or other alternative forms of transportation, and
 - (b) place the money to the credit of the reserve fund.
- (8) If reserve funds are established for both the purpose of subsection (7) (a) (i) and the purpose of subsection (7) (a) (ii), the reserve funds must be separate.
- (9) Before June 30 in each year, a local government must prepare and consider a report respecting the previous year in relation to the reserve funds required under this section, including the following information separately for each of the purposes established under subsection (7):
 - (a) the amounts received under subsection (2) in the applicable year;
 - (b) the expenditures from the reserve funds in the applicable year;
 - (c) the balance in the reserve funds at the start and at the end of the applicable year;
 - (d) the projected timeline for future projects to be funded from the reserve funds.
- (10)The local government must make a report under subsection (9) available to the public from the time it considers the report until June 30 in the following year.

WHY THE NEED TO MODERNIZE PARKING?

Parking has a broad and profound impact on communities in terms of form of development, rate of growth, how people travel and the health of people and the environment. Understanding the relationship between parking and the various aspects that make up the Esquimalt community, as well as recognizing the impact of various parking regulations and management options, is critical in the development of the Integrated Parking Strategy.

Parking Supply and Housing Affordability

The cost of parking gets bundled into the cost of the home or business, or into rent and the costs to construct parking are significant. Table 5 highlights the wide variation in parking construction costs between surface parking, free-standing parking, and underground parking. Costs may be higher in areas with challenging conditions, such as a high-water tables and limited space or difficult lot sizes.

TABLE 5. CONSTRUCTION COSTS PER PARKING SPACE - VANCOUVER 2022⁷

Dayking Capility Type	Construction (Construction Cost per Space			
Parking Facility Type	Low-end	High-end			
Surface Parking	\$5,000	\$25,000			
Free-Standing (Above-Grade) Parking Garages	\$100,000	\$140,000			
Underground	\$140,000	\$200,000			

The quantity and type of parking provided has a significant impact on communities and urban form. Surface parking increases impervious surfaces and consumes an enormous amount of land that could otherwise be contributing to density in appropriate locations, improving public spaces, and preserving natural spaces. Parking also takes up space that could be used for housing, particularly in more walkable or bikeable neighbourhoods with good access to mass transit.

Parking Influences Travel Choices

The transportation choices made by Esquimalt residents reflect the transportation options made available to them. Where considerable investments are made in building road infrastructure and providing ample free parking, residents are inclined to make singleoccupant vehicle trips. This has a whole host of negative impacts, including on the environment, air quality, personal health, and quality of life.

Parking provision, and therefore parking regulations, are an opportunity to influence transportation choices made by Esquimalt residents to better align with the Township's objectives to reduce greenhouse gas (GHG) emissions, increase active travel, and support healthy lifestyles

Altus Group - 2022 Canada Cost Construction Guide https://www.altusgroup.com/reports/canadian-cost-guide/

7.1 Parking Supply Rates

Parking supply rates dictate the required number of parking spaces associated with various land uses. Minimum parking supply rates are the most common method of regulating offstreet parking, where virtually all communities have established specific rates for most key land uses to ensure each is accompanied by at least the prescribed minimum quantity of parking. While this approach has generally been effective in addressing concerns over new development contributing parking to established neighbourhoods, it has the potential to require parking at a rate above-and-beyond what is necessary to meet the needs of a particular site. This is especially true where minimum parking supply rates have been established to protect against a "worst case" scenario and/or do not reflect the factors known to influence parking demand (i.e., location, travel options, etc.).

Municipalities also have the option to establish a "parking maximum" that defines an upper limit for parking supply. This is an approach that only select communities have in-place and typically only for a small number of land uses. Maximums may accompany minimum supply rates to provide a limited range of possible parking supply, or may be pursued instead of a minimum, thereby protecting against over-supply. This approach is most often applied in defined areas such as downtown or other urban areas where land is scarce and the local government is seeking density and to protect against excessive parking supplies.



Edmonton's "Open Option" Parking

The City of Edmonton recently became the first North American city to eliminate minimum parking requirements. Referred to as "Open Option" parking, the new approach includes a full-scale removal of minimum parking requirements across the City, instead allowing developers, homeowners, and businesses to decide how much on-site parking to provide on their properties based on their particular operations, activities or lifestyle.

Minimum requirements remain in-place for accessible parking and bicycle parking to ensure adequate supplies of each are provided, while parking maximums have been retained downtown and in designated transit-oriented development ("TOD") and main street areas consistent with City goals to increase density and prioritize sustainable transportation in these locations.

The City of Edmonton's review of parking requirements included an extensive public consultation period and education campaign to ensure the community had the opportunity to comment on the proposed changes.

Comparative Review, Minimum Parking Supply Rates

A comparative review of parking supply rates for core land uses was undertaken to determine how the Township's existing rates compare to rates in other representative communities. The comparative review is contained in Appendix B, Section 6.

The following are the key take-aways from the comparative review.

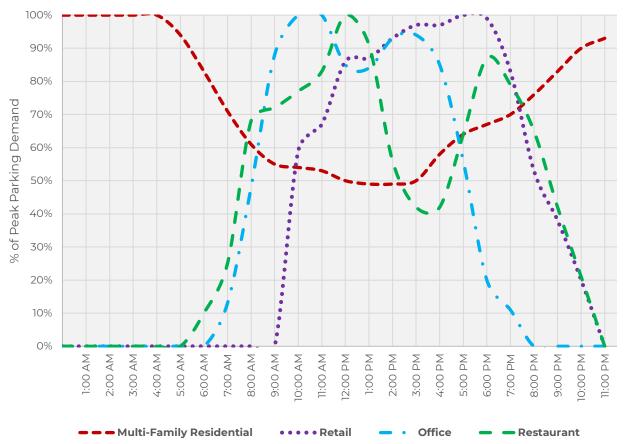
- Lack of differentiated supply rates for condominium (i.e., strata ownership), apartment (market rental), and affordable housing. Differentiated rates are becoming increasingly common in other communities, a recognition of demonstrated differences in parking demand and/or supporting community objectives for rental or affordable housing. Communities such as Victoria and Nanaimo have varied rates to reflect demonstrated decreases in parking demand among rental buildings and to encourage varied housing options, including affordable housing. Given the limited difference between observed parking demand at representative sites in the Township presented in **Section 5.2**, differentiated parking rates based on residential tenure may not be appropriate for Esquimalt.
- Parking demand among multi-family residential uses varies based on unit size, with smaller units generally experiencing lower parking demand than larger units. A key change in select communities has been to base multi-family parking requirements on unit size or number of bedrooms to better reflect actual parking demand (Victoria, Nanaimo, Colwood).
- Supply rates for uses including offices, retail, and light industrial are generally comparable to other communities.
- Supply rates for commercial uses are expressed as units of measurement that are not easily determined at the time of application and/or may change over time (e.g., number of seats, etc.). The City of Victoria, District of Saanich, Oak Bay, and Town of View Royal use Ground Floor Area (GFA) only to calculate supply rates for restaurants and entertainment uses.
- Many communities will identify location areas with specific parking supply rates, particularly in core locations where amenities and transportation options are readily available for residents. Nanaimo, Comox, Duncan, West Kelowna, and Victoria all apply a locational variable to parking requirements for some land uses.

7.2 Shared Parking

Shared parking refers to a scenario where two or more adjacent land uses share parking facilities in order to reduce the overall parking supply for the site or area. The concept is successful where parking demand for different uses exhibits complementary demand patterns with peak demand experienced at different times of day. For example, an employment centre and multi-family residential are complementary land uses because employment parking demand is typically highest during weekday working hours while residential demand is highest during weekday evenings and weekends. Parking must remain unreserved (i.e., available for all users) for shared parking to work well.

The general time-of-day parking characteristics for key land uses are shown in Figure 6.

FIGURE 6. TIME-OF-DAY PARKING DEMAND FOR KEY LAND USES (ITE)



A shared parking regulation would help meet the overall parking demand with fewer parking spaces, as well as support the Township's desire to encourage mixed use development.

The following criteria require attention when considering a shared parking regulation:

- Land Uses Specific land uses must be identified that may be included in a shared parking arrangement, with consideration for uses that exhibit complementary parking demand patterns and are aligned with policy directions.
- Reduction The extent of the parking supply reduction that may be achieved through sharing is to be clarified, expressed as either a whole number or percentage of the total requirement between the land uses involved. This may include a maximum reduction that is no greater than the minimum requirement associated with the lesser of the land uses involved.
- Policy / Regulation An allowance for shared parking may be included as a regulation in the Parking Bylaw or to rationalize an off-street parking variance.
- Conditions Certain communities include language to encourage / require that onsite parking spaces remain unreserved to uphold the sharing arrangement and/or a covenant to restrict a change in use that would adversely impact the shared parking arrangement.

Regulations that allow for shared parking are not common in other communities primarily due to the numerous possible combinations of land uses and associated reductions, as well as challenges ensuring spaces remain unreserved. Examples are highlighted in Table 6.

TABLE 6. SHARED PARKING REGULATIONS IN OTHER COMMUNITIES

Community	Regulation
Central Saanich	Where it is determined that peak parking demand for two or more non-residential buildings, structures or uses on the same site or abutting sites occurs at different periods of time, the parking requirements for those buildings or uses may be reduced by a maximum of 25% of the total parking requirement.
Nanaimo	 Where more than one of the uses listed in the Bylaw are located on the same lot, parking spaces may be shared between the uses and is calculated by: a. The number of parking spaces required for the lot under this subsection is calculated by multiplying the number of parking spaces required for each land use by a given percentage where listed uses intersect. b. Where three or more uses are located on the same lot, the lowest reduction rate between any two of the uses shall apply.
Nelson	Where the peak use of off-street vehicle parking spaces for 2 or more uses on the same lot or adjacent lots occurs at different periods of time, the required number of off-street vehicle parking spaces for such uses in total may be reduced by no more than 25%.
Vernon	Where a development consists of a mix of use classes, the total on-site parking requirement shall be the sum of the on-site parking requirements for each use class, unless supported by a shared parking study endorsed by the authority having jurisdiction.
West Kelowna	Where it is determined that the peak parking demand for a mixed use development with 2 or more buildings, structures or uses on the same parcel or abutting parcels occurs at sufficiently different times of the day, the General Manager may permit the cumulative parking space requirements to be reduced by a maximum of 25%.
Whitehorse	In the case of a mixed use development, or where two or more owners jointly provide and maintain composite parking facilities, the number of off-street vehicle parking spaces required shall be the sum total of off-street vehicle parking space requirements for each use unless the applicant can demonstrate to the satisfaction of a Development Officer that there is a shared use of parking spaces that would warrant a reduction in their collective requirements, in which case a Development Officer may reduce the requirements.

7.3 Parking Variances

Land development applicants may seek a variance where their application does not meet the requirements of the Township's land use regulations. This applies to parking regulations, where applicants will frequently seek to reduce the number of parking spaces required by the Parking Bylaw.

A key item that the Township wishes to explore as part of this process is a parking variance policy that identifies conditions and/or provisions that the Township may accept as support for a variance.

A scan of representative communities with policies specific to parking variances was completed to understand the approach taken elsewhere. The following are the criteria used in other communities in support of parking variances:

- Urban Location The proposal site is located in a downtown, urban area, or "mobility hub" designation in an OCP or other plan where parking demand is anticipated to be reduced and transit, cycling, and walking opportunities are present.
- Travel Options Where the subject property is located immediately adjacent a highorder (or frequent) transit corridor or identified key cycling corridor, anticipated to lead to lower parking demand.
- Affordable Housing Where the site includes purpose-built affordable housing and the anticipated parking demand associated with Affordable Housing sites is typically less than other multi-family housing types.
- TDM Specific transportation demand management (TDM) strategies are implemented, including carshare memberships, carshare vehicle contribution, cycling trip-end facilities, transit subsidies, or otherwise.
- Car Share Where the proposal includes an on-site or nearby carshare vehicle and the vehicle and/or carshare memberships are purchased by the proponent.
- Nearby Parking Where on-street parking is readily available nearby the subject property or there are opportunities to secure access to parking on nearby properties (secured through covenant or easement).
- Magnitude Where only a minimal reduction in required parking is sought.
- Shared Parking Where the site contains two or more complementary land uses with different peak parking hours and where on-site parking supply may be shared (refer also to **Section 7.2**).

In most communities with an established policy, a parking study is sought with technical justification for how a combination of criteria listed above are being met and how they will result in reduced parking demand.

Parking Variance Policies in Other Communities

City of Nanaimo, Policy for Consideration of a Parking Variance

www.nanaimo.ca/docs/default-document-library/policy-for-consideration-of-a-parking-variance.pdf

District of Saanich, Official Community Plan, Policy 37

www.saanich.ca/assets/Local~Government/Documents/Corporate~and~Annual~Reports/2008 %20OCP.pdf

City of Campbell River, Sustainable Official Community Plan, Policy 7.1.1

http://campbellriver.ca/docs/default-source/Document-Library/bylaws/sustainable-official-community-plan-(schedule-a-to-bylaw-3475-2012)-amended-to-bylaw-3640-2016.pdf?sfvrsn=21d96108_2

District of Sooke, Official Community Plan, Policy 4.4.3 (q)

https://sooke.civicweb.net/document/4044

District of North Vancouver, Official Community Plan, Policy 5.1.8

www.dnv.org/sites/default/files/bylaws/Bylaw%207900.pdf

City of Nelson, Official Community Plan, Downtown Policy 13

www.nelson.ca/DocumentCenter/View/227/Schedule-A---Goals-Objectives-Policies-PDF



7.4 Bicycle Parking

Several detailed bicycle parking design guidelines exist, including Chapter H.2 of the B.C. Active Transportation Design Guide. These guidelines cover bicycle parking principles, the pros and cons of various rack designs, different types of short- and long-term bicycle parking, and various other elements. These guidelines can be applied to the public and private supply of bicycle parking and amenities for active travel.

Although the design and layout of bicycle parking facilities may be defined in a bylaw, most bylaws in comparative communities contain only the minimum standards that will ensure a functional and accessible bicycle parking facility. Providing too much detail may be inflexible and cumbersome for developers.

The following elements are commonly provided in land use and parking bylaws.

Bicycle Parking Supply

Appendix B, Section 7 compares the supply rates of short- and long-term bicycle parking across different communities. The common approach found through a comparative review is to provide set supply rates for each type of bicycle parking.

Municipalities take varying approaches in terms of the number of land use designations described in their bicycle parking bylaws. Colwood, Vancouver, North Cowichan, and others take a detailed approach, assigning requirements to a long list of sub-categories. Other municipalities use fewer categories (e.g., "all institutional uses" compared to defining requirements for each type of school).

It is important to consider the underlying rationale for determining supply rates in specific land uses. Municipalities may also wish to align these land use categories with the categories used for off-street motor vehicle parking.

The B.C. Active Transportation Design Guide (BCAT) recommends that 50% of long-term and 10% of short-term bicycle parking be designed to accommodate e-bikes by providing an electrical outlet. The CRD's Capital Region Local Government Electric Vehicle (EV) + Electric Bicycle (E-Bike) Infrastructure Planning Guide also recommends electrifying 50% of all longterm spaces.

The review of off-street parking regulations from other communities found that only three of those reviewed - Nanaimo, North Vancouver, and Vancouver - have requirements specific to e-bike parking. None of the municipalities have short-term requirements. Vancouver's longterm requirements that 50% of spaces be electrified match the recommendations from the CRD and BCAT. Nanaimo's long-term recommendations are more ambiguous, stating that all parking areas shall have an outlet (but not specifying how many outlets per storage area).

Bicycle Parking Location

Parking bylaws should outline the desired location of bicycle parking to ensure convenient access. For example, Sidney and Victoria specify that the bicycle parking must be located on same lot as the building, structure, or use they are intended to serve. The City of Victoria also states that short-term bicycle parking must be no more than 15 m from the building entrance (with the exception that where 6 short-term spaces are required, any additional spaces may be located more than 15 m from the entrance).

Vancouver requires that short-term bicycle parking be located "in a convenient, well-lit location that provides visual surveillance by occupants of the building the racks are intended to serve," and says that if the racks are not readily visible to visitors to a site, directional signage to the racks shall be provided.

Some bylaws also require short-term bicycle parking to weather protected. The City of North Vancouver requires that at least 50% of short-term spaces by sheltered from the elements where more than 6 short-term spaces are required. Several bylaws also specify that long-term bicycle parking be in a secure, weather-proof location or, in the case of bicycle lockers, that the locker is weatherproof.

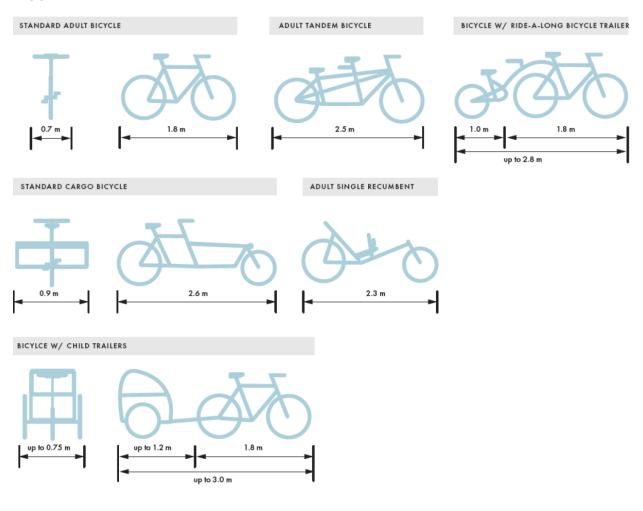


Bicycle Parking Stall Dimensions + Layout

The minimum bicycle parking stall depth, aisle width, and distance between adjacent racks, doorways, and walls should also be defined so that the racks are able to meet their advertised capacity. These dimensions can change depending on the installation angle of a bicycle rack as well as the type of rack (ground anchored or wall mounted). The aisle width is important to ensure that sufficient space if provided for maneuvering while holding a bicycle. The minimum door opening is also key, as this can be a limiting factor for larger bicycles.

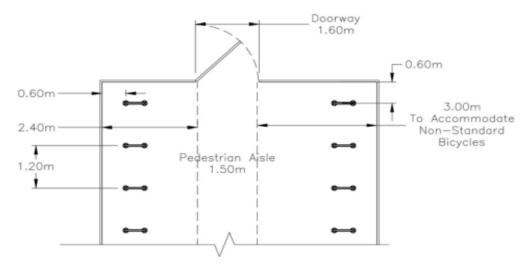
Typical dimensions for various bicycle sizes are identified in Figure 7. The recommended bicycle parking dimensions and layout for long-term bicycle rooms, cages, or parkades are identified in Figure 8.

FIGURE 7. TYPICAL DIMENSIONS FOR VARIOUS BICYCLE SIZES & TYPES⁸



⁸ British Columbia Active Transportation Design Guide, Figure B-11

FIGURE 8. RECOMMENDED BICYCLE PARKING DESIGN REQUIREMENTS⁹



Accommodating Non-Standard Bicycles

The B.C Active Transportation Design Guide provides sample bicycle parking layouts, with slightly larger minimum dimensions than Victoria. This is important for accommodating "non-standard" bicycles such as cargo bicycles, recumbent bicycles, adult tricycles, bicycles with trailers, and adaptive bicycles for people with mobility impairments. These bicycle types are becoming increasingly common, as they help to make cycling accessible to a larger number of people and trip purposes (e.g., grocery shopping, taking children to school, etc.).

Many non-standard bicycles are longer, wider, and heavier than a typical bicycle, making them challenging to park using conventional bicycle racks and extremely difficult (if not impossible) to park with vertical racks. BCAT recommends that for both short- and long-term bicycle parking facilities, 10% of all bicycle parking spaces should be able to accommodate larger, non-standard bicycles such as cargo bicycles and bicycles with trailers. BCAT also states that multi-family residential buildings and schools should have the highest proportion of non-standard sizes, followed by commercial and office buildings. A stall depth of at least 3.0 m should be used for these spaces. These spaces may be marked with a sign or pavement markings identifying their purpose as a spot for non-standard bicycles, to encourage compliance.

Electric bicycles must also be accommodated in short- and long-term bicycle parking requirements. Due to their motors, e-bikes tend to be larger and heavier than standard bicycles, making it challenging to park them on vertical racks. Additionally, they require access to electrical outlets for charging.

⁹ British Columbia Active Transportation Design Guide, Figure H-146

End-of-Trip Amenities

End-of-trip amenities include any amenity provided in a development that makes cycling easier, more convenient, and more comfortable, particularly at land uses where a commuter cyclist may end their trip. Desired end-of-trip amenities may include:

- Change Rooms
- Showers
- Sink / Wash Basin
- Storage Lockers
- Bicycle Repair Equipment (tools, tire pump, workbench or stand)

Some bicycle parking facilities provide additional amenities such as bulletin boards, multimodal trip information (e.g., maps and bus timetables), towel service, and even small lounges with seating to encourage social interaction.

Cycling end-of-trip facilities may be required in off-street parking regulations or encouraged and used as rationale for a reduced parking supply in support of a variance. Beyond bicycle parking, requirements for cycling end-of-trip facilities are not often found in off-street parking regulations in other communities. Among the communities with requirements inplace (e.g., City of North Vancouver, City of Vancouver, City of Colwood), they are typically required based on the number of required long-term bicycle parking spaces.

The following are examples from communities with requirements in-place:

- The City of North Vancouver regulates that in all new buildings and uses that require secure bicycle parking, showers and wash basin are required if 3-10 long-term bicycle parking spaces are required, and the shower and wash basin requirements increase by one for each increase of 10 parking spaces. Toilets are not required unless 30 or more long-term bicycle parking spaces are required.
- The City of North Vancouver bylaw also includes an equitable access to facilities clause, stating that facilities shall be equally divided by gender (or can be gender neutral if a smaller facility) and must include a minimum of one wash basin, grooming station, shower, and locker that is accessible to a user in a wheelchair of each gender.
- Vancouver has separate requirements for office/retail/service uses and for other uses. Both Vancouver and North Vancouver mandate grooming stations (with requirements for counter space and electrical outlets). North Vancouver includes requirements for the supply and size of personal clothing lockers.

7.5 Mobility Scooters

Mobility Scooters are appearing in parking regulation as a method to ensure people using mobility aids are considered for parking and charging needs. Mobility scooter requirements are typically being integrated with bicycle parking requirements as they have similar charging and maneuvering needs as larger cargo bikes and electric bikes.

Some of the key considerations in establishing a mobility scooter requirement are as follows:

- Supply Rate Establish a supply rate requirement that meets the need for mobility scooter parking.
- Land Uses Consideration of the land uses where mobility scooter parking is desirable, with possible variation in supply rate requirements to reflect differing needs.
- Design / Layout Establish appropriate mobility scooter stall dimensions and access requirements.
- Charging Consider access to an electrified outlet capable of charging a mobility scooter while parked.

Saanich's bylaw makes specific mention of providing parking for mobility scooters, stating that "For the purpose of this section, motor scooter parking spaces must be secured, have electrical services for recharging, and have a minimum width of 1 m and length of 1.5 m." Both Saanich's and Vancouver's bylaws allow parking for mobility scooters to count towards long-term bicycle parking requirements for certain land uses, such as senior citizen housing.

View Royal's regulations note that "Where parking spaces for mobility scooters are provided, they must be located adjacent to the entrance of the building or use and must not impede access to the entrance." The bylaw also specifies that mobility scooter parking should not impede or restrict pedestrian movements on the sidewalk.

North Vancouver notes that "Bicycle Compounds and Rooms may be used to park wheeled mobility aids with the limitations that; (a) such use shall not impose on access aisle; (b) bicycle racks shall be provided unless it is demonstrated with reasonable accuracy the proportion of people requiring wheeled mobility aids expected to use the site."

7.6 Accessible Parking

Dedicated accessible parking spaces are required throughout the community to ensure individuals with physical, sensory, and cognitive challenges are able to access parking that is located and designed to specifically meet their needs. The best practices identified in this section should also be considered in the design of new and retrofit of existing public accessible parking stalls.

Generally, the Township's established requirement for accessible parking supply is aligned with other communities and reflects best practices. The BC Building Code (which prior to 2018 included accessible parking requirements for the province) included a supply rate of "where more than 50 parking stalls are provided, parking stalls for persons with disabilities shall be provided in the ratio of 1 for every 100 or part thereof)", which the Township's current rate exceeds at 1 stall for every 50 conventional stalls.

Detailed requirements for accessible parking supply in other communities are identified in Appendix B, Section 8.



Existing accessible parking stalls at Esquimalt Recreation Centre

An emerging policy best practice is to differentiate supply rates based on land use where it is anticipated to have a higher demand for accessible parking. Examples could include medical offices and senior citizen apartments, as well as residential units specifically designed for universal access and likely to be inhabited by an individual(s) requiring accessible parking (i.e., accessible and adaptable units). Further, emerging policy is establishing the need for the one visitor parking stall in multi-family residential buildings to be accessible, as recently adopted by the City of Victoria.

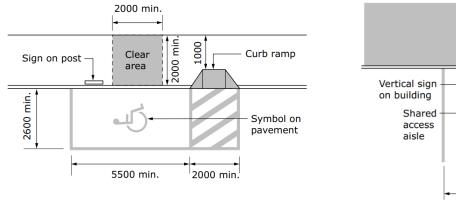
While the requirement for accessible parking spaces is commonly expressed based on the number of conventional parking spaces, consideration should be given to accessible parking rates as the Township considers potentially lowering minimum parking supply rates for conventional spaces. Any such reduction would reduce the number of required accessible parking spaces.

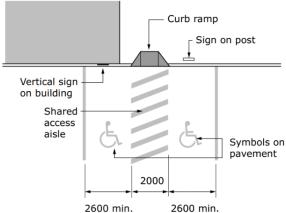
The current Parking Bylaw provided design requirements for accessible parking stalls that do not meet current best practice as identified in the Canadian Standards Association (CSA) recommendations as described and depicted below in Figure 7.

A designated accessible parking space shall:

- a) be at least 2.6m wide;
- b) have an adjacent side access aisle at least 2m wide
- c) have an adjacent rear access aisle at least 2m long

FIGURE 7. ACCESSIBLE PARKING DESIGN STANDARDS, CANADIAN STANDARDS ASSOCIATION (CSA)





In addition to design dimensions, communities are also updating its paint and signage standards related to accessible parking to ensure consistency and awareness for users, to increase safety and to assist with issues related to compliance. These design features can include:

- Painting the curb of the accessible parking space blue
- Using hatching to clearly demarcate the rear and side access aisles
- Applying the Dynamic Symbol of Access on pavement markings and vertical signage, rather than the conventional symbol (shown in photo on previous page).

7.7 EV Charging

Development regulations present the opportunity to ensure appropriate EV charging is included in new development. There are two general means of including EV charging in regulations:

- 1. Requiring that a development be 'EV ready' (i.e., future-proofing the parking by providing an energized outlet capable of providing Level 2 charging or higher) so that future occupants seek to install charging stations. This approach does not represent a significant cost for developers and builders in the interim and allows for the future installation of EV charging station when demand dictates.
- 2. Requiring dedicated EV charging infrastructure is installed at the time of development. This may include Level 1 charging in residential sites where vehicles are typically parked overnight or for long periods of time, or Level 2 charging in commercial, institutional, or other uses where vehicles are typically parked for a shorter period of time and benefit from a faster charge.

Appendix B, Section 9 details electric vehicle charging requirements in other communities.

The City of Victoria adopted its EV Strategy in 2022. This strategy has set direction for the expansion of EV charging infrastructure in the municipality. To help future EV drivers plug in at home, Victoria introduced a requirement that all parking stalls in new multi-residential buildings and certain commercial buildings are equipped to support charging infrastructure.

Similarly, Saanich's bylaw has made them a regional leader in EV parking requirements, with definitions for a range of EV charging technologies and detailed requirements for a range of institutional, commercial, cultural, recreational, and industrial uses¹⁰. Saanich's bylaw requires one energized space in all single family residential and 100% level 2 EV-ready in all multifamily residential. They also have requirements for the installation of EV charging units (referred to as "Electric Vehicle Supply Equipment" or EVSE¹¹), with minimum requirements in institutional land uses (e.g., hospitals and schools) as well as office, industrial, cultural, recreational, and retail land uses.

7.8 Transportation Demand Management (TDM)

¹⁰ See: Zoning Bylaw, 2003, Amendment Bylaw, 2020, No. 9627

¹¹ Defined as "a complete assembly consisting of conductors, connectors, devices, apparatus, and fittings installed specifically for the purpose of power transfer and information exchange between a branch electric circuit and an electric vehicle."

Transportation demand management (TDM) has been well covered in previous sections of this working paper where reference is made to bicycle parking supply requirements, improved bicycle facility design, requirements for cycling trip-end facilities, and provisions specific to e-bikes and mobility scooters.

The following are some of the additional opportunities to support transportation demand management (TDM) in new development.

What is Transportation Demand Management (TDM)?

TDM refers to specialized policies, targeted programs and encouragement, and innovative mobility services that encourage people to use sustainable transportation modes rather than driving alone or make fewer trips by vehicle.

Car Share

Car sharing has begun to play a larger role in the transportation system of many growing North American municipalities, including communities in the Capital Region. Car sharing can help encourage the use of alternative transportation modes and reduce private vehicle ownership, with North American research showing that each carshare vehicle typically replaces 9 to 11 private vehicles 12. With fewer private vehicles on the road, car share has also been shown to reduce parking demand.

Securing a car share vehicle and parking space for a development typically involves an agreement between the developer and car share operator where the developer pays for the vehicle as part of a 2-3 year agreement. Car share memberships can be tied to individual units in perpetuity. Involving the car share operator early in the development process helps to ensure the integration of car sharing in the development and its success as a TDM tool. Car sharing is more successful where developers provide marketing or financial incentives for using the service, such as providing annual car share memberships.

Several BC municipalities have integrated car sharing into their rezoning process as a transportation demand management tool to support reduced parking requirements, including the Township of Esquimalt. Coquitlam and Richmond provide 5 and 10% reductions in off-street parking based on TDM actions, while New Westminster allows a reduction of up to 5 on-site parking stalls for each car share vehicle (up to 10% of total spaces). Vancouver uses a 1:5 substitution ratio in residential developments.

This tool is being used in Esquimalt as a strategy to grant parking variances for new multifamily residential buildings. There are currently five (5) modo car share vehicles available within Esquimalt that were acquired through redevelopment.

¹² Martin, E., & Shaheen, S. (2016). The Impacts of Car2go on Vehicle Ownership, Modal Shift, Vehicle Miles Traveled, and Greenhouse Gas Emissions: An Analysis of Five North American Cities. Berkeley, California: Transportation Sustainability Research Center (TSRC).

Ride-Hailing

Ride-hailing has potential implications for setting off-street parking supply rates, especially with ride-hailing poised to enter the CRD market. However, ride-hailing impacts can differ depending on a community's geographic size and location, density (or lack thereof), car ownership rates and costs, ride-hailing access and costs, transit ridership, demographics, and other variables, so the specific impacts on Esquimalt are yet to be determined.

Transit Support

Access to transportation options, particularly proximity to transit, is another method for structuring variable parking requirements.

Few of the directly relevant communities include parking reductions for proximity to transportation options. Saanich includes a provision for reduced parking where a bus stop abuts the site. Other communities that have revisited their parking regulations more recently include a provision for reduced parking where transit is nearby including Abbotsford, Vancouver, Calgary, and Edmonton. These are considered best practices and not necessarily the norm in municipalities in the Capital Region, likely due to the limited extent of the rapid transit network.

As a TDM tool, providing residents or employees a subsidy to transit fare can help to reduce dependence on parking and single-occupancy vehicles and encourage the use of public transit. Transit subsidies are most commonly offered by an employer to its employees. A Vancouver study¹³ that observed employee's behaviours when offered transit subsidies found that the larger the transit subsidy offered, the more employees become transit riders and the more transit-only commuting increased. New York City and Washington, D.C. offer employer transit subsidies, and have a requirement for any employer with "20 or more employees to offer qualified pre-tax transportation benefits to their workers."

¹³ Hall, P. (2021). Employer-paid transit subsidies and travel behaviour: Experimental evidence from Vancouver hotels. Journal of Urban Mobility. Volume 1.

7.9 Cash In-Lieu of Parking

The Local Government Act (LGA) permits municipalities to establish regulations allowing a prospective developer to pay cash in-lieu of required parking spaces. Cash in-lieu of parking is at the land developer's discretion and is typically pursued where private off-street parking is not needed or is difficult to accommodate on-site due to physical or other constraints.

Per the LGA, all monies received must be placed in a reserve fund for the purposes of providing:

- 1. New and existing off-street parking spaces, or
- 2. Transportation infrastructure that supports walking, bicycling, public transit, or other alternative forms of transportation.

All monies received must be credited to the reserve fund, and the municipality is required to report annually on reserve fund contributions, expenditures, balance, and projected timeline for future projects to be funded.

A number of specific conditions must be considered if a cash in-lieu regulation is to be pursued, as follows:

- Cost A per-space cost must be established for the applicant to contribute for each required parking space that is not provided. Costs in other communities range significantly and are most commonly approximate \$10,000 to \$12,000 per space. Refer to Table 7. In setting rates, consideration should be given to the cost to provide parking, the value to the developer in not having to construct parking, and the Township's goal to accrue funds to support active transportation infrastructure.
- Magnitude An upper limit may be established to ensure that a minimum off-street parking supply is provided and so that an applicant cannot entirely "buy" their way out of supplying parking.
- <u>Location</u> The option for cash in-lieu of parking may be limited only to locations where the Township is strategically seeking to limit parking supply and/or generate funds for public parking or active transportation facilities.

TABLE 7. CASH IN-LIEU OF PARKING RATES IN OTHER COMMUNITIES

Community	Conditions	Rate (per space)
Comox	The Town must own and operate a parking facility within 700 m	\$11,500
	Not applicable for required spaces for dwelling units or B&B's	
	Public parking spaces built with the collected funds cannot be reserved	
Courtenay	Only for one select commercial zone	\$6,500
Langford	Only where a city owned parking facility is within 150m	\$11,000
Oak Bay	Only where a District owned parking lot is nearby	Parking Space - \$9,700
		Loading Space - \$14,500
Parksville	Only for select zoning areas	\$9,800
Sidney	Only applies within a boundary established by the Town	\$10,000
	Certain zoning areas may use 50% of payment toward permanent carshare memberships registered to units	
Sooke	Only in areas outside of the Town Centre	Value equal to the outstanding parking requirement
View Royal	Only for select zones and only to a maximum of	\$12,000
	15% of total requirement	Additional \$10,000 if within 250 m of a Town owned parking lot

8. Best Practices in Public Parking Management

Public parking refers the supply of on-street parking contained within road rights-of-way, as well as off-street parking available at public sites. The Township has jurisdiction over public parking resources and can determine how to best manage these parking facilities.

Management techniques may include the following and are expanded in this section below.

- Time limitations
- Parking Pricing
- User restrictions (i.e., residential parking zones)
- Curbside management
- Reserved parking to encourage sustainable travel options (i.e., rideshare, lowemissions vehicles)



8.1 Curbside Management

Increased demand for curbside space is resulting in growing competition for space, which can impact onstreet parking. This competition is expected to increase in the future as demand for flexible curbside loading space increases with ride-hailing, micromobility, and increasing e-commerce and deliveries. Additional competition for the curb comes from active transportation facilities (e.g., bike lanes, bike parking), transit lanes and amenities, green infrastructure, and public realm improvements (e.g., parklets and patios). Design and best practice guides increasingly recognize the value of streets as public spaces with functions that extend beyond the movement and storage of motor vehicles. Between 6 - 20 bicycles can be parked in the space required by one car¹⁴.

Curbside management policies will be needed to facilitate this increased demand. In many cases, onstreet parking can be reallocated without negatively

impacting drivers or businesses. However, in some cases, additional off-street parking may be required to offset the loss of on-street parking.

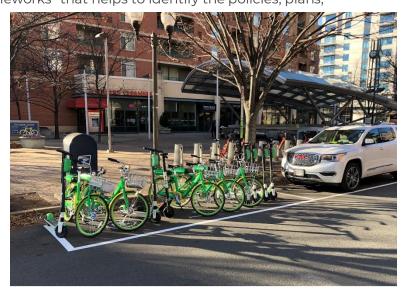
Many communities have started their process of curbside management through the development of "curb management frameworks" that helps to identify the policies, plans,

fees, and regulations required for city staff, developers, operators, businesses, and the public. The framework could the guide details on how to apply for a passenger loading zone, show a business how to get a permit for a parklet or provide bicycle parking, and tell staff how departments can modify or remove curb regulations.

Creating a framework can help the Township prepare for emerging technologies that will impact the curbside such as ride-hailing, snow storage and shared micromobility.



In Boston, the city turned four parking spots into ride-app zones on evenings and overnight, using geo-fencing technology to manage the use of the curb and allowing flexibility for timing and location as the community and operators adapted to this new parking management tool.



Curbside space used for shared micromobility parking

¹⁴ Gotschi, T. (2011). Costs and Benefits of Bicycling Investments in Portland, Oregon. Journal of Physical Activity and Health.

Essential Right-of-Way Functions

Function		Uses
Mobility	The movement of people and goods, including sidewalks, bicycle lanes and protected bikeways, dedicated bus or light rail/streetcar lanes, and general purpose vehicular travel lanes	 Sidewalks Bike lanes General purpose travel lanes includes freight Right-or left-turn only lanes Bus lanes
Access for People	People arriving at their destination or transferring between different modes of transportation. This includes transit stops, passenger loading/unloading zones, taxi zones, short-term parking, bicycle parking, and curb extensions.	 Bus stops Bike parking Ride-hailing Passenger load zones Short-term parking Taxi zones
Access for Commerce	Goods and services reaching their customers and markets primarily through commercial vehicle or truck loading zones.	Commercial vehicle loadingTruck load zoneDelivery / courier
Activation	Provision of vibrant social spaces that encourage people to interact and congregate. Uses that drive activation include food trucks, restaurant patios or sidewalk cafes, parklets, public art installations, seating, and street festivals (including farmers markets).	 Seating Patios, parklets Food trucks Public art Street festivals, temporary events
Greening	Enhancements to aesthetics as well as environmental health via planted boulevard strips, streets trees, planter boxes, rain gardens, and bio-swales.	 Boulevards, cub extensions Street trees Planter boxes Rain gardens / bio-swales
Storage	Provision of storage for vehicles and equipment, including bus layover spaces, reserved spaces for specific uses such as police or government vehicles, short-term vehicle and bicycle parking, longer-term on-street parking, and construction vehicles.	Bus layoverLong-term parkingReserved spacesConstruction

8.2 On-Street Parking Management

Time Limitations

One of the most common ways to manage parking is to limit parking duration. Shorter time periods increase turnover but constrain the activities that can be performed.

Short time periods (15-30 minutes) accommodate quick errands. This is appropriate for the most convenient parking spaces at post offices, convenience stores, and other destinations that often involve quick stops. Medium time periods (30 minutes – 4 hours) accommodate longer stays and activities such as shopping and dining. Three- or four-hour limits are commonly used to prevent commuters from using parking spaces either in business districts or on nearby residential streets.



The Township of Esquimalt implements Limited Time Parking Zones to designate certain streets with time limitations. Shorter time period restrictions are typically found around the Esquimalt Town Centre, with medium-time period zones also located around the Viewfield Industrial Area and along the federal lands on Colville Road.

Numerous studies show that signed time limits produce longer stays, lower turnover, and block faces that are 100 percent occupied. Areas with posted time-limits frequently suffer from double parking and additional cruising by motorists striving to find a vacant space. As a result, communities look to parking pricing as a solution to promote parking turnover, distribute limited on-street parking time equitably and maximize the economic viability of the area¹⁵. The process of initiating the pay-parking device and establishing the desired duration of stay seems to create in the person parking a greater awareness of the expected ending of the parking session, as compared to stopping at a curb with signed parking duration restrictions.

Residential Parking

Households with easily accessible on-street [public] parking were two and a half times more likely to park on the street, even when factoring in garage and driveway space 16.

Residential parking zones in Esquimalt are currently differentiated by "residential parking only" and "residential permit zones". Residential parking only zones are only enforced through complaint-based measures, where residential permit zones require a physical permit obtained at Municipal Hall and is periodically observed and enforced by Bylaw

¹⁵ Swanson, H. (2017). Criteria for Installing Curbside Pay-Parking for Engineers and Planners. Institute of Transportation Engineers.

¹⁶ Guo, Z. (2013). Residential Street Parking and Car Ownership. Journal of the American Planning Association. Volume 79, Issue 1.

Services. Residential parking only zones in Esquimalt are created based on a resident request and then reviewed by staff and approved by Council.

Although residential parking only zones are created, enforcement is required to ensure the compliance of these restrictions. The largest barrier to effective enforcement is the resources required to efficiently and effectively manage the use of these parking stalls, which is why residential permit zones or programs are an increasingly popular tool for public parking management.

Parking permit revenue can provide cities with the resources needed to administer parking permit programs, enforce restrictions, and ultimately improve access for residents. Charging for permits helps incentivize residents to only use the on-street spaces they need and to utilize their off-street supply.

Residential Permit zones in Esquimalt are currently limited to three locations within the Township. The purpose of residential parking permits is to help meet residential parking needs in areas where off-street opportunities are insufficient. These programs succeed in general to protect on-street spaces for residents but raise concerns about costs, enforcement difficulties, and inefficiencies if parking goes unused. New technologies (e.g., license plate readers, variable pricing, app-based systems) may provide new forms of residential parking management to upgrade or replace older, less efficient programs.

In other CRD communities, residential-only parking is commonly regulated through a Streets and Traffic Bylaw and is typically only enforced through complaints. Victoria, Saanich, and Langford follow this model.

Two Canadian examples where residential permit programs have been successfully rolled out include Ottawa, Ontario and St. John's, Newfoundland. Here, residents must demonstrate that they have no access to off-street parking to quality for a residential parking permit. In Toronto, a priority ranking systems classifies applications for residential parking permits into one of three levels, depending on each resident's degree of actual need for an on-street parking space¹⁷. A system like this could help to mitigate residential parking capacity issues and provide on-street parking spaces to residents that are in the most need.

Reserved Parking

Communities are increasingly creating specialty parking spaces that encourage sustainable transportation, such as low emission vehicle parking zones, car share zones, and carpool parking stalls. Although challenging to enforce, these restrictions are a tangible action that demonstrate the objectives of the municipality in reducing GHG emissions and encouraging transportation alternatives.

Low emission parking stalls are uncommon in North American communities, especially as governments currently focus on expanding EV charging facilities. Low emission parking can

¹⁷ Chua, G. (2014). Residential Parking Management Best Practices and Policies. University of British Columbia.

accommodate hybrid and zero-emission vehicles at key destinations to incentivize users with low emitting vehicles.

Communities with car share programs designate parking stalls for car share users free of charge. In Metro Vancouver, Evo carshare has designated "car share" only spaces at several public and private parking spaces to incentivize users.

Carpool/Rideshare stalls are typically found at locations with high densities of commuters such as large employment centres, campuses, or park and rides. To promote and reward sustainable transportation choices, the City of Edmonton has introduced reserved carpool parking spots at three LRT Park & Ride locations. This program offers extra incentive for



commuters to try share a ride, carpoolers using Park & Ride locations will be rewarded with a prime parking spot as well as the cost savings of ridesharing.

8.3 Priced Parking

Parking pricing is one of the most effective ways to encourage more efficient parking and vehicle travel. Compared with unpriced parking, cost-recovery parking typically reduces affected parking demand and vehicle trips by 10-30%, and sometimes more if implemented in conjunction with alternative mode improvements (walking, bicycling, ridesharing, and public transport).

Pricing public parking has opportunities and limitations. Underpricing parking can increase the amount of parking needed to meet demand, and tends to increase problems such as traffic congestion, housing unaffordability, and GHG emissions. Charging users directly for parking tends to be more efficient and equitable and generates revenues that can finance new services or reduce taxes and rents¹⁸.

The introduction of priced parking to a commercial area often appears harmful because negative impacts (loss of existing customers) tend to be

The City of Victoria is the only community in the Capital Region to charge for on-street parking. Setting pricing at \$1.50 to \$3 per hour with 90-minute to 24-hour time limits, contributing greatly to the city's annual revenue. In the City's 2020 budget, street and surface lots account for \$9.8 million in revenue, followed by parkade parking at \$5.9 million and parking violations at \$3.9 million.

¹⁸ Litman, T. (2021) Parking Pricing Implementation Guidelines: How more efficient parking pricing can help solve parking and traffic problems, increase revenue and achieve other planning objectives. Victoria Transport Policy Institute.

concentrated and visible, while economic benefits (new customers attracted by more convenient parking, additional future development, or tax reductions) tend to be dispersed and long-term.

Parking pricing can cause various transportation system changes, including:

- Reduced vehicle ownership (particularly pricing of residential parking)
- Mode shifts (from driving to walking, cycling, ridesharing, and public transit)
- Destination shifts (to areas with cheaper parking)
- Parking location changes (to cheaper or free parking lots)
- Trip schedule changes (from priced to unpriced periods)
- Shorter stop durations

Charging residents directly rather than indirectly for parking typically reduces automobile ownership by about 30%¹⁸

Canadian municipalities have adopted a few different types of pricing models. Locationbased parking pricing is a strategy where prices vary by location to provide a financial incentive to park in underutilized parking facilities, and therefore improve the distribution of parking demand. Time-based pricing varies parking prices by time-of-day and day-of-week, to manage parking demand during peak periods. Under the performance-based pricing strategy, the price of parking is automatically adjusted based on observed demand with the intent of maintaining a desired overall utilization. Prices can be periodically adjusted if automated technology is not available¹⁹.

In addition to charging for public parking, communities are also having to make decisions on how to charge for the use of publicly provided EV charging. The cost of electricity at public EV charging stations is borne onto the municipality and as a result, some communities charge a nominal fee to help off-set these costs. In Esquimalt, Victoria, Saanich, and View Royal, a fee of \$1/hour is charged to the user.

¹⁹ City of Hamilton, (2021). Parking Master Plan. Received here: filestream.ashx (escribemeetings.com).

Where Is Priced Parking Appropriate?

The following are key factors in determining whether conditions may warrant pursuing priced parking:

Land Use Priced parking is most commonly applied in downtown or

urban areas with higher land use densities to reflect both

the higher intensity of parking demand and greater

acceptance among community members.

Parking Occupancy Areas where parking occupancy is high (i.e., 85% or higher)

may benefit from priced parking to reduce demand in busy

areas and better distribute demand into other areas.

Parking Duration Areas where vehicles are parked in excess of the designated

> time limit highlight where parking time restrictions are not effective and where priced parking may be appropriate to

more effectively manage parking.

Magnitude of Issue Priced parking should not be pursued in small, isolated

areas, and is appropriate where parking occupancy and/or

duration issues are experienced over a larger area.

Parking Management Priced parking is most appropriate nearby other areas with

priced parking already in-place (either on- or off-street)

and/or where time limitations are in-place.

APPENDIX A Local Parking Demand Data

Apartment²⁰ (market rental)

		Parking Demand ²¹		Observation		
Address	Units	Total	Rate	Method	Date / Time	
1337 Saunders St	28	23	0.82			
1340 Sussex Street	39	22	0.56			
1357 Esquimalt Rd	50	37	0.74			
611 Admirals Road	25	15	0.60		June 16, 2022, @ 9:00	
615 Fernhill Place	10	6	0.60			
625 Constance Avenue	29	17	0.59	Observation	PM	
639 Constance Avenue	19	6	0.32			
801 Dunsmuir Rd	32	25	0.78			
841 Kindersley Road	11	8	0.73			
885 Dunsmuir Road	77	68	0.88			
1337 Saunders Street ^{DE}	28	19	0.68			
1340 Sussex Street ^{DE}	39	25	0.64			
1357 Esquimalt Road ^{DE}	50	38	0.76		October 5, 2017 @ 9:00	
611 Admirals Road ^{DE}	25	19	0.76			
625 Constance Avenue ^{DE}	29	18	0.62	Observation	PM	
639 Constance Avenue ^{DE}	19	10	0.53			
841 Kindersley Road ^{DE}	11	10	0.91			
850 Admirals Road ^{DE}	20	16	0.80			
848 Esquimalt Road ^G	50	25	0.50	Observation	Dec 3, 2015 @ 10:30 PM	
464 Lampson Street ^{AB}	42	39	0.93			
628 Head StreetAB	22	27	1.23			
630 Head Street ^{AB}	30	28	0.93	Observation	Jan 26 and 27, 2021 @ 10:30 PM	
734 Lampson Street ^{AB}	35	24	0.69			
801 Esquimalt Road ^{AB}	32	18	0.56			

 $^{^{20}}$ For the purposes of the parking demand analysis provided in Section 5, only the counts with the highest demand were utilized to avoid double counting single sites.

²¹ Parking demand has been factored up to account for peak weekday parking demand at multi-family residential between 12-4 AM, between 7% - 17% as indicated in the Parking Generation Manual, 5th Edition.

820 Craigflower Road ^{AB}	58	45	0.78
827 Selkirk Road ^{AB}	23	21	0.91
830 Craigflower Road ^{AB}	31	37	1.19
831 Ellery Street ^{AB}	31	23	0.74
837 Ellery Street ^{AB}	36	34	0.94
843 Craigflower Road ^{AB}	48	27	0.56
885 Dunsmuir Road ^{AB}	77	73	0.95
899 Craigflower Road ^{AB}	49	35	0.71
980 Wordsley Street ^{AB}	65	68	1.05

Condominium²²

Address	Units	Parking Demand ²³		Observation		
Address	Units	Total	Rate	Method	Date / Time	
614 Fernhill Place	21	23	1.10			
830 Esquimalt Road	21	22	1.05	Observation	June 16, 2022, @ 9:00 PM	
885 Ellery Street	20	20	1.00			
1000 Esquimalt Road ^c	30	5	0.17			
614 Fernhill Place ^c	22	22	1.00		Dec 3, 2015 @ 10:30 PM	
830 Esquimalt Road ^G	22	19	0.86			
840 Craigflower Road ^c	59	47	0.80	Observation		
885 Ellery Street ^c	21	18	0.86			
929 Esquimalt Road ^c	31	11	0.35			
614 Fernhill Place ^F	21	22	1.05			
885 Ellery Street ^F	20	18	0.90	Observation	Dec 2, 2015 @ 10:30 PM	
830 Esquimalt Road ^F	21	19	0.90			
614 Fernhill Place ^F	21	22	1.05			
885 Ellery Street ^F	20	18	0.90	Observation	Sept 19, 2017 @ 9:30 pm	
830 Esquimalt Road ^F	21	18	0.86			
724 Sea Terrace ^C	24	19	0.79	Observation	Dec 17 and 18, 2019 @ 9:00-11:00 PM	

For the purposes of the parking demand analysis provided in Section ##, only the counts with the highest demand were utilized to avoid double counting single sites.

Parking demand has been factored up to account for peak weekday parking demand at multi-family residential between 12-4 AM,

between 7% - 17% as indicated in the *Parking Generation Manual*, 5th Edition.

Non-Residential Uses

		Floor		Parking	Parking Demand		
Address	Uses	Uses Area S		Total	Occupancy	Time (June 16, 2022)	
1153 Esquimalt Road	Shopping Centre	5,125 m ²	165	112	68%	11:30 AM	
1149 Esquimalt Rd	Shopping Centre	547 m ²	20	8	40%	11:45 AM	
870 Esquimalt Rd	Retail	1,202 m ²	38	27	71%	12:30 PM	
1230 Esquimalt Rd	Retail	260 m²	8	3	38%	11:30 AM	
1519 Admirals Rd	Retail	4,260 m ²	116	90	78%	2:30 PM	
1010 Craigflower Rd	Retail / Restaurant	637 m²	31	22	71%	2:15 PM	
612 Head St	Retail / Restaurant	590 m²	24	8	33%	12:45 PM	
890 Esquimalt Rd	Retail / Medical Office / Fast Food	2,093 m ²	81	40	49%	12:30 PM	
939 Esquimalt Rd	Restaurant / Café	443 m²	12	5	42%	12:30 PM	
1205 Esquimalt Rd	Restaurant / Convenience Store	745 m²	23	11	48%	11:45 AM	
1310 Esquimalt Rd	Grocery Store	603 m²	16	12	75%	12:00 PM	
846 Viewfield Rd	Grocery Store / Warehouse	5,322 m ²	155	78	50%	12:45 PM	
1495 Admirals Rd	Grocery Store	3,845 m ²	110	66	60%	2:30 PM	
1234 Esquimalt Rd	Office	540 m ²	9	6	67%	11:30 AM	
530 Fraser St	Medical Office	790m²	18	10	56%	11:45 AM	
808 Viewfield Rd	Entertainment	1,750 m²	12	4	33%	12:45 PM	
836 Viewfield Rd	Brewery	5,462 m ²	40	26	65%	12:45 PM	
836 Devonshire Rd	Brewery	1,910 m²	18	11	61%	1:15 PM	
533 Admirals Rd	Liquor Store	617 m²	41	13	32%	11:30 AM	
955 Craigflower Rd	Gas Station / Retail	454 m²	5	2	40%	1:45 PM	
944 Craigflower Rd	Gas Station / Retail	604 m²	25	23	92%	2:15 PM	

Sources:

А	880 Fleming Street Parking Study	Watt Consulting Group	Nov 10, 2021
В	The Marin Multi-Family Development Parking Study	Watt Consulting Group	May 6, 2021
С	876/ 880 Dunsmuir Road Parking Study	Watt Consulting Group	Jan 23, 2020
D	681 - 685 Admirals Road Parking Study	Watt Consulting Group	Jan 17, 2019
E	638 / 640 Constance Avenue + 637 Nelson Street Parking Study	Watt Consulting Group	Dec 6, 2017
F	833 + 835 Dunsmuir Road Parking Study	Watt Consulting Group	Dec 6, 2017
G	826 Esquimalt Road Parking Study	GYE + Associates	Dec 15, 2015

APPENDIX B COMMUNITY COMPARISONS

Comparative Review – Vehicle Parking Supply Rates

Single-Family Residential

Community	Land Use	Rate
Esquimalt	Single Family	1 space per dwelling unit
Campbell River	Single Family Residence, Two Family Residence, Three Family Residence	2 per dwelling unit
Central Saanich	Residential Single Family	2 per dwelling unit
Courtenay	Single dwelling unit or duplex	2 per dwelling unit
Colwood	Single Family Attached Housing	2 space per dwelling unit 1.5 space per dwelling unit in Urban Centre; 2 space per dwelling unit all other areas
Duncan	Dwelling, single unit	2 space per unit
Langford	One-family dwelling	2 per dwelling unit
Nanaimo	Single detached	2 per dwelling unit
Oak Bay	One-Family Residential Use	Two (2) parking spaces per dwelling unit, one of which shall be within a building
Saanich	Single Family Dwellings	2 spaces per dwelling unit
Sidney	Dwelling, Single-family	1 per dwelling unit
Victoria	Single family dwelling	1 space per dwelling unit
View Royal	Single Detached Dwelling, Modular Home, Mobile Home	2 per dwelling unit

Multi-Family Residential

Community	Land Use	Rate	
Esquimalt	Low, medium and High- density Townhouse and low-density Apartment	2 spaces per dwelling unit	
	Medium and High- density apartment	1.30 spaces per dwelling unit	
	Two Family	1 space per dwelling unit	
Campbell River	Apartment	1.3 per dwelling unit plus 1 visitor parking per 5 dwelling units.	
	Apartment (Townhouse or Patio Home style complex)	2 per dwelling unit plus 1 visitor parking per 8 dwelling units.	
Central	Residential Two Family	2 per dwelling unit	
Saanich	Residential Attached	1.5 per dwelling units plus 0.25 per dwelling unit for visitors' parking	
	Residential Apartment	1.5 per dwelling unit plus 0.25 per dwelling unit for visitors' parking	
	Condominium Hotel	1.5 per dwelling unit plus 0.25 per dwelling unit for visitors' parking	
Courtenay	Multi residential dwellings	1.5 per dwelling unit with 10% of the required spaces being provided and retained for visitor parking.	
Colwood	Multi-family (attached housing, apartments)	Studio – 0.8/unit (urban centre); 1/unit (other areas)	
		1 Bedroom – 1/unit (urban centre); 1.25/unit (other areas)	
		2 Bedroom – 1.3/unit (urban centre); 1.6/unit (other areas)	
		3 Bedroom+ - 1.5/unit (urban centre); 2/unit (other areas)	
Duncan	Dwelling, Multi-unit (including multi-unit rowhouse)	Within the downtown parking area: 0.5 per unit with 1 or fewer bedrooms and 1 per unit with more than 1 bedroom	
		In all other areas: 1 per unit with one or fewer bedrooms and 1.2 per unit with two or more bedrooms	
Langford	Apartment in City Centre and the Mixed-Use Employment Centre designation	1.25 spaces per dwelling unit with two bedrooms or less, of which 0.25 shall be designated for visitor parking;	
	designation	2.25 spaces per dwelling unit with more than 2 bedrooms, of which 0.25 shall be designated for visitor parking;	

	Apartment outside City Centre and the Mixed- Use Employment Centre	2.75 spaces per dwelling unit with two bedrooms or less, of which 0.25 shall be designated for visitor parking;	
		3.75 spaces per dwelling unit with more than 2 bedrooms, of which 0.25 shall be designated for visitor parking	
	Townhouse (subdivided pursuant to the Strata Property Act)	2 per dwelling unit	
	Townhouse (subdivided pursuant to the Land Title Act)	3 per dwelling unit OR 2 per dwelling unit when a minimum of 1 on-street parking space per every 3 dwelling units is created within the frontage of the subject property	
	Two-family dwelling	2 per dwelling unit	
Oak Bay	Multiple Dwellings Use	Two (2) parking spaces per dwelling unit, plus additional guest parking spaces of one (1) space per four (4) dwelling units or part thereof.	
Saanich	Apartments	1.5 spaces per dwelling unit	
	Attached Housing	2 spaces per dwelling unit	
	Two Family Dwellings	2 spaces per dwelling unit	
Sidney	Dwelling, Apartment	1.0 per dwelling unit	
	Dwelling, Townhouse	1 per dwelling unit	
	Dwelling, Two-family	1 per dwelling unit	
Sooke	Residential, Medium Density/ High Density Multifamily/Tent Lot Residential	1.5 per dwelling unit	
Victoria	Condominium	Core Area: 0.65 spaces per dwelling unit that is less than 45m² 0.80 spaces per dwelling unit that is 45m² or more but equal to or less than 70m² 1.20 spaces per dwelling unit that is more than 70m² Village/Centre: 0.70 spaces per dwelling unit that is less than 45m² 0.85 spaces per dwelling unit that is 45m² or more but equal to or less than 70m² 1.30 spaces per dwelling unit that is more than 70m² Other Area: 0.85 spaces per dwelling unit that is less than 45m²	
	Apartment	1.00 space per dwelling unit that is 45m² or more but equal to or less than 70m² 1.45 spaces per dwelling unit that is more than 70m² Core Area: 0.50 spaces per dwelling unit that is less than 45m²	
		0.50 spaces per dwelling unit that is less than 45m ² 0.60 spaces per dwelling unit that is 45m ² or more, but equal to or less than 70m ² 1.00 space per dwelling unit that is more than 70m ²	

		Village/Centre: 0.60 spaces per dwelling unit that is less than 45m ² 0.70 spaces per dwelling unit that is 45m ² or more, but equal to or less than 70m ² 1.10 space per dwelling unit that is more than 70m ²
		Other Area: 0.75 spaces per dwelling unit that is less than 45m ² 0.90 spaces per dwelling unit that is 45m ² or more, but equal to or less than 70m ² 1.30 space per dwelling unit that is more than 70m ²
View Royal	Duplex	2 per dwelling unit
	Rowhouse	1.5 per dwelling unit
	Townhouse	1.5 per dwelling unit
	Apartment	Studio or One Bedroom – 1 per dwelling unit
		Two Bedroom – 1.5 per dwelling unit
		Three Bedroom or more – 2 per dwelling unit

Multi-Family Residential, Visitors

Community	Rate	
Esquimalt	1 of every 4 required spaces	
Campbell River	N/A	
Courtenay	10% of required spaces	
Colwood	0.2/unit	
Duncan	1 for every 20 required spaces	
Langford	0.25 / unit	
Oak Bay	0.25 / unit	
Saanich	0.3 / unit	
Sidney N/A		
Victoria	0.1/ unit	
View Royal N/A		

Office

Community	Land Use	Rate
Esquimalt	Business and Professional Offices	1 space per 30 m ² of gross floor area
Campbell River	Bank or Other Financial Institution, Office	1 per 40 m² of floor area

Courtenay	Office (single or multiple tenant)	1 space per 37.5 m²	
Colwood	Offices	Urban Centre: 1 per 45m² of gross floor area All Other Areas: 1 per 35m² of gross floor area	
Duncan	Office	1 per 30m² of gross floor area	
Langford	Office	1 per 35.0 m² (376.7 ft²) GFA	
	Office (medical or dental)	1 per 25.0 m ² (269.1 ft ²) GFA	
Oak Bay	Office Use	One (1) parking space for every 19 m² (204 ft²) of occupied building area, minus a percentage equal to the number of spaces to be calculated, or 25%, whichever is less.	
	Medical and Dental Offices	1 space per 14 m² (150 ft²) of building area	
Saanich	General Office	For buildings not exceeding 1000 m ² (10764 ft ²) of gross floor area: 1 space per 25 m ² (269 ft ²). For buildings exceeding 1000 m ² (10764 ft ²): 1 space per 25 m ² (269 ft ²) for the first 1000 m ² (10764 ft ²), and	
		1 space per 30 m ² (323 ft ²) for any additional area.	
Sidney	Office	1 per 40 m ²	
Victoria	Office	Core Area: 1 space per 70m² floor area	
		Village/Centre: 1 space per 55m² floor area	
		Other Area: 1 space per 50m² floor area	
View Royal	Office	Single tenant - 1 per 30 m² of floor area	
		Multiple tenant - 1 per 25 m² of floor area	
	Office – Medical Clinic	1 per 20 m ² of floor area	

Retail

Community	Land Use	Rate	
Esquimalt	Retail Sales of goods and services	1 space per 25 m² of gross floor area	
	Financial Institutions	1 space per 25 m² of gross floor area	
Campbell River	Retail or Wholesale Store	1 per 40 m² of floor area	
Central Saanich	tral Saanich Bank 1 per 20 m² of retail floor area		
	Retail Store	1 per 22 m² of gross floor area	
Courtenay	Convenience stores, retail stores, storefront cannabis retailer	1 space per 35 m ² of floor area	

Colwood	Retail Store, Supermarkets, Liquor and Other Retail Personal Uses	Urban Centre: Less than 400m² of GFA – 1 per 36m² 400m2 to 4,000m² of GFA – 1 per 42m² Greater than 4000m² GFA – 1 per 48m² All Other Areas: Less than 400m² of GFA – 1 per 30m² 400m2 to 4,000m² of GFA – 1 per 35m² Greater than 4000m² GFA – 1 per 40m²	
Langford	Retail store >2,000.0 m ² (21,527.8 ft ²) GFA	1 per 30.0 m² (322.9 ft²) GFA	
	Retail store <2,000.0 m ² (21,527.8 ft ² GFA) selling furniture, appliances, carpets or similar Uses	1 per 80.0 m² (861.1 ft²) GFA	
	Retail store >2,000.0 m ² (21,527.8 ft ² GFA) selling furniture, appliances, carpets or similar Uses	1 per 100.0 m² (1,076.4 ft²) GFA	
Oak Bay	Commercial Use	One (1) parking space for every 19 m² (204 ft²) of occupied building area, minus a percentage equal to the number of spaces to be calculated, or 25%, whichever is less.	
Saanich	Retail sales of goods and services	1 space per 14 m² (150 ft²) of gross floor area	
Sidney	Retail, excluding Outdoor Retail	1 per 40 m ²	
	Financial Institutions	1 per 40 m ²	
Victoria Retail Core		Core Area: 1 space per 80m² floor area	
		Village Centre: 1 space per 50m² floor area	
		Other Area: 1 space per 37.5 m² floor area	
View Royal	Retail Store	1 per 20 m² of floor area	
	Financial Institutions	1 per 20 m² of floor area	

Restaurant

Community	Land Use	Rate
Esquimalt	Restaurant	1 space per 5 seats with a minimum of 1 space per 14 m² of gross floor area
Campbell River	Entertainment Centre (excluding bowling centre or billiard centre), Coffee Shop, Restaurant	1 per 4 seats of maximum seating or licensed capacity

	I		
	(includes food primary), Licensed Facility (for liquor primary, with entertainment and including pubs)		
Central Saanich	Premises Licenced under the Liquor Control and Licencing Act	Greater of 1 space per 3 seats or 1 space per 10 m ² gross floor area	
	Restaurant	Greater of 1 space per 3 seats or 1 space per 10 m ² gross floor area	
Courtenay	Restaurant	1 space per 6 seats	
	Fast food restaurant	8 spaces plus 1 per 6 seats	
Colwood	Restaurant	Urban Centre: 1 per 15m² of GFA	
		All Other Areas: 1 per 10m² of GFA	
Langford	Restaurant and drive- through restaurant	1 per 4 seats	
Oak Bay	Restaurants	1 space per 14 m² (150 ft²) of building area	
Saanich	Restaurants, Drive-in and Fast Food Restaurants	1 space per 10 m² (107 ft²) of gross floor area	
Sidney	Restaurant, Class I or Class II	1 per 5 seats	
Victoria	Restaurant	Core Area: 1 space per 40m² floor area	
		Village Centre: 1 space per 25m² floor area	
		Other Area: 1 space per 20m² floor area	
View Royal	Restaurant - Self-Service	1 per 10 m² of floor area.	
	Restaurant - Full-Service	1 per 10 m² of floor area.	

Comparative Review - Bicycle Parking Requirements

Note 1: Township of Esquimalt currently has no bicycle parking requirements

Note 2: Class 1/A = Long Term; Class 1/B = Short Term

Residential

Community	Land Use	Short Term Bike Parking	Long Term Bike Parking
	One-Family Dwelling, Secondary Suite and Duple	None	None
Colwood	Attached Housing	6 space /building	1 per unit
	Multi Family Dwelling	6 space /building	1 per unit (<60m²) 1.25 per unit (>60m²)
Central Saanich	All Comprehensive Development and Residential Attached and Residential Apartment uses	1 space per 10 required vehicular parking spaces	1.5 bicycles parking spaces per Dwelling Unit
	Dwelling, Multi-unit	1 two-sided rack per 5 units	1 per unit
Duncan	Dwelling, Single Unit	No requirements	
	Dwelling, Two-unit	No requirements	
Langford	Apartment	1 per dwelling unit	
Langford	Townhouse	1 per dwelling unit	
Oak Bay	No requirements	No requirements	No requirements
Saanich	Apartment/Townhouse	6-space rack at each entrance of an apartment	1 per unit
Sidney	Apartment	6 per building	1 per unit
	Single Family Dwelling	No requirements	
Victoria	Attached Dwelling	The greater of 6 spaces per building or 0.1 spaces per dwelling unit	1 per dwelling unit, except where the dwelling unit has access to a private garage

Community	Land Use	Short Term Bike Parking	Long Term Bike Parking
	Multiple Dwelling		1 space per dwelling unit that is less than 45m ²
	Mataple Dwelling		1.25 spaces per dwelling unit that is 45m² or more
View Royal	Apartment, Rowhouse, Townhouse	6-space rack at each entrance of an apartment	1 per unit

Commercial / Office

Community	Land Use	Short Term Bike Parking	Long Term Bike Parking
Colwood	Hotel/Motel		1 per 15 rental rooms
	Office, Retail, Services, Restaurants	6 spaces per building	1 per 250m ² of GFA
	Shopping Centre	1 space per building (for mobility aids)	1 per each 250m² of GFA for the first 5,000m², and 1 per each 500m² of GFA for any additional area
Duncan	Office, Retail, Restaurant	1 two-sided rack per 200m²	1 per 200m²
Langford	Hotel	1 per 15 rental rooms	
	Office	1 per 250.0 m ² (2,691.0 ft ²) GFA for the first 5,000 m ² (5,382.0 ft ²) and 1 per 500.0 m ² (5,382.0 ft ²) GFA for any additionarea.	
	Shopping centre and retail store >2,000.0 m² (21,527.8 ft²) GFA	1 per 250.0 m² (2,691.0 ft²) GFA ft²) and 1 per 500.0 m² (5,382.0 area.	
Saanich	Hotel/Motel	One per 15 rooms · In addition, when hotel/motel is large than 75 rooms, a six space visitor rack shall be provided Class I - 60% Class II - 40% One per 250 m² GFA for the first 5000 m² and one per 50 GFA for any additional area Class I - 50% Class II - 50% One per 250 m² of gross leasable area for the first 5000 rand one per 500 m² of gross leasable for any additional a Class I - 30% Class II - 70%	
	Office (all) retail sales of goods and services, restaurants research establishments, laboratories		
	Shopping Centre		
Sidney	Hotels, motels	6 per building	1 per 500m² of GFA, with a minimum of 2
	All other uses	6 per building	2 plus 1 per each 125m² of GFA

Community	Land Use	Short Term Bike Parking	Long Term Bike Parking
Victoria	Oria Office 1 space per 400m² floor area, or part thereof	1 space per 150m² floor area, or part thereof	
	Medical Office	1 space per 300m² floor area, or part thereof	1 space per 200m² floor area, or part thereof
	Restaurant	1 space per 100m² floor area, or part thereof	1 space per 400m² floor area, or part thereof
	Retail	1 space per 200m² floor area, or part thereof	1 space per 200m² floor area, or part thereof
View Royal	Hotel or Motel 1 per 15 rooms plus, where hotel or rooms, a 6-space rack must be prov Class 1 – 60% Class 2 – 40%		
	Office, Retail Store, Restaurant and Laboratory	1 per 250m2 of floor area for the first 5000m2 , plus one per 500m2 of additional floor area Class 1 - 50% Class 2 – 50%	
	Shopping Centre	1 per 250m2 of floor area for the first 5000m2 , plus one per 500m2 of additional floor area Class 1 – 30% Class 2 – 70%	

Industrial

Community	Land Use	Short Term Bike Parking	Long Term Bike Parking
Colwood	All	6 spaces per building	1 per 1,000m² of gross floor area
Central Saanich	All Industrial	1 space per 10 required vehicular parking spaces	No requirements
Duncan	Repair Service, Automotive	1 two-sided rack per 200m²	1 per 200m²
Langford	Industrial	1 per 950.0 m² (10,225.7 ft²) GFA	Α.
Nanaimo	Warehousing, storage, mini-storage, wholesale and similar uses	No requirements	0.1 per 100m² of gross floor area
Saanich	All	One per 950 m² GFA Class I - 80% Class II - 20%	
Sidney	All	6 per building	1 per 500m² of GFA, with a minimum of 2
Sooke	No requirements	No requirements	No requirements
View Royal	All	1 per 950m² of floor area Class 1 – 80% Class 2 – 20%	

Institutional / Civic

Community	Land Use	Short Term Bike Parking	Long Term Bike Parking
Colwood	Civic Uses	1 per 200m² of gross floor area	1 per 250m² of gross floor area
	Hospital	6 spaces at each public building entrance	1 per 500m² of gross floor area
	Church	6 spaces at each public building entrance	1 per 500m² of gross floor area
	School (Elementary, Middle or Secondary)	1 per 125m² of GFA	1 per 1,600m² of gross floor area
	Post Secondary	1 per 100m ² of GFA	1 per 500m ² of GFA
Central Saanich	No requirements	No requirements	No requirements
Langford	Community care facility	1 per 15 dwelling units	
	Cultural facility of library	1 per 100.0 m² (1,076.4 ft²) GFA	
	Hospital	1 per 500.0 m² (5,382.0 ft²) GFA entrance	plus 6 in a rack at each
	Place of Worship	1 per 50 occupants, based on noccupancy	naximum permitted
	School (Elementary)	1 per 10 employees plus 1 per 10) students
	School (Junior Secondary/Middle)	1 per 10 employees plus 1 per 8	students
	School (Senior Secondary)	1 per 10 employees plus 1 per 8	students
	Training and education facility	1 per 10 employees plus 1 per 5	5 students
	University	1 per 10 employees plus 1 per 5 attendance)	students (full-time, max
Oak Bay	No requirements	No requirements	No requirements
Saanich	Hospitals	One per 500 m² GFA plus six s Class I - 75% Class II - 25%	oace rack at each entrance
	Schools	All levels: One per 10 employee Class I employees Class II stud	
	Elementary School	One per 10 students Class I employees Class II stud	ents
	Middle School	One per eight students Class I employees Class II stud	ents
	Senior Secondary School	One per eight students Class I employees Class II students	
	College	One per five students Class I employees Class II stud	ents

Community	Land Use	Short Term Bike Parking	Long Term Bike Parking
	University	One per five students (full-time Class I employees Class II stude	
	Churches	· One per 50 fixed seats Class II - 100%	
	Library/Museum/Art Gallery	One per 100 m2 GFA Class I - 20% Class II - 80%	
	Personal Care	One per 15 dwelling units Class I - 75% Class II - 25%	
	Correctional Institution	· One per 50 beds Class I - 70% Class II - 30%	
Sidney	Schools, Libraries, Museums, Hospitals, Fire Stations, Police Stations, Ambulance Stations, Public Works Yards	6 per building	1 per 250m² of GFA, with a minimum of 2
	Places of Worship	6 per building	6
View Royal	Hospitals	1 per 500m2 of floor area, plus a 6-space rack at each entrance Class 1 – 75% Class 2 – 25%	
	Schools – Elementary and Middle	1 per 10 employees, plus 1 per 10 Class 1 – employees Class 2 – st	
	School - Secondary School	1 per 10 employees, plus 1 per 8 Class 1 – employees Class 2 – st	
	College, University	1 per 10 employees, plus 1 per 5 Class 1 – employees Class 2 – st	
	Place of Worship	1 per 50 fixed seats Class 2 – 100%	
	Library, Cultural Facility	1 per 100m2 of floor area Class 1 – 20% Class 2 – 80%	
	Congregate Care Facility	1 per 10 employees Class 1 - 75% Class 2 – 25%	
	Gym	1 per 80m² of surface area Class 1 – 20%	

Cultural / Recreational

Community	Land Use	Short Term Bike Parking	Long Term Bike Parking
Colwood	Recreational Facility	1 per 100m² of GFA	1 per 400m² of GFA
Saanich	Community Care	One per 80 m ² of GFA Class I - 20% Class II - 80%	
	Stadium, Arena, Pool, Exhibition Hall, similar	One per 100 m ² of surface area Class I - 20% Class II - 80%	

Community	Land Use	Short Term Bike Parking	Long Term Bike Parking
	places with spectator facilities		
	Gymnasium, Health Spa	One per 80 m² of surface area Class I - 20% Class II - 80%	
	Bowling Alley, Curling Rinks	One per 2 alleys or sheets Class I - 20% Class II - 80%	
Sooke	Recreational/Cultural/ Educational	1 space per 200 m ² Gross Floor	Area (25% Class I, 75% Class II)
Vancouver	Community centre, hall, club, bingo hall, activity centre or similar place of assembly; Casino - Class 1; Library, gallery, museum or aquarium.	A minimum of 6 spaces for any portion of each 1,500 square metres of floor area used for assembly purposes.	A minimum of 1 space for each 500 square metres of floor area used for assembly purposes.
	Theatre, auditorium, stadium, arena, or similar place with spectator facilities.	A minimum of 6 spaces for any portion of each 300-person seating capacity.	No requirement
	Fitness centre.	A minimum of 6 spaces for any portion of each 500 square metres of gross floor area.	A minimum of 1 space for each 250 square metres of gross floor area.
	Billiard hall; Arcade; Bowling Alley; Curling Rink.	A minimum of 6 spaces for any portion of each 40 tables, games, alleys or ice sheets.	No requirement.

Comparative Review – Accessible Parking Supply Rates

Community	Land Use	Supply Rate
Esquimalt	Congregate Care Senior Citizens' Apartment, other seniors housing complexes and Rest Homes	1 accessible stall for every 6 required Parking Spaces.
	All other uses:	I for every 50 required Parking Spaces, plus I space for any remainder in excess of the required number of spaces divided by 50.
Colwood	Congregate Housing, Group Home Use and Hospitals	15% of all required vehicle parking spaces shall be provided as accessible parking.
	All other uses	No. of Required Parking Spaces: No. of Accessible Parking Spaces: 0 – 10: 0 11 – 50: +1 51 – 100: +2

		101 – 150: +3 151+ spaces: 1+ for each additional 50 total parking
		spaces required
Central Saanich	Residential and Residential Attached	1 stall for each increment of 25 spaces Van accessible stall required as first stall and every additional 50 stalls
	All other applicable uses	1 van accessible stall required for a total supply of 1 – 9 stalls 1 additional stall for each increment of 25 spaces Van accessible stall required as first stall and every additional 50 stalls
Duncan	All Uses	1 accessible parking space for the first 20 total parking stalls
		1 additional accessible space required for every 40 required spaces thereafter
Nanaimo	Seniors' Congregate Housing and Personal Care Facility	One accessible parking space shall be provided per 15 required parking spaces.
	All Other Uses	No. of Required Parking Spaces: No. of Accessible Parking Spaces: 1-10: 0 11-20: +1 21-100: +2 101-1000: +2 per 100 required spaces or part thereof 1001+: +1 per 100 required spaces or part thereof
North Saanich	All Uses	No. of Required Parking Spaces: No. of Accessible Parking Spaces: 0-4: 0 5 – 10: +1 11+: minimum 3% of stalls are accessible and 6% of spaces are limited mobility
District of Saanich	All Uses	1 accessible stall for every 100 parking spaces of part thereof
Victoria	Assisted Living Facility	15% of vehicle parking spaces
	Hospital	5% of vehicle parking spaces
	Residential, Attached Dwelling/Multiple Dwelling; Commercial, Institutional and Industrial	1:6 2:25 3:50
View Royal	All Uses	1 of every 100 spaces must be accessible when 50 or more spaces are provided

Comparative Review – Electric Vehicle Regulations

Community	Single-Family Residential	Multi-Family Residential	Commercial / Other
Colwood	100% Energized Spaces	100% Energized Spaces	Minimum 10% of stalls energized
Central Saanich	No requirements	No requirements	No requirements
Duncan	No requirements	Must install one (1) electric vehicle charging station, minimum Level-2 for every 20 required off-street parking spaces	Multi-unit commercial must install one(1) electric vehicle charging station, minimum Level-2, for every 20 required off-street parking spaces
Langford	No requirements	No requirements	No requirements
Nanaimo	All required off-street parking spaces within a single residential dwelling or dedicated multiple-family dwelling parking space such as a garage for an individual unit shall include an electric outlet box wired with a separate branch circuit capable of supplying electricity to support a Level 1 charger.	Minimum of 10% of all required off-street parking stalls within any common parking areas for multiplefamily residential require shared access to Level 2 charging (or higher). An additional 20% of required parking spaces for a multiple-family dwelling use shall be provided with an electrical outlet box wired with a separate branch circuit capable of supplying electricity to support the installation of a Level 2 charger.	5% of all required off-street parking spaces require access to Level 2 charging (or higher).
Oak Bay	No requirements	No requirements	No requirements
Saanich	Min 1 energized space	100% of spaces must be energized	Minimum 5% of stalls energized at restaurants, retail and office uses
Sidney	In all Multi-Family, Commercial and Industrial buildings, all parking spaces shall be serviced by electrical conduit that can support the installation of an electric vehicle charging station.		1 9 1
Victoria	1 per required vehicle parking space	1 per required vehicle parking space	# Vehicle parking spaces: If <10: no EV requirements If 10-14: 1 energized EV outlet If >15: 2 energized electric vehicle outlets or 5% of the total number of required vehicle parking spaces, whichever is greater

Community	Single-Family Residential	Multi-Family Residential	Commercial / Other
View Royal	For every commercial or mu 100 parking spaces, an elect which is accessible to the pa		ment that requires more than equired on the lot, in a location

