City of Castlegar

PARKING ASSESSMENT & REGULATORY REVIEW

May 2025

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CASTLEGAR

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1.0 INTRODUCTION

1.1 Project Background

The City of Castlegar adopted a new OCP and Zoning Bylaw in July 2024. The latest documents provide a framework to guide future growth in the City over the next 20 years. The City's Official Community Plan (OCP) promotes concentrated new growth within neighbourhoods already serviced and established, such as in the Downtown and Uptown growth Nodes. While the City does not experience any significant issues with parking now, it recognizes an opportunity to take a forward-looking approach to parking and curbside management, congruent with the new OCP and its planned Transportation Master Plan, scheduled for later this year.

Castlegar remains a car-dependent community due to the distance between destinations and limited public transit service. In 2023, car ownership averaged 1.33 per household, and a proportional increase in private vehicles with residential growth could pose parking management challenges.

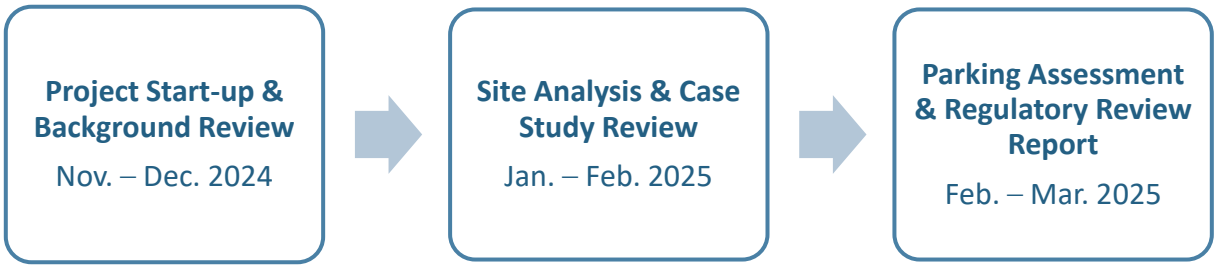
BC's Small-Scale Multi-Unit Housing (SSMUH) legislation also opens the door for greater housing density in residential areas by allowing multi-unit housing (multiplexes, townhouses) on lots previously zoned for single-family or duplex use. The introduction of this legislation will have implications for off-street parking requirements as municipalities may see increased housing density, with less space for driveways and garages. This also has the potential for an increase in on-street parking demand.

At the same time, Castlegar's new OCP seeks to promote affordable housing, higher-density residential and mixed-use development, and alternative transportation options. This Parking Assessment and Regulation Review aims to better understand parking needs while proactively supporting sustainable transportation, affordable housing, and compact development in the Downtown core.

The review's key objectives are to ensure that current parking regulations in Castlegar effectively manage parking demand as the community grows and evolves. This includes integrating the directions of the OCP and other key documents in regulation while identifying where further study or consideration may be required.

1.2 Project Process

The Parking Assessment and Regulatory Review project was initiated in October 2024, with three phases: (1) Project Start-Up and Background Review, (2) Site Analysis and Case Study Review, and (3) Parking Assessment and Regulatory Review Report (this report), as outlined below.



1.3 Study Focus Areas

The parking study focuses on parking in the Downtown and Uptown areas, which have been designated as key Nodes for concentrated growth in Castlegar's 2024 Official Community Plan (OCP), as shown in **Figure 1.** Map of Study Areas. The OCP prioritizes these areas for development to create vibrant, walkable hubs that support a mix of commercial, residential, and public spaces. With their central location, existing amenities, and potential for higher-density growth, Downtown and Uptown are expected to see the most significant development and increased demand for parking in the coming years. As a result, these areas were selected for the study to ensure that parking strategies align with future growth and support a well-functioning urban environment.

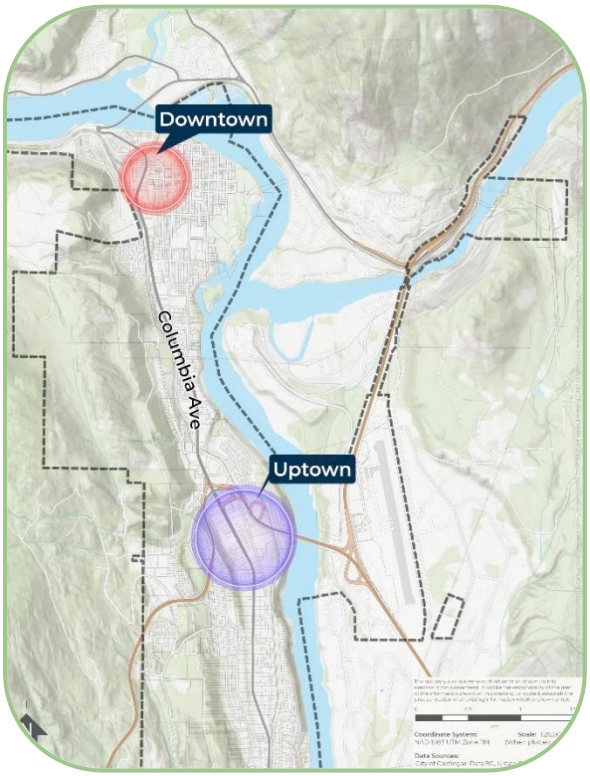


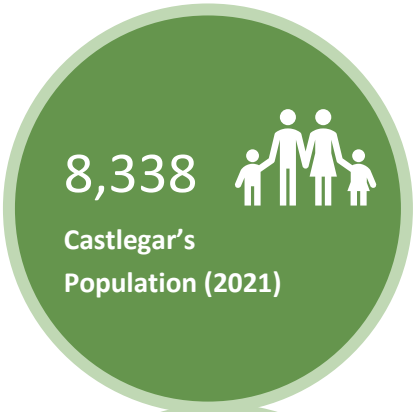
Figure 1. Map of Study Areas

2.0 COMMUNITY CONTEXT

Nestled at the meeting point of the Columbia and Kootenay Rivers, Castlegar is a key community in southeastern British Columbia, framed by the Monashee and Selkirk Mountains. The city spans 2.3 square kilometres and is home to major regional infrastructure, including the Hugh L. Keenleyside and Brilliant Dams, the Mercer Celgar Pulp Mill, and the West Kootenay Regional Airport. With a population of 8,338,[1] Castlegar is a vital hub for the broader region, supporting approximately 350 businesses. The city is bordered by Electoral Areas I and J of the Regional District of Central Kootenay (RDCK), linking it closely to surrounding rural communities. The area is part of the traditional Sinixt, Ktunaxa, and Syilx territory.

2.1 Demographics

Castlegar's population is gradually aging, with the median age increasing from 44 in 2006 to 45.6 in 2021. The proportion of residents over 65 has also risen significantly, from 17% to 25% over the same period. However, the demographic shift is not solely toward an older population. The number of children aged 0–9 has risen since 2011, alongside growth in the 25–39 age group. This suggests that young families and professionals are choosing to settle in Castlegar—whether returning after time away for education and work or relocating for the city's lifestyle and affordability.



2.2 Growth

Historically, Castlegar's population has grown at a modest pace of about 0.5% annually, but shifting migration patterns could accelerate this trend. Rising housing costs in the Lower Mainland and other major centers are prompting more people to seek affordable, smaller urban communities like Castlegar. If growth increases to 0.75% or 1.0% annually, the city's population could reach 9,670 to 11,174 by 2051. Castlegar's location in the Kootenays, proximity to a regional airport and the increasing flexibility of virtual work mean that Castlegar could potentially attract even higher numbers of residents than what is projected. The community's Housing Needs Report details the breakdown of potential units in the next section. However, Castlegar's

[1] https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/details/page.cfm?Lang=E&SearchText=Castlegar&DGUIDlist=2021A00055903045&GENDERlist=1,2,3&STATISTIClist=1&HEADERlist=0

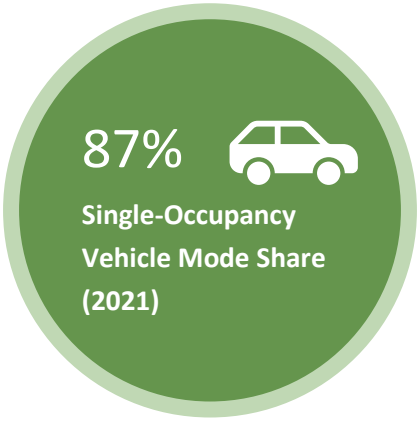
geography—bounded by rivers and steep terrain—means future expansion will rely on densification and strategic land-use planning to accommodate new residents.

2.3 Housing needs

Castlegar's housing stock has traditionally been dominated by single-detached homes with three or more bedrooms, leaving a gap in the availability of smaller housing options. As the city's demographics shift, demand for compact living spaces, such as studios, one-bedroom, and two-bedroom units, has grown significantly. According to the 2024 Interim Housing Needs Assessment, by 2041, demand is expected to increase by 1,056 studio (zero-bedroom) and one-bedroom units, and by 869 for two-bedroom units. In contrast, there is projected to be an oversupply of 594 three-bedroom units and 504 units with four or more bedrooms.

The City's Official Community Plan (OCP) emphasizes increasing housing choice and diversity by directing 75% of new development to existing neighbourhoods through infill and redevelopment. This approach maximizes land efficiency, promotes resource conservation, and places residents closer to essential services, amenities, and transportation. However, to successfully implement these strategies, the City must also ensure that infrastructure and amenities—including utilities, transportation networks, and parking—are adequately planned and supported to accommodate future growth. This concentration of housing in existing neighbourhoods could also create additional pressure on parking availability in and around the downtown.

2.4 Mode Share



Castlegar is a predominantly car-dependent city, with most residents relying on personal vehicles for daily travel. According to Statistics Canada (2021),[2] 87% of commuting residents used a vehicle, while only 10% utilized alternative transportation options such as public transit, walking, or cycling.

The city's linear layout, combined with geographic constraints such as the Columbia River and steep terrain, presents challenges for expanding transportation options. Mode share may also vary seasonally, with people more willing to choose active modes when conditions and temperatures are suitable. To address this, the OCP prioritizes increasing transportation choices by concentrating 75% of new housing within existing urban areas. This strategy promotes walkability, reduces travel distances, and aims to improve public transit services, while also enhancing pedestrian and cycling infrastructure to create a more sustainable, accessible transportation network that reduces auto dependency. This vision for transportation in Castlegar would also reduce parking demand by allowing people to complete their daily activities by different means.

3.0 PARKING IN CASTLEGAR

Parking in Castlegar is shaped by ongoing growth, evolving transportation needs, and efforts to support a more walkable, accessible community. The City's OCP guides how parking should be integrated with land use and mobility. Key bylaws, including the Traffic and Highways Regulations Bylaw and the Zoning Bylaw, provide the regulatory framework for managing both on-street and off-street parking, balancing the demand for vehicle access with broader city planning goals.

These documents, along with existing parking resources and restrictions, are identified in this section.

[2] https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/details/page.cfm?Lang=E&SearchText=Castlegar&DGUIDlist=2021A00055903045&GENDERlist=1,2,3&STATISTIClist=1&HEADERlist=0

3.1 Policy Context

3.1.1 OFFICIAL COMMUNITY PLAN (2024)

The 2024 Castlegar Official Community Plan (OCP) was updated to reflect the city's specific needs and priorities while aligning with various provincial legislative changes. It sets a vision for the city's future, guiding growth, housing, transportation, economic development, and environmental sustainability. It focuses on creating complete, connected, resilient communities by encouraging diverse housing options, enhancing public spaces, and supporting local businesses. The plan emphasizes sustainable transportation, active mobility, and strategic land use to foster a more livable and vibrant city. This approach addresses parking by balancing the need for vehicle access with efforts to support walkability and efficient land use.

3.1.2 DOWNTOWN AREA PLAN (2021)

The 2021 Downtown Area Plan for Castlegar provides a framework to enhance the economic vitality and livability of the downtown core while promoting walkability and accessibility. The plan recognizes the importance of well-managed parking to support businesses, residents, and visitors, balancing the need for vehicle access with efforts to create a more pedestrian-friendly environment. It includes strategies to optimize parking availability, improve wayfinding, and integrate parking solutions that align with future growth and development.

3.1.3 DOWNTOWN AREA CONDITIONS REPORT (2019)

The 2019 Downtown Area Conditions Report for Castlegar is a foundational assessment for the Downtown Area Plan, evaluating infrastructure, land use, transportation, and economic conditions. The report identifies key challenges and opportunities related to mobility and parking, highlighting the need for better parking management to support businesses, residents, and visitors. Its findings inform strategies to optimize parking availability, improve pedestrian access, and enhance the overall functionality of the downtown core.

3.1.4 LEGISLATIVE UPDATES

Through 2023 and 2024, the Government of British Columbia introduced legislation to support increased housing supply by allowing for higher density, relaxed parking minimums, and sustainable mobility.

3.1.5 BILL 44

Bill 44 requires all local governments to update zoning bylaws to increase density on lots currently zoned for single-family homes or duplexes by allowing for more Small-Scale Multi-Unit Housing (SSMUH) types. It also requires governments in municipalities of over 5,000 people to allow three to four units on lots zoned for single-family use.

3.1.6 BILL 16

Bill 16 supports local governments in building more affordable and livable communities while supporting tenants facing eviction for redevelopment. The legislation gives authority to:

- Clarifying that local governments can require Transportation Demand Management (TDM) measures and active transportation infrastructure in new developments, such as charging stations, end-of-trip facilities, and cash-in-lieu of TDM.
- Offering the ability to require new infrastructure through subdivisions and building permits, including active transportation and transit infrastructure and amenities, such as sidewalks, bicycle lanes, or transit stops, among others.

3.2 Applicable Bylaws

3.2.1 TRAFFIC AND HIGHWAYS REGULATIONS BYLAW (2006)

Castlegar's Traffic and Highways Regulations Bylaw (2006) regulates on-street parking, loading, and other curbside uses, designating where these uses are allowed or restricted on public roads. Through these regulations, Castlegar can control the use of the road right-of-way to ensure safe mobility, support suitable curb use in different parts of the city, and appropriately enforce use of the street where necessary. As such, the Traffic and Highways Regulations Bylaw complements the City's Zoning Bylaw to help manage parking demand, maintain safe roadways, and achieve other objectives for the city's streets.

3.2.2 SUBDIVISION AND SERVICING BYLAW (2009)

Castlegar's Subdivision and Servicing Bylaw (Bylaw No. 1018, 2009) establishes land subdivision and development requirements to ensure compliance with City standards. It mandates that subdivisions and developments provide necessary infrastructure, such as roads, utilities, and other services, as outlined in the bylaw. No building permit will be issued unless the land complies with the Bylaw's requirements.

3.2.3 ZONING BYLAW (2024)

Castlegar's Zoning Bylaw (2024) includes parking regulations to ensure sufficient off-street parking for all land uses, such as residential, commercial, and industrial developments. The bylaw sets out parking provisions in the following ways:

- Sets minimum parking requirements based on the type of use, with specific standards for parking spaces per unit or per square footage of commercial space.
- Provisions are included for accessible parking spaces and design standards, such as the size of parking spaces and aisle widths.
- The bylaw emphasizes integrating parking with the overall urban design, ensuring it is convenient yet not overly dominant in residential and mixed-use areas.
- There are also provisions for parking lot landscaping to enhance aesthetic appeal and minimize the visual impact of large parking areas.
- These regulations support mobility needs while promoting a more pedestrian-friendly and sustainable urban environment.

This new Zoning Bylaw introduced a number of reduced off-street parking standards for the City. This new bylaw also permits accessory dwelling units and regulations for Small-Scale Multi-Unit Housing. These changes represent a shift toward more diverse and compact housing options, which could

significantly impact how new developments function within the city. As these regulations are implemented, monitoring how they influence housing development, neighbourhood character, and overall transportation patterns will be important to ensure they align with Castlegar's long-term planning goals.

3.3 Downtown Parking Inventory

The City of Castlegar does not have an official inventory of on- or off-street parking spaces. This section highlights some of the parking facilities owned and operated by the City and other parking opportunities found in the Downtown and Uptown areas.

3.3.1 ON-STREET PARKING

On-street parking is found along most streets in Downtown Castlegar, surrounding residential neighbourhoods, and in limited locations near the Uptown Node. Where it is formally integrated into the downtown, on-street parking is in parallel, angled, and perpendicular configurations. On-street parking spaces generally feature time restrictions to encourage turnover in high-value locations, primarily two-hour maximum stays. Shorter-term on-street parking is found in some locations that allow 15-minute parking to support passenger loading or quick stops. Accessible parking is also available on-street throughout Downtown Castlegar and is not time-restricted.

No complete inventory of on-street parking is available for Castlegar, which could be explored in future parking and curbside management initiatives.

3.3.2 CITY-OWNED LOTS

The City manages four off-street parking facilities throughout the Downtown and Uptown areas, including:

- Downtown: 13th Avenue Parking Lot (460 - 13th Avenue)
- Downtown: 11th Avenue Parking Lot (205 - 215 11th Avenue)
- Uptown: Columbia Avenue Parking Lot at the Pioneer Arena
- Uptown: 6th Avenue Parking Lot, at the Castlegar & District Recreation and Aquatic Centre.

Stays up to 12 hours are permitted in public parking facilities.

3.3.3 INFORMAL PARKING LOCATIONS

In Downtown Castlegar, several informal parking lots provide convenient parking for visitors and employees. These sites, often privately owned or temporarily repurposed for parking, are crucial in supplementing the city's formal parking supply. However, they are not designated long-term parking facilities, so they introduce uncertainty into future parking availability.

As development pressures increase and land values rise, many of these informal lots may be redeveloped for commercial, residential, or mixed-use purposes. This could reduce available parking, potentially affecting business activity and accessibility in the downtown core. Losing these spaces may create challenges for workers and patrons who rely on them, highlighting the need for proactive parking management strategies.

4.0 KEY ISSUES & OPPORTUNITIES

To inform how parking regulations could be adapted in Castlegar, it is important to understand current conditions that can be appropriately responded to through regulation, further study, or new approaches to parking management.

The issues and opportunities identified below are primarily informed by conversations with City staff and strategic reviews of Castlegar's existing bylaws that regulate on- and off-street parking and curb use. Themes have been organized around geography, including city-wide observations and specific themes for the Downtown and Uptown Nodes.

4.1 City-wide

Several themes emerged around issues and opportunities that apply across Castlegar. Generally, it was observed that parking is not currently a significant issue in the city, unlike many other communities across the Kootenays. This has led to the belief that parking will always be available in Castlegar, where and when it is needed. Priced parking, for example, was mentioned as a strategy that is likely not currently supportable in the city due to community expectations. As the community grows and changes, parking and curb demand may increase to the point that the City may need to change its approach to parking management and work with residents, businesses, institutions, and other stakeholders to adjust expectations.

Specific actions or directions identified by staff include the following:

- **Parking-related bylaws, such as the Traffic and Highways Regulations Bylaw, are old and outdated**.
- **Desire to explore adding new parking provisions to the Zoning Bylaw,** such as bicycle parking, EV charging, and residential loading.
- **Cash-in-lieu should support new off-street parking facilities and/or sustainable transportation.**
- **Active transportation infrastructure, such as end-of-trip facilities and bicycle parking, is lacking in Castlegar**.
- **Seasonality is an important consideration** for intermittent changes in mode shift throughout the year, as well as snow storage within the right-of-way or in parking lots.
- **Staff capacity to manage parking is currently very limited** and could be increased to help enforce and monitor existing and future regulations.

4.2 Downtown

As the city's primary commercial and service hub, Downtown Castlegar experiences unique local challenges with parking and curb use. New developments will increase density in downtown and peripheral neighbourhoods, some of which are unlikely to have sufficient parking for current demand. These emerging pressures mean parking management in Downtown Castlegar will likely be a priority for new or adapted strategies to proactively and effectively manage on- and off-street parking.

Specific observations around parking management in Downtown Castlegar include:

- Parking availability in Downtown Castlegar was generally thought to be adequate.
- On-street parking is an important resource in the Downtown area since many businesses do not provide off-street parking.
- City-owned parking lots are located around the periphery of Downtown Castlegar and may not be an option for people with limited mobility to reach destinations.
- Private parking is more often than not oversupplied, but there is generally no security over this parking supply. Development on these parcels could contribute additional parking demand at on-street or off-street locations.

4.3 Uptown

The Uptown Node presents a different context from Downtown Castlegar, which is generally characterized by large-format retail and industrial uses. Large surface parking lots in these developments are typically underused, which was observed to affect the environment and experience in Uptown. Unlike the Downtown, development around Uptown is generally newer, so redevelopment in which parking changes could be enacted likely will not be immediate. However, some examples of parking lot redevelopment could be forthcoming, with one lot being discussed as a new housing opportunity. Commercial Retail Units (CRUs) are another opportunity to add new commercial buildings into existing parking lots.

Unpaved parking surfaces are also found in a few locations that spread gravel and other debris onto Columbia Avenue, including the bicycle lanes. Trucks are also known to block the right-of-way since some of the smaller parking lots cannot accommodate one or multiple large vehicles.

5.0 COMPARATIVE REVIEW

A comparative review of the off-street parking regulations in Castlegar and example communities was undertaken to identify opportunities to enhance parking management in the city. This includes understanding vehicle parking-related regulations, such as parking minimum or maximum numbers for different types of land uses, along with other important considerations, such as accessible parking, bicycle and EV parking, shared and off-site parking, and parking design and layout.

The outcomes of the staff workshop drove the focus of the comparative review and, therefore, primarily discussed off-street parking regulations. Some commentary on public parking management is provided where relevant. Findings from this section directly inform the recommendations provided in **Section 6.0**, which considers both on- and off-street parking management.

5.1 Parking Standards in Castlegar

Part 8 of Zoning Bylaw No. 1428 (2024) outlines off-street parking requirements for the City of Castlegar. Section 8.12 specifically defines vehicular parking requirements for different buildings, structures, and uses. For a full overview of Castlegar's parking standards, see **Appendix A**.

5.1.1 GAPS BETWEEN CURRENT PARKING REQUIREMENTS & OCP POLICY

A comparison with the Official Community Plan (OCP) highlights several opportunities to better align parking requirements with the City's broader policy objectives:

- Vehicle parking supply requirements are calculated based on factors such as number of dwelling units, Gross Floor Area (GFA), and, in some cases, anticipated user groups (e.g., medical offices based on the number of doctors or healthcare facilities based on the number of beds). Where possible, aligning units can help make the interpretation of parking requirements clearer.
- **Opportunities exist to introduce reduced minimum parking supply requirements** for sites in the Downtown core, where transit access and walkability reduce the need for extensive on-site parking.
    - Example: Food and beverage services downtown require five spaces per 100 m^2 GFA; this could be further broken down to differentiate between a sit-down restaurant downtown versus a short-stay or drive-through restaurant in a suburban location.
- **Mixed-use developments could benefit from tailored standards**, recognizing the potential for shared parking between complementary land uses. There are currently some standards for these types of development, but there may be further opportunities depending on the

context and use of specific developments. Further exploration could include regulations for shared parking in the Zoning Bylaw.

- **Requirements for end-of-trip facilities** (e.g., showers, lockers) in new development would better support more commute trips made by walking and cycling.
- **Incorporating bicycle parking requirements** would encourage cycling as a viable transportation option.
- **Establishing requirements and supporting guidance on Electric Vehicle (EV) charging infrastructure** would support the transition to low-emission transportation.
- **Standards for e-bike parking should be considered to** address the growing use of this mode of mobility.
- **Updating accessible parking and loading space requirements** could further support businesses and improve accessibility for all users, enhancing economic development.
- **Parking maximums are not currently applied** to any land use and are a potential opportunity to protect against excessive parking supply.

Addressing these gaps will ensure that on-street and off-street parking regulations align with the OCP's vision for a more sustainable, multimodal, and economically vibrant Castlegar. Strategic updates can help balance parking supply, support alternative transportation, and enhance the overall functionality of the city's parking system.

5.2 Comparative Community Interviews

Representatives from three other comparative municipalities were interviewed to better understand how Castlegar can learn from other communities as it explores updates to the City's parking management approach. Cranbrook, Nelson, and Whitehorse were chosen as comparative communities due to their similarity to Castlegar regarding land use, density, policy context, transit availability, and geography, as applied to Castlegar's current state or desired future outcomes per the OCP.

These interviews were to discuss parking challenges faced by each of these communities and ways they have addressed, or would like to address, them. Discussions explored key issues such as parking supply and demand, enforcement strategies, impacts of land use patterns, and integrating alternative transportation options. Each interview provided valuable insights into how these municipalities manage parking through zoning regulations, other bylaws, and policy initiatives. Innovative approaches, such as shared parking strategies, reductions in minimum parking requirements, and including bicycle parking and end-of-trip facilities, were also examined as part of the review.

The discussion topics are outlined below, with key themes and findings from each community.

5.2.1 BICYCLE PARKING SUPPLY AND DESIGN (PRIVATE AND PUBLIC)

Castlegar does not have specific bicycle parking supply or design requirements. In contrast, many communities across BC have established short- and long-term bicycle parking standards to support active transportation. These requirements help create a more bike-friendly environment, encouraging a shift from private vehicle use to more sustainable mobility options. Castlegar can modernize its regulations by including bicycle parking supply and design regulations.

- **Cranbrook**: Supply and design requirements are not currently required for development; however, in specific cases where many off-street spaces are required, bike parking may be substituted, up to a maximum. The City has also helped community groups by installing public bicycle racks.
- **Nelson**: The City Zoning Bylaw provides design standards and minimum bicycle parking requirements for short- and long-term bike parking. The City provides secure bicycle parking for $30/year in their parkade.
- **Whitehorse**: The City Zoning Bylaw requires short-term bicycle parking for most land uses. Long-term bicycle parking is required for multi-family residential, office, non-office commercial, institutional, community and recreational uses. Bicycle parking design and dimensional requirements are not considered.

5.2.2 ACTIVE TRANSPORTATION END-OF-TRIP FACILITIES

End-of-Trip (EOT) facilities can help to encourage cycling and active transportation by providing facilities that include showers, lockers and/or change rooms that support a positive user experience. They help encourage alternative transportation and support OCP objectives such as moving people, not just cars, and transitioning to a more diverse and mobile transportation network.

- **Cranbrook**: Not a requirement.
- **Nelson**: This is not a requirement in regulation; however, the City has installed a bike repair station and bathroom at the Hall Street Pier.
- **Whitehorse**: Not a requirement.

Beyond the case study communities above, only select municipalities in BC have established requirements for EOT cycling facilities. Where in-place, these include required supply and design

requirements for amenities like change rooms, showers, lockers, wash basins and toilets. The City of Colwood (in the Capital Region) is an example.[3]

5.2.3 CASH-IN-LIEU OF PARKING

Cash-in-Lieu of parking (CIL) allows municipalities to provide flexibility by collecting funds from developers in exchange for reduced off-street parking requirements. These funds can then be allocated to reserve funds for new or existing off-street parking facilities, such as a parkade, or invested in alternative transportation infrastructure, including pedestrian, cycling, and transit improvements. Cranbrook aims to use its program to upgrade its transit hub, while Nelson directs funds toward active transportation projects. Castlegar may explore how CIL could align with and support the goals of its Official Community Plan.

- **Cranbrook**: A recent parking study recommended implementing CIL in Cranbrook. City staff are considering enacting this program with the potential to direct funds towards updating the current transit hub and bike infrastructure as per their Revitalization Plan. More research must be done to set the program parameters.
- **Nelson**: The City previously charged $10,000 per space. However, there was no uptake, so it was recently lowered to $3,000 per space. Several recent multi-unit developments have opted to use the CIL program, which has also been used for residential areas. Funds go to the City's Active Transportation Reserve Fund to progress active transportation projects. Contributions to the reserve fund can also be made in lieu of short-term bicycle parking in new development. The value will be determined based on land and construction costs.
- **Whitehorse**: CIL ranges between $7,000 and $18,706 for different zones and locations in Whitehorse. Maximum rates are applied to core commercial and activity areas, where lower rates are applied for mixed-use and secondary areas.

5.2.4 ELECTRIC VEHICLE CHARGING INFRASTRUCTURE

Castlegar currently does not require Electric Vehicle (EV) charging infrastructure; however, the Official Community Plan (OCP) aims to expand and support EV infrastructure. The City of Nelson requires this for new developments, and the City of Cranbrook will have it under consideration, as it was a recommendation in their recent draft parking study.

- **Cranbrook**: Not currently in the Zoning Bylaw, but is under consideration in the 2025 update as per the parking study recommendation.

[3] City of Colwood, Off-Street Parking Regulations Bylaw (2022). Available online at: https://colwood.civicweb.net/document/198446/

- **Nelson**: The City requires EV charging stations for new developments and outlines the number of Level 2 charging stations required under various kinds of development.
- **Whitehorse**: Not a requirement.

5.2.5 PARKING SUPPLY RATES

Castlegar reduced several vehicle parking supply rates in the recent Zoning Bylaw update. It will be important to monitor the implementation of the new rates. As outlined below, some communities with older zoning bylaws and parking supply rates are considering how their rates will be reduced as they work towards updating their regulations.

- **Cranbrook**: The City will review their parking supply rates in the upcoming Zoning Bylaw update. They see a potential to reduce the required spaces, as per recommendations in their recent parking study. The City has a delegation bylaw that permits staff to authorize up to a 50% reduction in required parking spaces for commercial developments.
- **Nelson**: Among the case study cities reviewed, Nelson had the lowest minimum off-street parking requirements. Despite its high parking demand, the city's compact, dense layout supports walkability and alternative mobility options, reducing reliance on parking. Nelson also permits shared parking rates to allow multiple users to share parking when they have different peak demand times.
- **Whitehorse**: The City has the option to permit up to a 25% reduction for particular types of mixed-use developments with residential and commercial uses. This recognizes the potential for shared parking between complementary land uses.

5.2.6 ACCESSIBLE PARKING

Currently, Castlegar's accessible parking requirements contain elements of current best practice but are not necessarily fully implemented and reflected in the latest Zoning Bylaw. To better serve the community, some cities, such as Nelson, are differentiating supply rates based on land uses where accessible parking, such as hospitals and assisted living communities, may have a higher demand.

- **Cranbrook**: The Zoning Bylaw outlines basic accessible parking minimums and minimum dimensions.
- **Nelson**: Accessible parking standards are more robust and include minimum dimensions (including height), requirements for an access aisle, and high contrast pavement markings that connect with an adjacent accessible path. The spaces must also be located near an accessible entrance on a level, firm, and slip-resistant surface. More spaces are required for senior citizen homes, hospitals, etc.

- **Whitehorse**: Accessible parking requirements outline number of spaces required, accessible routes, signage, curb letdown requirements, and parking lot slope.

5.2.7 MOBILITY SCOOTER PARKING

Like accessible parking, dedicated mobility scooter parking provides safe and convenient spaces for individuals to park their mobility aids. While not currently required in any case study cities, these spaces are implemented in other BC municipalities in areas of higher demand.

- Not currently a requirement for case study cities.

5.2.8 LOADING SPACE SUPPLY AND DESIGN

Some cities vary their loading space design and requirements as the vehicles used for deliveries have evolved. These spaces are often geared towards medium- or large-sized trucks. However, smaller vehicles are now being used for deliveries and ride-hailing.

- **Cranbrook:** Loading spaces are very large to accommodate large trucks.
- **Nelson**: Loading spaces are required according to zone (for non-residential only), and spaces are required according to the building's Gross Floor Area (GFA).
- **Whitehorse**: Loading space requirements are outlined according to land use and size of the development, providing more flexibility between small and larger development types of the same use.

5.2.9 PUBLIC PARKING FACILITIES

Castlegar currently owns four off-street parking lots and relies on several informal lots throughout the Downtown core, none of which currently have associated parking fees. Meanwhile, Cranbrook is reassessing its parking management approach, exploring payment structures to enhance flexibility and ensure operational costs are covered through parking fees.

- **Cranbrook**: The City owns several off-street parking lots in its downtown area. Several sites are free for 2 hours, while others are leased monthly. The recent parking study suggested that the leased parking spaces were underutilized, and the City should consider phasing out monthly leases and offering weekly or daily plans to improve flexibility. For other City-owned lots, it was recommended that first-come, first-served, hourly, and daily parking be implemented.
- **Nelson**: Vehicles parking longer than 2 hours are encouraged to use the City's parkade, per the City's Parking webpage. Parkade spaces were previously leased monthly; however, it was

found that the parkade was underutilized. The City has recently implemented day rates available on a first-come, first-served basis.

- **Whitehorse:** The City owns one long-term off-street parking lot in Downtown Whitehorse and has recently updated its pay station to accept credit cards. The parking lot is free after work hours and on weekends to promote visitors in the downtown area.

5.2.10 OTHER THEMES

- **Curb Cut Restrictions:** The Nelson Subdivision Servicing Bylaw outlines curb cut restrictions to ensure on-street parking spaces are not lost to off-street private spaces such as new driveways, and instead, parking in alleyways is encouraged.
- **Change of Use**: The City of Nelson has determined that a change of use does not trigger a higher parking requirement. This is to avoid vacant storefronts due to parking requirements. It is noted that this may prove challenging where parking demand associated with new uses exceeds previous demand, contributing additional parking demand to nearby public parking areas.

5.3 PARKING STANDARDS IN COMPARATIVE COMMUNITIES

Table 1 below provides an overview of parking standards in Castlegar, comparing them to those in Cranbrook, Nelson, and Whitehorse. This comparison highlights differences in vehicle parking supply requirements across different communities and whether they regulate other important parking considerations, such as cash-in-lieu of parking, bicycle parking, active transportation end-of-trip facilities, and EV charging, among others. This offers insights into how each municipality approaches parking regulation and how Castlegar compares.

Table 1. Parking Regulations in Comparative Communities

Vehicle Parking	Castlegar	Cranbrook	Nelson	Whitehorse	How Does Castlegar Compare?
Residential					
Single Family Dwelling	1 (1–2 units)	2 per unit	1 per unit	1 per unit	Similar to Comparative Communities
Multi-Family Residential	3 (per 3–4-unit building), 0.5 greater than 4 units and 0.25 for visitors	2 per unit	1 + 0.1 visitors per unit	1 per unit	Lower than Comparative Communities
Non-Market Housing	0.25 per unit	-	1 per unit	0.5 per unit	Lower than Comparative Communities
Townhouse	1 (1–2 units) 3 (per 3–4 units) 0.5 (per unit for 4 or more units)	-	1 + 0.1 visitors per unit	1 per unit	Lower than Comparative Communities
Accessory Dwelling Unit	0.5 per unit	1 per unit	May be waived (see 7.9(3))	0.5 per unit	Similar to Comparative Communities
Commercial					
Commercial Uses in Mixed-Use Buildings	0.5 per 50 m² GFA	-	Up to 25% reduction (see S.7.6)	Up to 25% reduction (see S.7.3.7 (h))	Site Dependant
Food and Beverage	2.5 per 50 m² GFA	1 per 4 seats	~2 per 50 m² GFA	1 per 5 seats	Slightly Higher Than Comparative Communities
Office	1 per 50 m² GFA	~2 per 50 m² GFA	~2 per 50 m² GFA	~2 per 50 m² GFA	Higher Than Comparative Communities
Overnight Accommodation	1 per room	2 plus 1 per room	1 per room	0.5 per room	Similar to Comparative Communities
Personal Services	1.5 per 50 m² GFA	0.5 per 50 m² GFA	~2 per 50 m² GFA	1 per 50 m² GFA	Similar to Comparative Communities
Shopping Centre	1 per 50 m² GFA	2.5 per 50 m² GFA	0.5 per 50 m² GFA	2 per 33 m² if GFA is more than 1000 m²	Lower than Comparative Communities
Institutional					
Institutional in Mixed-Use Commercial	1.5 per 50 m² GFA	-	Up to 25% reduction (see S.7.6)	-	Site Dependant

Institutional	1 per 50 m² GFA	~2 per 50 m² Net FA	1 per classroom, 3 per classroom (secondary or higher)	2 per classroom, 5 per classroom (secondary or higher)	Lower Than Comparative Communities
Childcare Centre	1.25 per 50 m² GFA	1 per 50 m² GFA	~2 per 50 m² GFA	1 per 8 children	Similar to Comparative Communities
Hospital	10 reserved for doctors, + 1 per 5 beds	1 per bed	1 per 50 m² GFA	1 per 3 beds, 1 per staff	Similar to Comparative Communities
Medical Clinic	1 per 50 m² GFA	5 per 50 m² GFA	~0.5 per 50 m² GFA	~2 per 50 m² GFA	Lower Than Comparative Communities
Recreational/Entertainment (Indoor)	1 per 50 m² GFA	1 per 4 seat capacity plus ~2 per 50m² of GFA, not for seating	5 per 50 m² of floor area used for assembly purposes	1 per 5 seats	Lower Than Comparative Communities
Industrial					
Warehouse/Light Industrial/ Storage	0.25 per 50 m² +1.25 per 50 m² of accessory	0.5 per 50 m² of office use, plus 0.5 per 50 m² of GFA open to the public, plus ~0.33 per 50 m² of GFA for other enclosed uses	Warehouse: 0.5 per 50 m² GFA Light Industrial: 1 per 50 m² GFA, Warehouse/Storage: 0.25 per 50 m² GFA	Storage: 33 m² dedicated office space	Lower Than Comparative Communities
Other Regulations					
Cash-in-Lieu of Parking	-	-	$3000/space for AT Reserve Fund	$18,706 in CC, CPG, CMW zones, $7,967 in CM1, CM2 and CNC2 zones	No Current Regulation
Bicycle Parking Provisions	-	-	Yes	Yes	No Current Regulation
Active Transportation End-of-Trip Facilities	-	-	-	-	No Current Regulation
EV Charging Requirements	-	-	Yes	-	No Current Regulation

6.0 RECOMMENDATIONS

Based on the comparative review, several possible action areas emerged for Castlegar. The recommendations in this section reflect emerging parking and curbside management trends, lessons learned from other communities, and Castlegar's objectives. As such, focus is placed on supporting sustainable mobility, promoting accessibility, improving parking management systems, exploring opportunities to collect data to inform decision-making, and diversifying the tools available to staff, among others.

The following sub-sections organize recommendations based on off-street parking regulations and public parking management, which includes on-street parking, curbside management, and off-street public parking facilities.

6.1 Proposed Parking Management Framework

6.1.1 POLICY GOALS

To ensure that Castlegar's approach to parking management is coherent and cohesive, establishing overarching objectives is critical to ensure that various strategies and regulations are complementary under this approach. This requires consistent collaboration across City staff, support from Council, and clear communication with the public and stakeholders.

It is recommended that the five priorities for Castlegar in 2033 be used as the basis for the parking management framework. Their relevance to parking regulations and curbside management is briefly identified under each:

- Focus Growth in Key Nodes
  Ensure that off-street parking regulations align with the economic realities of the developments desired by the City in growth centres.
- Protect and Restore the City's Ecosystems
  By reducing reliance on single-occupancy vehicles through enhanced private and public active transportation infrastructure and programs, space can be reallocated to supporting natural spaces in Castlegar.
- Create a Dynamic Columbia Avenue Corridor
  Manage public and private parking along Columbia Avenue to ensure that the diverse activities desired along the corridor's various contexts, including actively managing the curb, can be supported.

- Diversify the City's Neighbourhoods

  Ensure that appropriate development regulations and management systems are in place to ensure diverse development and that spillover effects or conflicts between uses are mitigated.

- Nurture an Active City

  Ensure that all new development and public rights-of-way can support active transportation alongside other priorities.

6.1.2 PROPOSED OBJECTIVES

By aligning actions with these priorities, the City can maintain a unified approach to any new or revised policies, regulations, and/or programs related to parking and curbside management. A series of action areas has been identified for consideration:

- Integrate Decision-Making on Parking and Curbside Management

  Make decisions with the perspective that on- and off-street parking and curbside management are integrated systems where regulation and infrastructure changes have interconnected implications.

- Expand Sustainable Transportation Infrastructure

  Require infrastructure in all new development that supports active transportation and zero-emission vehicles, and implement new and enhanced public active transportation infrastructure to connect people and places.

- Support Accessibility in the Public and Private Realm

  Pursue regulatory and infrastructure improvements to allow people of different abilities to access parking and loading across Castlegar.

- Accommodate Emerging Mobility Trends and Technologies

  Plan and design for new technologies and modes by requiring different types of infrastructure, updating regulations, and maintaining a proactive approach to other parking and curbside management methods.

- Maximize Value of the Curb

  Practice proactive curbside management to appropriately regulate and enforce curbside use to meet diverse needs across different areas of Castlegar.

- Collect Data and Monitor Parking Conditions

  Establish consistent data collection strategies to understand how the City is finding success in its management approach or opportunities for improvement.

6.1.3 TOOLS TO SUPPORT PARKING AND CURBSIDE MANAGEMENT

Regarding achieving the proposed objectives, Castlegar, like other municipalities in British Columbia, has several tools available to support desired outcomes in parking and curbside management. This includes regulatory powers, infrastructure, and enforcement, as briefly described below:

- Regulations
  Establishing regulations that require new development to support specific types of parking and loading infrastructure, manage and restrict curbside uses, and/or support value capture (pay parking / cash-in-lieu of parking). Currently, regulatory tools are primarily found in Castlegar's Zoning Bylaw and Traffic and Highway Regulations Bylaw.
- Infrastructure
  Developing new and retrofitted public infrastructure will be required to directly support Castlegar's approach to parking and curbside management, including permanent infrastructure and pilot projects to test opportunities. This could include new on- and off-street parking assets, sustainable transportation infrastructure, or other needs as they arise.
- Enforcement
  Ensuring compliance is essential to achieving the desired outcomes of the regulatory and infrastructure approaches taken by the City. This includes developing staff capacity and accessing technologies that can support effective enforcement, with co-benefits for other objectives like data collection and monitoring.

Specific recommendations related to these tools are identified in **Sections 6.2** and **6.3** below.

6.1.4 PARKING MANAGEMENT FRAMEWORK

A high-level framework to visualize the connections between the policy goals, proposed objectives and tools is provided in Figure 2 below. This framework suggests a possible decision-making process for how the City can implement and manage new parking and curbside management approaches, including the recommendations in subsequent sections and other needs as they arise. Applying this process will look different across Castlegar as higher growth areas, such as Downtown and Uptown, will likely require more active decision-making when compared to other parts of the City experiencing less pressure driven by changes in land use, mobility, or other factors. Similarly, adjustments will be required to provide the necessary guidance to staff and clarity to the public as new opportunities and challenges emerge, so this framework should be refined over time.

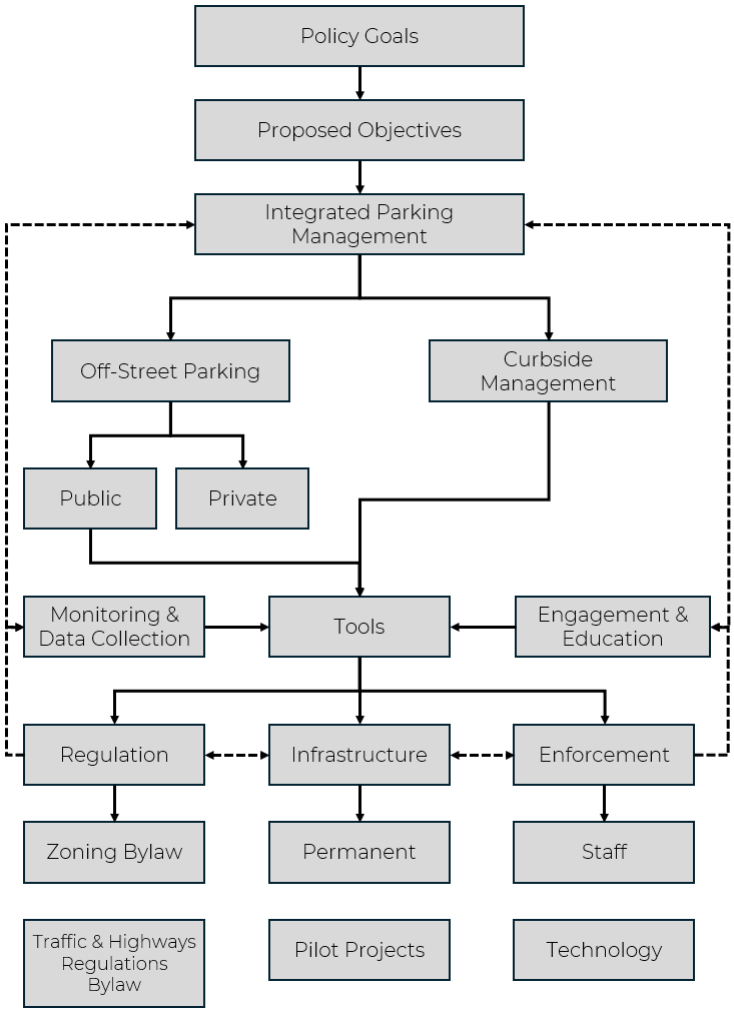


Figure 2. Proposed Parking Management Framework

6.2 Off-Street Parking Regulations

Recommendations for off-street parking management focus on how the City's parking and loading-related regulations in the Zoning Bylaw can be expanded or adjusted to align with Castlegar's objectives and best practices, which can be reflected in new development. This includes aligning with specific directions found in the Official Community Plan and Downtown Area Plan and taking inspiration from regulations in other communities across British Columbia.

A proposed timeframe, generalized cost estimate, and a sample of example communities have been identified for each of the recommendations described in this section to help guide implementation. The three timeframes—immediate, medium, and long—reflect a relative prioritization of each regulatory update for staff and Council consideration. Some regulatory updates may become appropriate as new developments are constructed and changes resulting from the new OCP and Zoning Bylaw become more evident. The regulatory recommendations identified in this section apply to new development across the city, which could result in a range of new private and public amenities depending on the nature of the development.

To summarize, the new and updated regulations recommended to be considered by the City are identified in **Table 2**:

Table 2. Summary of Recommendations for Off-Street Parking Regulations

	Recommendation	Timeframe	Cost	Applicable Areas	Key Documents
Off-Street Parking Regulations					
1	Introduce supply requirements by land use for short- and long-term bicycle parking	Immediate	$	City-wide	Zoning Bylaw No. 1428
2	Develop design requirements for short- and long-term bicycle parking	Immediate	$–$$	City-wide	Zoning Bylaw No. 1428
3	Require active transportation End-of-Trip facilities	Immediate-Medium	$	City-wide	Zoning Bylaw No. 1428

	Recommendation	Timeframe	Cost	Applicable Areas	Key Documents
Off-Street Parking Regulations					
4	Define and update cash-in-lieu of parking regulations	Immediate	$	City-wide	Zoning Bylaw No. 1428
5	Introduce electric vehicle charging infrastructure requirements	Variable (tied to electrical grid capacity)	$	City-wide	Zoning Bylaw No. 1428
6	Consider requirements for mobility scooter parking	Medium–Long	$	City-wide	Zoning Bylaw No. 1428
7	Update accessible parking supply and design regulations	Immediate–Medium	$	City-wide	Zoning Bylaw No. 1428
8	Consider updating loading space supply and design requirements	Medium–Long	$	City-wide	Zoning Bylaw No. 1428
9	Ensure consistency in units of measurement in vehicle parking supply rates	Immediate	$	City-wide	Zoning Bylaw No. 1428
10	Explore differentiated parking supply rates	Medium–Long	$	City-wide	Zoning Bylaw No. 1428

6.2.1 NEW REGULATIONS

RECOMMENDATION NO.1

Introduce supply requirements by land use for short and long-term bicycle parking.

Most communities in British Columbia require short- and long-term bicycle parking in various land uses to support comfortable cycling environments that encourage mode shift away from private vehicles. There is an immediate opportunity to add these requirements to the Zoning Bylaw. Cycling infrastructure, like bicycle parking, is supported by the OCP in the Downtown and Uptown Nodes, along with other land use designations. Like vehicle parking requirements, bicycle parking spaces are typically required based on floor area or the number of entrances in the case of short-term bicycle parking.

Recommendation	
Update Zoning Bylaw No. 1428 to include short- and long-term bicycle parking supply rates for specific land uses.	
Timeframe	**Cost**
Immediate	$
Example Communities	
• City of Nelson • City of Vernon	

Bicycle parking supply rates will vary depending on the land use and the anticipated demand for bicycle parking for each use. Typical cycling trip generators, such as residential uses, offices, or institutional uses, have higher requirements than other uses. The mix of short- and long-term spaces may also differ based on how residents, employees, and visitors are anticipated to use this parking supply.

The introduction of bicycle parking supply requirements should be a high-priority regulatory change for the City to ensure that all new development includes appropriate levels of bicycle parking. This is a common practice in most other BC communities and an expectation in Castlegar. Potential supply rates for key land uses could fall within the ranges derived from regulations in other communities with bicycle parking supply requirements, as shown in **Table 3**.

Table 3. Possible Bicycle Parking Supply Ranges for General Land Use Categories

Use	Minimum Long-Term Bicycle Parking Spaces	Minimum Short-Term Bicycle Parking Spaces
Multi-family Residential	0.75–1.5 per dwelling unit	6 spaces per entrance or per 10 dwelling units
Commute Destinations (Office, Shopping Centre, Institutional, Hospital, etc.)	1 per 150 m^2 - 500 m^2 GFA	6 spaces per 1,000 m^2 GFA
Other non-residential uses	1 per 500–1,000 m^2 GFA	6 spaces

New bicycle parking supply requirements should also be supported by bicycle parking design requirements (refer to Recommendation 2), with consideration also given to requirements for cycling end-of-trip facilities such as showers and change rooms.

RECOMMENDATION NO.2

Develop design requirements for short and long-term bicycle parking.

Should Castlegar decide to implement bicycle parking supply requirements, it should support safe, comfortable, and efficient use of these facilities that enhance the user experience and provide clear guidance for the development community. The City could approach bicycle parking design by including requirements in the regulations or developing guidelines.

Various design elements should be considered in bicycle parking areas. Long-term bicycle parking areas typically require higher standards to allow bicycles to be easily parked and moved in and out of a development. Some of these key features are highlighted below.

Recommendation	
Update Zoning Bylaw No. 1428 to include short- and long-term bicycle parking design requirements or introduce design guidelines.	
Timeframe	**Cost**
Immediate	$–$$
Example Communities	
• Most BC Communities	

All Bicycle Parking

- Minimum height, width, and length of bicycle racks.
- Required distance between bicycle racks and walls or doorways.

- Permitted bicycle rack types.

Long-Term Bicycle Parking

- Access requirements, such as door and aisle widths or automatic door openers.
- Location within a development relative to a primary entrance.
- Permitted bicycle parking configuration between ground-anchored, vertical, and stacked racks. A defined amount is typically required to be ground-anchored, due to accessibility challenges with vertical and stacked bicycle parking.
- Charging infrastructure for electric bicycles (in certain building types, and in conversation with the fire chief).
- Larger racks for non-standard bicycles, such as cargo or recumbent bicycles.

Short-term Bicycle Parking

- Distance to a primary building entrance.
- Required weather protection.

The City should investigate the appropriate design measures to be included in regulations or guidelines to ensure that bicycle parking is achievable in Castlegar and supports a positive experience for cyclists.

RECOMMENDATION NO.3

Require active transportation end-of-trip facilities.

End-of-trip facilities help to enhance the day-to-day experience of travelling by active transportation, whether for cyclists, pedestrians, or people travelling by active means. These amenities support comfortable active transportation by providing facilities to wash up, change, make repairs, and store belongings, among others, when they arrive at their destination. End-of-trip facilities are typically focused on enhancing the commuter experience, where similar facilities may not typically be available, but also have some applications in residential contexts. End-of-trip facilities are specifically identified for the Uptown Mixed-Use Node in the Official Community Plan but are relevant across the city, particularly in areas with greater employment and residential density, like Downtown Castlegar. The Downtown Area Plan identifies opportunities for public and private end-of-trip facilities in various land uses and destinations across downtown.

Recommendation	
Update Zoning Bylaw No. 1428 to require active transportation end-of-trip facilities.	
Timeframe	**Cost**
Immediate–Medium	$
Example Communities	
• City of Colwood • City of Coquitlam • City of Vernon	

It is recommended that the City integrate end-of-trip facility supply requirements to ensure they are provided in appropriate quantities in different land uses, while also guiding the design or siting of facilities in a development. **Figure 3** below is an example from the City of Colwood, which shows the variety of amenities and land use considerations that could be included in end-of-trip facility requirements.

Required Number of Long-Term Bicycle Parking Spaces	End-of-Trip Facility				
	Water Closet	Wash Basin	Shower	Bicycle Repair Set	Clothing Locker
Residential, Hotel					
Residential, Multi-Family	0	0	0	1	0
Hotel, Motel	0	0	0	1	0
All Other Uses					
5 or less	0	0	0	0	1.25 times the number of required Long-Term Bicycle Parking spaces
6-10	0	1	1	1	
11-20	0	2	2	1	
21-30	0	3	3	1	
31-40	2	4	4	2	
For each additional 30 or part thereof	2 additional	2 additional	2 additional	1 additional	

Figure 3. City of Colwood End-of-Trip Facility Supply Requirements

Supply requirements are typically structured around the number of long-term bicycle parking spaces required in a development. This approach allows the number of facilities to scale with the anticipated demand for bicycle parking, which should be incorporated into long-term bicycle parking supply rates.

Regulations for the design of end-of-trip facilities could consider some or all of the following:

- Location of end-of-trip facilities relative to entrances and/or long-term bicycle parking areas.
- Size and required components of facilities (e.g., locker dimensions, tools for repair sets)
- Gender equity in facility allocation to ensure all users can access end-of-trip facilities.

End-of-trip facilities could be integrated into the Zoning Bylaw as part of broader updates to regulate bicycle parking in Castlegar. These regulations are complementary in enhancing the active transportation experience in the city and ensuring that new development incorporates a variety of considerations for active modes.

RECOMMENDATION NO.4

Define and update cash-in-lieu of parking regulations.

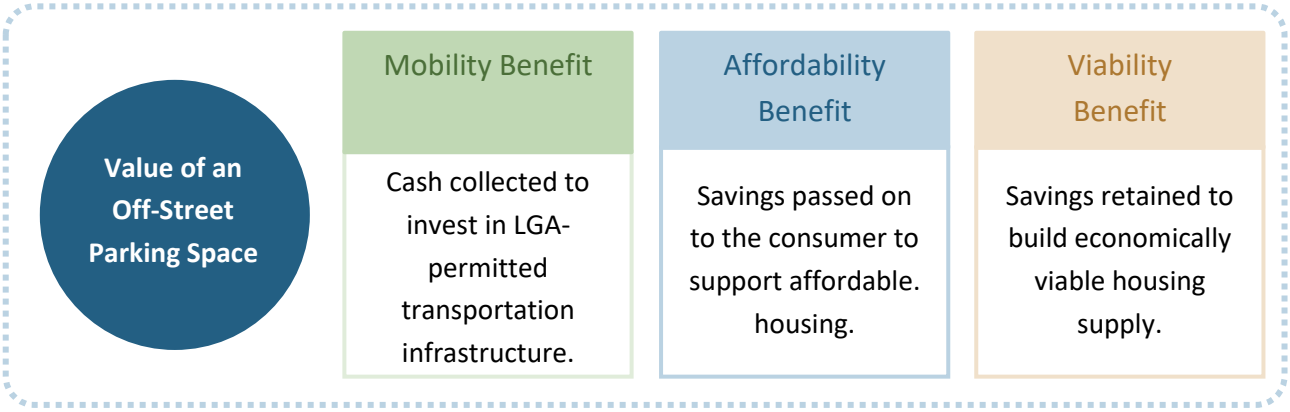
Cash-in-lieu of parking is a tool that allows municipalities to collect cash from developers in exchange for the right not to build required off-street parking spaces. Section 525 of the *Local Government Act* permits cash contributions to be collected by a municipality instead of the required parking supply, where the collected funds are then used to provide either:

- Alternative transportation infrastructure includes pedestrian, bicycle, and/or transit facilities.
- New and existing off-street parking spaces.

Recommendation	
Update Zoning Bylaw No. 1428 to specify collection amounts for cash-in-lieu parking or create a separate bylaw dedicated to cash-in-lieu parking.	
Timeframe	**Cost**
Immediate	$
Example Communities	
• City of Nelson • City of Revelstoke • City of Salmon Arm	

In the most recent updates to the Zoning Bylaw, the City introduced a series of parameters for the application of cash-in-lieu (CIL) of parking (Section 8.11). This included defining the possible off-street parking reduction achievable through CIL in different zones and identifying that the funds collected would flow to the City's Parking Facilities Reserve Fund. However, CIL is not currently available as an option for development as the CIL amount is not currently defined in a bylaw. This direction was supported by the Downtown Area Plan, which specifically recommended CIL use for public parking facilities. A downtown parkade/mobility hub would support the City's ability to broadly manage parking downtown, reduce dependence on private parking lots, and enhance sustainable or shared mobility options.

This gap must be addressed to make CIL operational and provide an opportunity for new development to achieve lower off-street parking provision. To help guide Castlegar in its implementation of cash-in-lieu of parking, a conceptual framework on the applications of CIL and the potential impacts on development and infrastructure is offered below. The framework describes three categories of potential 'benefits' CIL offers relative to the value of an off-street parking space.



The CIL rate must balance these three benefits while considering the actual costs of a parking space in Castlegar. As with escalating construction prices, these inputs can be dynamic and, therefore, challenging to maintain at a rate that is consistently well-informed and aligned with community values.

CIL rates from comparative communities to Castlegar are shown in the table to the right. Typically, rates are between $3,000 and $5,000.

Comparative Cash In-Lieu of Parking Rates (per stall)

Community	CIL Rate
Nelson	$3,000
Rossland	$3,000
Revelstoke	$23,479
Trail	$1,500–$3,000
Salmon Arm	$5,500
Penticton	$13,000
Whitehorse	$7,967–$18,706

Based on the City's priorities and understanding of the market, an appropriate CIL rate should be included in the Zoning Bylaw or connected regulation. This rate does not need to be aligned with similar communities, which may not have regularly updated CIL requirements or see this option leveraged by developers. Larger urban communities with dynamic real estate markets and higher construction costs are typically more aggressive in setting high CIL rates.

If the ultimate objective of CIL collection is to support a downtown parkade/mobility hub, then costs for CIL should be aligned with potential costs for that infrastructure, which would align with the higher CIL rates shared in the table above. Recent reductions to vehicle parking supply rates for residential uses could also lead to lower overall CIL collection, where developers feel they can or should provide the required off-street parking.

Without these considerations being accounted for, along with other actions to reduce overall parking demand, the City could risk collecting modest funds for a downtown parking facility that may ultimately serve the needs of developments with insufficient on-site parking. Therefore, this requires the City to develop a more detailed strategy on how CIL funds will be used when collected. One possible high-level approach could be structured as follows:

- Immediate – Implement city-wide CIL rate of $3,000 to $5,000 and establish necessary reserve funds for sustainable transportation infrastructure and/or off-street parking investment. The zone-specific maximum reductions through CIL currently defined in the Zoning Bylaw can be used for this initial implementation and reviewed based on the uptake of CIL in new development.
- Medium–Long – Consider increased CIL rate for Downtown and/or Uptown areas as a tool to support lower off-street parking supply and more cost-intensive public investments such as a parkade/mobility hub (as discussed in Recommendation 15) to help meet downtown parking needs. This approach is to be considered through a more detailed study to confirm directions concerning parking supply rates, CIL and downtown public parking (refer to Recommendation 15). Potential reductions through CIL in the Downtown or Uptown area could be updated depending on the potential of a parkade to accommodate some off-street parking needs, such as for visitors and customers.

Regardless of the approach taken, CIL is recommended to apply only to conventional vehicle parking spaces and should not support reduced visitor or accessible parking spaces. This condition could accompany the maximum allowable CIL reduction in Section 8.11 of the Zoning Bylaw.

RECOMMENDATION NO.5

Introduce electric vehicle charging infrastructure requirements.

Currently, Castlegar does not require electric vehicle (EV) charging infrastructure in new development. With recent amendments to the *Local Government Act,* the City could choose to require EV charging infrastructure in two ways: electrified outlets in parking areas and/or installing EV chargers. Many communities in BC have adopted similar regulations, particularly given the Province's goals to rapidly increase the uptake of zero-emission vehicles, including electric and plug-in hybrid vehicles.

The need for EV charging is captured in the OCP, with several policies supporting further investigations into local and regional charging demand and supporting e-mobility in the city. Requiring EV charging infrastructure in new development is a key part of the broader electrification of the transportation system. However, it could be limited by the electrical grid capacity needed to support widespread EV charging. As such, these recommendations may only be appropriate when infrastructure conditions are suitable.

Recommendation	
Update Zoning Bylaw No. 1428 to require electric vehicle charging infrastructure for some or all land uses and specify any technical requirements.	
Timeframe	**Cost**
Variable (tied to electrical grid capacity)	$
Example Communities	
• City of Nanaimo • City of Nelson • City of Vernon • Town of Osoyoos	

Differentiated requirements by land use should be considered to ensure different needs are met. Since most charging will likely take place at home, many communities require all parking spaces to include an electrical outlet capable of providing Level 2 charging (240v). Some non-residential land uses may also have a portion of spaces energized while also considering requirements for Level 2 charging stations in uses that might see significant demand, such as offices, grocery stores, shopping centres, or institutional uses. Charging stations are not generally recommended for residential settings, given that they would have to be a shared resource among all residents, which can create management challenges.

Some technical requirements for electric vehicle charging infrastructure could also be specified in the Zoning Bylaw, including:

- Use of Electric Vehicle Energy Management Systems
- Signage and markings

- Compliance with other electrical requirements specified by the City

Potential EV charging requirements could generally align with those in Nelson and Vernon, as shown in **Table 4**, with minimum requirements for charging stations in non-residential uses to be considered above and beyond these thresholds for EV-ready spaces.

Table 4. Possible Minimum EV Charging Infrastructure Supply Requirements

Use	Minimum Number of EV-Ready Parking Spaces
Residential	1 per dwelling unit + 10% of visitor parking spaces
Commercial / Institutional	15% of the required parking spaces
Industrial	10% of the required parking spaces
Accessible Parking	50% of the required accessible parking spaces

RECOMMENDATION NO.6

Consider requirements for mobility scooter parking.

Alongside accessible vehicle parking, dedicated mobility scooter parking can support an inclusive built environment by providing locations for people to safely and conveniently park their mobility aids. This was not noted as a priority for the City; however, it could be part of broader regulatory changes to support appropriate mobility scooter parking supply and design in the future.

Recommendation	
Update Zoning Bylaw No. 1428 to include mobility scooter parking supply and design requirements.	
Timeframe	**Cost**
Medium–Long	$
Example Communities	
• City of Colwood • District of Saanich • City of New Westminster	

Supply requirements for mobility scooters should vary by land use, where uses that typically have a higher demand are reflected in minimum mobility scooter parking supply rates. In Castlegar, uses such as hospitals, medical clinics, and special care facilities could be compatible with mobility scooter parking requirements since it is likely that more people with mobility aids will access these uses. Other development types, such as offices, shopping centres, and various institutional uses, could also be considered for mobility scooter parking requirements, perhaps at lower rates.

To accompany mobility scooter parking supply requirements, it is recommended that minimum mobility scooter stall dimensions and access requirements be included in the Zoning Bylaw. Design requirements should consider different types of mobility scooters and sensitively integrate spaces alongside other off-street parking and site design requirements. For example, Colwood and Saanich require minimum scooter parking spaces to be 1.0 m wide and 1.5 m long. New Westminster requires dedicated mobility scooter areas to be no smaller than 10 m^2, though this number represents a share parking area, not the size of individual spaces like Colwood or Saanich.

Castlegar could support similar design requirements to Saanich and Colwood, with spaces being no less than 1.0 m wide and 1.5 m long. Alongside dimension requirements, it is recommended that mobility scooter spaces should be:

- Located adjacent to a primary building entrance.
- Must not impede pedestrian access to the building or sidewalk.
- Should be located within 2.0 m of an electrical outlet to allow for mobility scooter charging.
- Include signage and pavement markings indicating they are reserved for mobility scooters.

6.2.2 UPDATED REGULATIONS

RECOMMENDATION NO.7

Update accessible parking supply and design regulations.

Dedicated accessible parking spaces are required throughout the community to ensure individuals with physical, sensory, and cognitive challenges can access parking that is located and designed to specifically meet their needs. The best practices identified in this section should also be considered when designing new and retrofitting existing publicly accessible parking spaces.

Recommendation	
Update Zoning Bylaw No. 1428 to include differentiated accessible parking supply rates for high-demand uses and integrate van-accessible parking supply and design.	
Timeframe	**Cost**
Immediate–Medium	$
Example Communities	
• City of Victoria • District of Central Saanich • City of Vernon	

Accessible Parking Supply

Generally, the City's established requirement for accessible parking supply is aligned with or exceeds the standards in other communities and reflects best practices, which generally suggests that 4% of all parking spaces should be accessible.

Building on this foundation, an emerging policy best practice is to differentiate supply rates based on land use where there is anticipated to be a higher demand for accessible parking. Examples could include hospitals, assisted living facilities, medical offices, senior citizen apartments, and residential units specifically designed for universal access and likely to be inhabited by individuals requiring accessible parking (i.e., accessible and adaptable units). The City of Nelson, for example, requires more accessible parking spaces in senior citizens' homes, hospitals, care services, and extended medical treatment services.

The City could consider creating a new accessible parking supply regulation to integrate differentiated parking requirements for these or other uses. Engagement with the community could support decision-making on applicable uses to ensure that people with lived experience can share their insights on the availability of accessible parking in Castlegar.

Van Accessible Parking Supply

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. People using these devices generally require a wider parking space to allow for

maneuvering a mobility device in and out of a vehicle, but do not necessarily need to be near the building entrance.

Alongside conventional accessible parking, minimum requirements for van-accessible parking spaces are becoming increasingly common. For example, the City of Victoria requires accessible and van-accessible parking spaces. One accessible parking space is required per 6–25 parking spaces, with an additional accessible parking space for each additional 25 standard parking spaces. The first accessible parking space must be van accessible.

Introducing van-accessible parking does not necessarily increase the overall supply of accessible parking, but instead seeks to diversify the type of parking spaces available to people with accessibility needs.

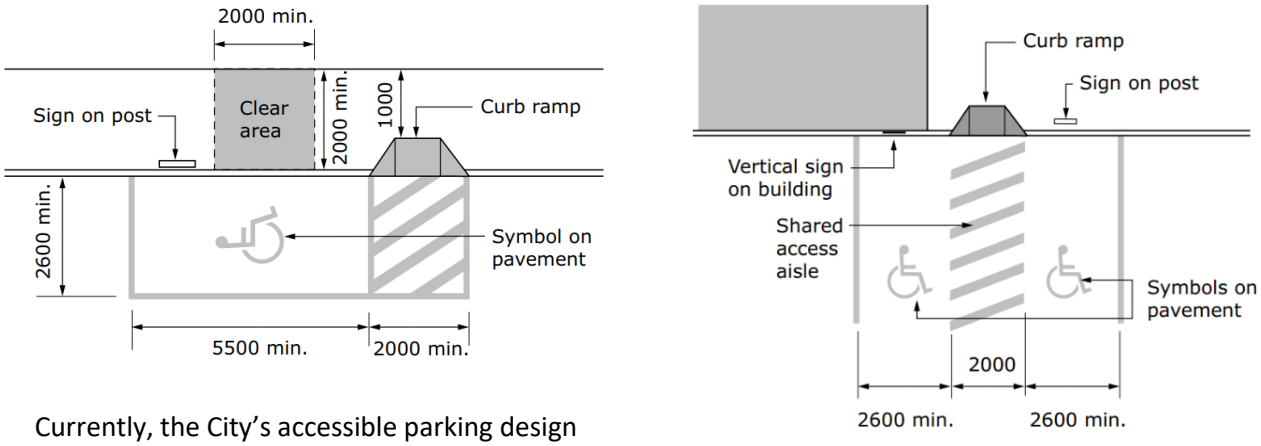
Accessible Parking Design

The design requirements for accessible parking spaces in the Zoning Bylaw do not align with best practices from the Canadian Standards Association (CSA) recommendations, as described and depicted below in **Figure 4**.

A designated accessible parking space shall:

a) Be at least 2.6 m wide
b) Have an adjacent side access aisle at least 2 m wide
c) Have an adjacent rear access aisle at least 2 m long

Figure 4. Accessible Parking Design Standards, Canadian Standards Association (CSA)



Currently, the City's accessible parking design requirements are excessively wide (3.9 m), likely allowing for loading and unloading from a vehicle. Regulations could be shifted to be more aligned with conventional parking space dimensions, with an additional requirement for an access aisle (up to 2.0 m wide) that aligns with CSA guidance. Access

aisle dimensions in most other communities with modernized accessible parking standards are typically between 1.5 and 1.6 m.

Similarly, van-accessible parking design standards would need to be integrated into the *Zoning Bylaw*, if desired. Typically, van-accessible parking spaces require greater width to allow mobility devices to be loaded and unloaded from a vehicle. In Victoria, van-accessible parking spaces must have a minimum width of 3.4 m, with an access aisle of 1.5 m.

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

- Specifying priority locations for accessible parking spaces near accessible entrances to buildings (already included in the Zoning Bylaw).
- Requiring curb ramps to be aligned with the access aisle, per the BC Building Code.
- Painting the curb of the accessible parking space blue.
- Using hatching to demarcate the rear and side access aisles clearly.
- Applying the Dynamic Symbol of Access on pavement markings and vertical signage rather than the conventional symbol.

These standards can similarly be applied to on-street accessible parking spaces, which will be discussed in subsequent sections of this report.

RECOMMENDATION NO.8

Consider updating loading space supply and design requirements.

The increase in the number and type of vehicles used for deliveries has changed how urban spaces use curb space and consider onsite loading needs. This recognizes that the nature of deliveries in urban contexts is changing, with more people regularly receiving packages or food deliveries and participating in ride-hailing or other activities. Loading space design requirements are typically oriented towards medium- or large-sized trucks ('Class B') that require similarly sized spaces with site design that supports truck movements.

Recommendation	
Consider updating Zoning Bylaw No. 1428 to include loading requirements for 'Class A' spaces and new uses, such as multi-unit residential developments.	
Timeframe	**Cost**
Medium–Long	$
Example Communities	
• City of Richmond • City of Vancouver • City of Vernon	

- A class of smaller loading spaces ('Class A'), perhaps aligned with conventional vehicle parking space requirements, could align with non-truck deliveries, such as food delivery, ride-hailing, or other short-term uses.
- A variety of land uses could benefit from smaller loading space classes to accommodate some loading uses on-site while not overbuilding for vehicles
- that may not typically load or deliver from specific land uses. This promotes flexibility in a building form that could support more efficient use of land.
- Land uses that could be considered for smaller loading spaces include multi-family residential (discussed below), mixed-use, office, food and beverage services, and other commercial and institutional uses.

Other communities in BC are shifting to a two- or three-tiered loading design and supply approach, with each tier supporting a different vehicle size. For example, communities such as Richmond and Vancouver are typically larger urban centres than Castlegar. Therefore, the City may want to consider such a regulatory update as the Downtown, Uptown, and other areas of the city continue to grow and change.

Supply requirements for the different classes of loading spaces will depend on the specific uses. Class A loading spaces are typically required for uses that may not receive large trucks often, such as residential, office, or small-scale retail developments, where infrequent large truck deliveries can be accommodated on-street. 'Class B' spaces should still be required for uses frequently receiving deliveries from medium- or large-sized trucks. A similar approach that is currently used in the Zoning

Bylaw can be maintained with updated and differentiated gross floor area thresholds for each loading space type. Currently, minimum loading space requirements in the Zoning Bylaw are significantly lower than those for similar uses in other communities (Table 1). For example, the City of Nelson requires the first off-street loading space for developments of a minimum of 500 m^2 for all commercial, industrial, institutional, and mixed-use buildings, compared to 1 per 2,000 m^2 to 1 per 5,000 m^2 in Castlegar. Vernon's recent regulatory updates introduced loading space requirements for multi-family residential buildings over 2,800 m^2 and greater than 11 dwelling units.

Minimum dimensions of an off-street loading space will also need to be regulated to ensure that this infrastructure is designed to meet the needs of anticipated vehicle types and their users. As previously mentioned, a 'Class A' space could align with the size of a conventional vehicle parking space, while the dimensions for 'Class B' spaces can be maintained as currently laid out in the Zoning Bylaw.

Vehicle Parking Supply Rates

Castlegar's vehicle parking supply rates were recently updated in the broader Zoning Bylaw review process. As such, the current rates are not likely to change in the immediate future. However, several potential areas for refinement could be considered in subsequent bylaw updates. Some of these changes could apply city-wide or may be more focused on shaping growth and development in the Downtown and Uptown Nodes.

RECOMMENDATION NO.9

Ensure consistency in units of measurement in vehicle parking supply rates.

Ensuring all vehicle parking supply requirements are based on consistent units is important for clear implementation. Some supply rates for uses are expressed as units of measurement that are not easily determined at the time of application and/or may change over time, including:

- Hospital – 10 reserved doctor spaces plus one space per 5 beds
- Social services – 1 space per 5 beds

Ideally, vehicle parking supply rates for non-residential uses should be based on floor area, as with all other commercial, industrial, and institutional uses in the Zoning Bylaw. Ultimately, this is a minor change given that hospital and social services uses will not be the most common types of development in Castlegar, but it is a good 'housekeeping' item to ensure regulations are understood and applied appropriately.

Recommendation	
Update Zoning Bylaw No. 1428 so that all non-residential uses require vehicle parking spaces based on gross floor area.	
Timeframe	**Cost**
Immediate	$
Example Communities	
• City of Nelson • City of Victoria • City of Colwood	

RECOMMENDATION NO.10

Explore differentiated parking supply rates.

Recommendation	
Update Zoning Bylaw No. 1428 to differentiate vehicle parking supply rates for multi-family residential uses based on bedroom size, tenure, and/or location.	
Timeframe	**Cost**
Medium–Long	$
Example Communities	
• City of Nanaimo • City of Colwood • City of Nelson • District of Sechelt	

The structure of vehicle parking supply rates plays a significant role in determining how regulations support different types and forms of new development. This is particularly true for residential uses in general and some non-residential uses in specific areas that may have different characteristics when compared to other areas of Castlegar, which could, in turn, warrant an adapted approach to parking supply.

This section identifies some potential options for consideration for vehicle parking supply rate differentiation in Castlegar, including regulating by bedroom size, tenure, and geographic location. Given that minimum parking supply rates were recently updated, this strategy may not be relevant until the City can test the effectiveness of the current rates within the market or needs to respond to other changes in the future. Future data collection efforts should include off-street parking supply and utilization information to help inform changes to vehicle parking rate structures, if needed. Similarly, experiences with the recently revised vehicle parking supply rates in the Zoning Bylaw may also create opportunities to consider eliminating parking requirements or other strategies like parking maximums to limit parking oversupply.

Differentiating Supply Rates by Unit Size

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).

Recent updates to Castlegar's vehicle parking supply rates have significantly decreased the required parking spaces for larger multi-family and mixed-use buildings with residential components. If desired, the City could build on these changes by differentiating supply rates between bachelor, one-bedroom, two-bedroom, or larger units to reflect parking demand relative to one another. This is particularly relevant where the City wants to try to incentivize a particular unit type, notably smaller units, by recognizing that they generally have lower parking demand than larger dwellings.

Differentiating Supply Rates by Tenure

Differentiated supply rates for condominiums (i.e., strata ownership), apartments (market rental), and affordable housing are other tools that could be considered in Castlegar. Differentiated rates are becoming increasingly common in other communities, recognizing demonstrated differences in parking demand and/or supporting community objectives for rental or affordable housing. Castlegar similarly prioritizes these housing tenures through the OCP, as evidenced through the policies under Objectives 106–108 and specific directions in residential and mixed-use land use designations. Communities such as Victoria and Nanaimo have varied rates to reflect decreased parking demand among rental buildings and encourage varied housing options, including affordable housing.

As previously mentioned, multi-family residential vehicle parking supply rates are already relatively low in Castlegar compared to many similar communities, including the supply rate for non-market housing. Castlegar could consider removing minimum parking requirements for affordable housing, allowing housing developers to decide the appropriate parking supply relative to anticipated use and project budgets. This practice has been adopted in other communities across BC to further incentivize affordable housing development.

The City can request vehicle registration data collected by ICBC to understand how vehicle registration differs among tenures to substantiate any future changes by collecting information from a sample of rental, condominium, and/or affordable housing developments. This process could be regularly repeated to track trends in vehicle ownership that may shift as Castlegar grows and changes.

Differentiating Supply Rates by Location

Many communities will identify location areas with specific parking supply rates, particularly in core locations where residents can readily access amenities and transportation options. Nanaimo, Comox, Duncan, West Kelowna, and Victoria all apply a locational variable to parking requirements for some land uses.

This is particularly relevant for the Downtown and Uptown Nodes and is already practically in place through the Zoning Bylaw, which allows for decreased parking requirements for residential uses in mixed-use buildings, which are generally only supported in these areas. The City can build on these efforts as growth patterns and transportation networks evolve to support lower vehicle ownership and parking requirements.

6.3 Public Parking Management

Like the off-street parking regulations, public parking management strategies seek to balance the need to manage parking demand and objectives to support sustainable transportation in Castlegar. The recommended actions for public parking management are summarized in **Table 5** below.

Table 5. Summary of Recommendations for Public Parking Management

	Recommendation	Timeframe	Cost	Applicable Areas	Key Documents
Public Parking Management					
11	Undertake detailed parking inventories	Immediate	$$	Downtown Uptown	--
12	Develop an on-street parking management framework	Medium	$$	City-wide	--
13	Explore updates to the Traffic and Highways Regulations Bylaw	Immediate–Long	$$	City-wide	Traffic and Highways Regulations Bylaw No. 1015
14	Retrofit and expand on-street accessible parking	Variable	$$$	Downtown	--
15	Undertake a parkade/mobility hub feasibility study	Immediate–Medium	$$$	Downtown	--
16	Expand internal capacity for public parking management	Immediate–Long	$$$	City-wide	--
17	Create a parking and curbside management monitoring program	Immediate–Long	$$$	City-wide	--

RECOMMENDATION NO.11

Undertake detailed parking inventories.

Recommendation
Complete Downtown and Uptown Parking Inventories to understand the current use of parking and

To support the City's decision-making around parking and curb use in Downtown and Uptown Castlegar, it is recommended that detailed parking inventories be completed for the area. This would include broad data collection, engagement with residents, business owners, and/or stakeholders, and assessing options to address current or future challenges or opportunities and ensure the right amount of parking is provided in the right locations. By studying parking and curb use more comprehensively, the City can begin to understand how various interconnected strategies may be implemented immediately or over time to support local objectives for Downtown and Uptown. A similar study was recommended in the Downtown Area Plan.

Possible areas for exploration in the parking inventories are identified in the following sub-sections.

curb space and identify Downtown-specific actions for improving parking and curb space utilization and other initiatives.

Timeframe	Cost
Immediate	$$

Example Communities

- City of Nelson
- District of Squamish
- Town of Sidney
- City of Mission

Parking and Curb Use Inventory

The City should create a parking and curb use inventory to establish the baseline conditions in and around Downtown and Uptown Castlegar. Good data often supports informed decision-making on parking and curbside management, so an inventory of the location, quantity, and restrictions on parking and curb use should be valuable information for this study and the City more broadly. Possible data to be collected as part of this inventory could include:

- Location and size of public and private parking lots
- Location and size of informal parking lots in and around the Downtown
- Mapping of all curb restrictions throughout the Downtown/Uptown and available space for specific uses such as on-street parking, commercial and passenger loading, accessible parking, etc.

It is recommended that the inventory be collected in a format that could be stored and managed in a GIS by the City to allow for updates and review in the future.

Public Parking Utilization and Turnover

Collecting data on public parking, including both on-street and off-street parking, to help the City understand how well current on-street parking is being used, how long parked vehicles stay in a single location, and where pressure points may exist. This information can help inform how parking restrictions may need to be adjusted to respond to demand. Data collection should include

observations of multiple locations over 24 hours on different days of the week and in different seasons to account for variability throughout the year.

On-street data collection can be completed through in-person observations or technologies such as license plate recognition or aerial drones. Completing a detailed public parking inventory before data collection will support efficient collection through the preferred approach.

Curbside Utilization

Decision-making in curbside management should be supported by an on-the-ground understanding of how and where people access the curb. This is especially important for short-term uses due to the number of potential uses and variation in behaviour. As such, an inventory of loading and passenger zones in Downtown and Uptown Castlegar could be used to establish baseline conditions for testing changes to curbside uses or restrictions. Data collection should include observations of multiple locations over 24 hours on different days of the week and throughout the year to capture variable use. Data to collect could include:

- Number and type of vehicles
- Dwell times by vehicle type
- Day, time, and/or seasonal variation

Findings from this analysis would support maintaining, updating, or diversifying curbside uses in Downtown and Uptown Castlegar to support a thriving urban centre.

Examples of what these data collection forms may look like can be found in **Appendix A**.

RECOMMENDATION NO.12

Develop an on-street parking management framework.

When implementing parking restrictions in Downtown, Uptown, and beyond, the City should consider setting criteria that distinguish whether on-street parking restrictions are merited or need to be adjusted to achieve the desired outcomes for a given block or area. By developing a clear and transparent framework for implementing or updating parking restrictions, the City can look to expand restrictions strategically and consistently.

Recommendation	
Create a framework for regulating public parking to provide a clear and consistent process for implementing new restrictions that ensure appropriate curb use.	
Timeframe	**Cost**
Medium	$$

The following are key conditions that should be considered:

- **Surrounding Land Use** – Priced parking should be focused in commercial or mixed-use areas where parking spaces are valuable for customers and visitors.
- **Existing Management** – Time restrictions and other non-priced approaches should be considered and/or in place before implementing priced parking, including understanding the level of compliance and citations issued.
- **Parking Utilization** – Where parking utilization (% occupied) exceeds a predefined threshold (typically 85%) over an extended period (commonly 5 or 6 hours).
- **Parking Turnover** – Where parking turnover (i.e., average length of stay) is too low, and vehicles parked over long periods impede access in areas of high demand.
- **Adjacent Development** – Where new development will add additional parking demand to the street, and there is a need to maintain adequate utilization and turnover levels.
- **Multi-Modal** – Where changes in curbside allocation to support multi-modal transportation networks are anticipated to lead to increased utilization and/or decreased turnover.
- **Seasonal Differences** – Applying different management techniques or restrictions in different seasons as demand for on-street parking fluctuates and needs change (i.e., snow storage).

Communication and engagement are key to successfully implementing new parking restrictions. This process should involve engagement with residents and stakeholders to understand how proactively updating curb use restrictions can contribute to efficient and vibrant use of public space in road rights-of-way that align with community goals and objectives.

RECOMMENDATION NO.13

Explore updates to the Traffic and Highways Regulations Bylaw.

Castlegar's Traffic and Highways Regulations Bylaw, No. 1015, was adopted in 2006 and is outdated. Updates could help address some gaps in typical curb uses while also seeking to proactively update the bylaw to set the City up with the tools to proactively address emerging trends in curbside management. Some of these changes are identified at a high level below, which could be found in the Traffic and Highways Regulations Bylaw or other applicable bylaws, as deemed appropriate by staff:

Immediate Changes

- **Highway Access Restrictions** – To ensure that new development does not have outsized impacts on the availability of curbside space, the City should consider implementing highway access restrictions based on land use and off-street parking supply. This is particularly relevant as the new development begins to densify around Downtown Castlegar and other growth Nodes, and large driveways would reduce the available space for on-street parking, boulevards, or other uses. For example, the City of Nelson only permits a single driveway access to a property, with widths of 3 m–6 m for residential properties and limits where driveways can be placed relative to street corners, fire hydrants, and utility poles, among other restrictions. The City should consider implementing a similar restriction to limit curb space disruptions. Regulations could also emphasize utilizing laneways to support rear-year parking that can similarly reduce the number of curb cuts.
- **Passenger Loading Zones** – Passenger loading is not currently addressed in the bylaw. Other communities typically allow for passenger loading functions either as a dedicated curb use or as a permitted use in commercial loading zones. For example, the City of Nelson has a single loading

Recommendation

Consider a variety of updates to the Traffic and Highways Regulations Bylaw No. 1015 to ensure regulatory tools are proactively available to the City to manage on-street parking and curb use.

Timeframe	Cost
Immediate–Long	$$

Example Communities

- City of Nelson (highway access, passenger loading, pay parking and winter parking)
- City of Rossland (passenger loading and winter parking)
- City of Whitehorse (residential parking)
- City of Victoria (car sharing, highway access)

zone designation that allows passenger loading for up to 3 minutes and commercial loading up to 10 minutes.[4]

- **Car Sharing** – To allow for car sharing in Castlegar, specific regulations to support their use could be added to the bylaw. This could include identifying required permits for car-sharing vehicles and creating a specific traffic control device for designated car-share parking spaces. If Castlegar were ever to consider a one-way car-sharing service, regulations must also consider exemptions for car-share parking in time-limited or residential parking areas. Engagement with car share operators (such as Kootenay Car Share) would be important to ensure that regulatory changes are clear and consistent with the City's needs and those of the operators.
- **Winter Parking** – The Traffic and Highways Regulations Bylaw currently does not feature regulations related to winter parking requirements. Such regulations in other communities control where parking is permitted during the winter months to allow for efficient snow clearing and provide enforceable regulations should on-street parking impede operations. The City of Rossland, for example, requires vehicles to be moved every 24 hours between November 1st and April 30th and prohibits overnight parking over the same period to allow for snow clearing.[5]

Potential Future Changes

- **Pay Parking** – New regulations would be required if the City ever considered paid parking, whether on- or off-street. Updates should include designating a specific traffic control device where payment is required, rates for payment, and processes to update payment rates over time. Similarly, exemptions, such as for SPARC pass holders, should also be considered. The City of Nelson has pay parking in designated areas in the downtown area, which could be referenced for regulatory updates. On-street pay parking rates for Nelson and other BC communities are shared in the table to the right.

  Although paid parking is a tool to manage parking and create revenue, other parking management tools should be applied before implementing charges. The criteria

Comparative On-Street Pay Parking Rates

Community	Parking Rate
Nelson	$2 / hour
Nanaimo	$1 / hour
Kamloops	$1.25 / hour (1st + 2nd hour) $2.5 / hour (3rd hour)
Kelowna	$1.50–$1.75 / hour
Vernon	$1.25 / hour
Penticton	$1.50 / hour

[4] https://nelson.civicweb.net/filepro/documents/488/?preview=14030

[5] City of Rossland. Traffic & Highways Regulation Bylaw no.2689. Retrieved from: https://rossland.civicweb.net/filepro/documents/3497/?preview=6986

below provide a tool for the City to measure the need for paid parking. If all conditions are exceeded, then paid parking should be considered:

- **Parking Occupancy** – Average Street Occupancy is 85% or greater on a cumulative of 3 street blocks. Analysis should be conducted over a one-year period.
- **Parking Duration –** Current time limitations have already been reduced to 1 hour or less.
- **Compliance –** Tickets, fines, and enforcement on a block or in an area are a challenge. Tickets are issued frequently, and complaints about parking challenges in these locations are regularly received.
- **Residential Parking** – Several tools are available to municipalities to control parking in residential areas. As Castlegar grows and parking demand increases or shifts, parking spillover into residential neighbourhoods adjacent to community destinations like Downtown Castlegar. Residential parking permits are one option to be considered, where residents in specific areas can acquire a set number of permits for their household for a fee. Another option is time-limited exemption permits, which would involve implementing time-limited parking in residential neighbourhoods, with residents being provided a permit that exempts their vehicle from the time limit. Like with pay parking, these updates may not be required immediately, but could be considered for implementation if pressure on residential parking increases.

RECOMMENDATION NO.14

Retrofit and expand on-street accessible parking.

Ensuring an appropriate supply of accessible parking is critical to ensuring that appropriately designed parking spaces are available on-street for people with accessibility needs, where they need them. The OCP reaffirms that all public spaces should be designed to be fully accessible for people with mobility and sensory challenges.

Best practice suggests that maintaining approximately 4% of all on-street parking spaces as accessible parking spaces is recommended.[6] Further investigation is required into the distribution of accessible parking across Castlegar, particularly in the Downtown and Uptown Nodes, which could be addressed in part through the Downtown Parking Inventories. Similar standards should be considered in other areas, where feasible, as demand for curb changes with growth throughout the city.

Recommendation	
Adopt design guidance to upgrade existing publicly accessible parking and passenger loading spaces and identify locations for expanded supply, as needed.	
Timeframe	**Cost**
Variable	$$$
Example Communities	
• City of Victoria • Halifax Regional Municipality	

Design specifications for accessible parking spaces that meet or exceed current best practice, as identified in the Canadian Standards Association (CSA), are outlined in the previous section. Similar design standards for access, pavement markings, signage, and other characteristics should also apply to public on-street accessible parking and be referenced as a design guide for these spaces in Castlegar. Many accessible parking spaces in Downtown Castlegar already feature some or all of these design features. However, understanding opportunities to improve accessible parking over the long term can be valuable for future budgeting and opportunistic implementation.

[6] Americans with Disabilities Act (ADA). Retrieved from https://www.ada.gov/topics/parking/

Potential actions could include the following:

- **Inventory existing on-street accessible parking stalls** to identify locations in need of upgrades.
- **Monitor the use of existing spaces and collect feedback** from the community and accessibility groups to develop criteria for designating an appropriate supply of on-street accessible parking.
- **Define the proportion of accessible parking needed** and build it when streets are renewed through policy or guidelines. Ensure funding from new development and consistent budgeting is set aside for this purpose.
- **Integrate consistent funding into municipal budgets** for ongoing, accessible parking space upgrades.

Accessible Passenger Loading

It is recommended that the City explore opportunities to ensure that passenger loading zones in Castlegar are appropriately designed for accessibility, including creating new and retrofitting passenger zones. Like with design criteria for on-street accessible parking spaces, this could include establishing safe paths of travel from the passenger zone to the adjacent sidewalk, removing obstacles from the curb, and providing access aisles. The U.S. Access Board's Public Right-of-Way Access Guidelines (PROWAG) identifies technical requirements for accessible passenger loading zones and could be used as a reference for developing Castlegar's design criteria.[7]

Compared to other accessible parking spaces, it might not be possible to integrate all accessible design elements in all cases. However, progress towards best practice should be realized wherever possible.

[7] U.S. Access Board. Public Right-of-Way Accessibility Guidelines. Retrieved from https://www.access-board.gov/prowag/technical.html#r311-passenger-loading-zones

RECOMMENDATION NO.15

Undertake a parkade/mobility hub feasibility study.

The possibility of developing a large, public parking facility to help accommodate parking demand in Downtown Castlegar was discussed with staff. Such a facility could help to offset the potential loss of parking supply as private parking lots are redeveloped around the Downtown and/or create opportunities for on-street parking to be repurposed for other local priorities. A centralized facility will also allow land development with less dedicated private parking, ensuring that downtown parking demand is met more efficiently and redevelopment in the Downtown area is made more feasible. Beyond parking, a central facility could also play a larger role in the Downtown's transportation options by supporting car share, electric vehicle charging, bicycle parking, and shared micromobility such as e-bikes or kick scooters.

Recommendation	
Complete a feasibility study for a new parking and mobility facility in Downtown Castlegar to understand key objectives, outcomes, and needs.	
Timeframe	**Cost**
Immediate–Medium	$$$

Before undertaking detailed operational and capital planning, it is recommended that the City complete a feasibility study for a future mobility-focused facility. The feasibility study would focus on understanding the conditions necessary to support a parkade/mobility hub and investigating when and how the city could approach its eventual construction and operations. Build on the findings of the Downtown Parking Inventories, as previously recommended in this section, to connect existing and anticipated future parking conditions to the need for off-street parking supply and a range of mobility options in the community.

Some of the key elements to be considered in the feasibility study could include, but not be limited to:

- **Defining the facility** – Outlining the role a parkade/mobility hub would play in Downtown Castlegar, and how it would support a variety of mobility options that support a range of transportation, economic development, and environmental sustainability objectives.
- **Parking demand thresholds –** Identifying how the demand for other public parking resources, including both on- and off-street parking, could trigger the need for a parkade or create demand conditions under which a parkade would be viable.

- **Guidance on management and pricing** – Discuss the desirable governance structure to support Castlegar in successfully operating the parkade, along with possible approaches to construction and operations costs, such as priced parking. Examples of hourly or daily costs for parkade use are shown to the right. Other uses could also be considered as part of a parkade development, such as ground-floor commercial uses to maintain a pedestrian-scale streetscape and support economic development and revenue generation.

Comparative Parkade Parking Rates

Community	Parking Rate
Nelson	$8 / day
Nanaimo	$1 / hour
Kelowna	$1.25 / hour
Victoria	$2.50 / hour
Kamloops	$1 / hour
Prince George	$1 / hour

- **Possible locations** – The hub's location would be a critical consideration to ensure that the facility is integrated with urban design objectives while being suitably located to allow users to access destinations throughout the Downtown area. Consideration could also be given to whether an underground or aboveground structure is preferable.
- **Costs and funding strategies** – Understanding the capital and operational costs at a high level is crucial to inform decision-making for future investment in a parkade facility. Strategies to cover costs should also be considered, with options such as priced parking, taxation, and cash-in-lieu of parking collections (refer to Recommendation 4).
- **Connection to on-street parking regulations** – Developing a parkade should be linked to other public parking objectives and regulatory outcomes. For example, a parkade could primarily reduce pressure on on-street parking, allowing for other curb uses, such as active transportation, curbside patios, or short-term uses, such as passenger loading.
- **Development Regulations** – Identify how the approach to development regulations may change. This may include leveraging cash-in-lieu to help establish funding for a future facility, adjusting off-street parking supply rates to reflect the presence of a future shared public parking facility, and updating sustainable transportation regulations (i.e., bike parking, trip-end facilities).
- **Alternatives** – The feasibility study could also explore opportunities for the City to increase parking supply and support new mobility options without building a new facility. The Downtown Area Plan, for example, supports exploring the purchase of large and underutilized private parking lots for the City to assume greater responsibility for off-street parking provision or as redevelopment opportunities. Similarly, if a focus on sustainable mobility is desired, developing public end-of-trip facilities and long-term bicycle parking

areas in a separate facility could also be considered and is supportable through CIL contributions.

RECOMMENDATION NO.16

Expand internal capacity for public parking management.

Staff Capacity

Staffing for public parking management is vital to ensuring effective oversight and implementation of policies and regulations. As Castlegar grows and further pressure is placed on existing resources, the City should consider adding staff capacity to support ongoing enforcement and monitoring of public parking.

Curbside management enforcement activities ensure policies and regulations are followed, optimizing public space use and enhancing user safety. These activities could include monitoring compliance with parking restrictions, managing loading zones, and ensuring that designated areas for transit, bicycles, and pedestrians are respected.

Recommendation	
Consider expanding staff and technological resources to undertake, analyze, and enforce parking and curbside-related strategies in Castlegar, including seasonal and full-time staff.	
Timeframe	**Cost**
Immediate–Long	$$$

Effective enforcement deters violations and reinforces the legitimacy of public parking management strategies, fostering public trust and cooperation. Without consistent enforcement, many of the strategies that Castlegar could pursue will not achieve their desired outcomes. Additionally, clear communication about enforcement policies and their rationale can help educate the community, ultimately leading to greater adherence and a more organized curbside environment.

Technological Capacity

Along with expanding enforcement staffing, the City should consider how new tools such as License Plate Recognition (LPR) and other new technologies can support efficient enforcement in Castlegar. As previously discussed, other communities have also found innovative ways to collect and monitor data, such as capturing images with drones over urban centres to catalogue parking occupancy. Regardless of the best option for Castlegar, new tools and technologies typically require time to train staff and test implementation, which should be considered before procurement.

Similarly, organizing and maintaining parking and curbside-related data is important to ensure that information remains current and usable.

RECOMMENDATION NO.17

Create a parking and curbside management monitoring program.

Many of the strategies for public parking management rely on the regular collection of data to support understanding existing conditions and identify trends that could require City intervention. A structured monitoring program will provide valuable insights to ensure Castlegar's parking policies and regulations remain responsive to growth and changing mobility patterns. New strategies could be useful if monitoring reveals changing parking and curb use demand patterns and increased pressure.

Regularly monitoring parking is essential to establish baseline and comparative datasets to make informed decisions about future parking and curb space needs. Analysis of this data can help determine when adjustments to parking policies or infrastructure are necessary.

Recommendation	
Develop and implement a formal parking monitoring program to regularly collect, maintain, and analyze parking and curbside-related data to inform decision-making.	
Timeframe	**Cost**
Immediate–Long	$$$

Some of the key data to collect, as previously discussed in the context of the Downtown Parking Inventories, should include:

- **Parking Occupancy** – Tracking how full on- and off-street parking areas are at different times of the day, week, and seasons.
- **Parking Turnover** – Measure how long vehicles stay parked in specific locations and how frequently spaces are used.
- **Curbside Use** – Observing short-term uses, such as commercial loading zones, to understand how and when these spaces are used.
- **Citation Data** – Tracking enforcement information of parking-related or other traffic and highway regulations. Bylaw infractions can help understand where gaps in public knowledge may exist or if regulations could be updated to reflect pressures.
- **Vehicle Registration Data** – Regularly request and analyze vehicle registration data from ICBC to estimate off-street vehicle parking demand for various residential development types, tenures, and locations.

- **Parking Variances** – Tracking information on parking variances received and/or granted by Council to understand where off-street parking regulations may be challenging for new development.
- **Cash-in-Lieu of Parking Collections** – Track funds from cash-in-lieu of parking provisions to support proper accounting and understand how CIL is used in Castlegar.

Data Collection Options

- Preparing a **GIS-based curbside inventory**, either of key growth areas or city-wide, to identify where specific curb use restrictions are located and the available space for on-street parking, loading, and other uses, which can serve as efficient data collection.
- Simple tools, such as the **Example Spreadsheets** provided in **Appendix A**, can efficiently record and analyze parking occupancy and turnover data.
- Engage City staff or **summer interns** to assist with data collection and analysis. Many municipalities access **grant funding** to support these positions and activities.
- Collaborate with local businesses, community organizations, and institutions to gather qualitative feedback on parking trends and challenges.

As discussed above, monitoring and data collection are a continual process to understand the impacts of decision-making and community changes over time. To align with the community's diverse objectives, it is recommended that data collection take place at some or all of the following instances:

- **For a comprehensive understanding, annual data collection is needed to monitor trends over time, ideally conducted during peak and off-peak seasons**. Key locations for data collection should include Downtown Castlegar and neighbouring Downtown Residential areas, the Uptown Node, and areas along key corridors such as Columbia Avenue. Staff may identify other priority areas depending on development trends and qualitative observations.
- **Biannual reporting** to assess changes in parking demand patterns and alignment with Official Community Plan (OCP) updates.
- **Major development may require monitoring (e.g., if an informal parking lot is redeveloped** downtown). This will help the City understand how reduced parking impacts parking patterns.
- **Threshold-based reviews** – Consider policy changes if parking occupancy or curbside utilization rates consistently exceed a set threshold (e.g., 85% occupancy at peak times).

7.0 IMPLEMENTATION ROADMAP

To support a coordinated approach to implementing parking and curbside management in Castlegar, an initial five-year roadmap is proposed in **Table 6** below. The roadmap suggests where the City can focus efforts and shows the connections between many of the recommendations presented in **Section 6**.

Table 6. Parking and Curbside Management Implementation Roadmap

Implementation Roadmap
Year 1–2 – Initial Implementation
• Complete 'quick-win' off-street parking and curbside regulatory updates that address key gaps or opportunities for proactive improvement in regulation, as described in this report. • Undertake parking inventories as a baseline understanding and complete initial regular monitoring of key indicators, beginning in the Downtown and Uptown areas. • Begin building staff and technological capacity to support parking and curbside management.
Year 3–4 – Parking Management Action Plan
• Complete detailed study of Downtown and Uptown parking management to identify specific objectives and actions, including the feasibility of a parking structure and associated changes to development regulations (e.g., parking supply rates, cash-in-lieu) and on-street parking management. • Undertake necessary regulatory and infrastructure investments to create a parking management system that supports land use and mobility objectives.
Year 5 – Review and Adjust
• Reflect on the effectiveness of the parking management framework, including overarching objectives. • Complete targeted review of the effects of regulatory updates based on monitoring outcomes. • Outline required adjustments to regulations to adapt to emerging trends and consider new regulations, as required.

8.0 CLOSING

The Parking Assessment and Regulatory Review identifies opportunities for the City of Castlegar to refine its approach to managing on- and off-street parking, and use of the curb in the Downtown and Uptown Nodes. To continue to support the land use and transportation directions of the Official Community Plan, parking and curbside management are important elements of the community's future.

This report envisions proactive steps that the City can take to develop a parking management framework that can, in turn, inform regulations, guidelines, processes, and resources to develop a robust and consistent parking and curbside management approach as Castlegar grows. New opportunities and challenges in these areas will likely arise as Castlegar moves towards its vision, where a resilient system for staff and Council to rely upon can help navigate and manage change.

Potential next steps for staff and Council include:

- Consider the recommendations of this report and identify priority actions for Castlegar that are in line with or supplementary to the Implementation Roadmap.
- Gradually implement regulatory updates to the Zoning Bylaw and the Traffic and Highways Regulation Bylaw.
- Identify potential funding sources to support data collection and monitoring activities.

APPENDIX A

EXAMPLE PARKING COUNT FORMS

CASTLEGAR

City of Castlegar Downtown Parking Study

Occupancy Data Collection Sheet

URBAN SYSTEMS

					Weather:	
Date:	Start & End Time:				Observer:	
Street	Block		Side of Road (N,S,E,W)	# of Parking Spots	Parked Cars	Notes
	From	To				

CASTLEGAR

City of Castlegar Downtown Parking Study

Turnover Data Collection Sheet

URBAN SYSTEMS

Weather:	
Date:	Start & End Time:
Observer:	

Street	Block		Side of Road (N,S,E,W)	License Plate No. (First 3 digits)						Notes
	From	To								