

CURB ACCESS & PARKING PLAN



A COMMITMENT TO TRUTH AND RECONCILIATION

The City of North Vancouver acknowledges that it is situated on the ancestral, traditional, and unceded territories of the Sḵw̱x̱wú7mesh (Squamish) and səliiwətał (Tsleil-Waututh) Nations. These Nations remain deeply connected to their lands and waters and, as we build community here, it is critical we acknowledge this has been their home since time immemorial. We thank them for sharing this land with us and for their ongoing partnership with the City on shared priorities.

The City is committed to Truth and Reconciliation. We humbly recognize that we need to learn the truth about Indigenous history in Canada and are at the beginning of our journey of reconciliation with First Nations.

The City will work collaboratively, cooperatively, and respectfully with the Sḵw̱x̱wú7mesh (Squamish) and səliiwətał (Tsleil-Waututh) Nations on policy, projects, programs, and services at the City and incorporate the Truth and Reconciliation Commission’s Calls to Action, support the principles and objectives of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), and the Province of British Columbia’s Declaration on the Rights of Indigenous Peoples Act (DRIPA).

APPRECIATION AND THANKS

This Plan has been developed with input and support from many residents, businesses, visitors, City staff, and interest holders. The City is grateful for everyone’s efforts and time.

CONTENTS

- Curb Access and Parking Plan - At a Glance..... 3
- Experiences Parking and Accessing the Curb 4
- Plan Objectives 6
- Managing Curb Space..... 7
- Curb Access and Parking Policy Changes..... 9
- Curb Space Allocation Framework 14
- Monitoring Approach 17
- Appendix 1: Current and Future Curb Space Composition 20
- Appendix 2: Curb Space Occupancy and Analysis 21

CURB ACCESS AND PARKING PLAN - AT A GLANCE

The Challenge

In recent decades, the City of North Vancouver has grown dramatically, particularly near our vibrant commercial streets and within the Regional City Centre. Our transportation network has also evolved, with more transit priority lanes and mobility lanes, to provide people with safe, reliable, and sustainable ways to travel.

Meanwhile, our approach to managing curbside access and parking is not fully serving the people and businesses who need it most. The City has used its current approach for many decades, successfully supporting various main streets and residential areas; however, these areas are becoming increasingly complex, particularly with new curbside needs and increased demand for this space. An updated approach is necessary to adapt to these changes.

Our Plan

This plan confirms the City's objective for accessing curbside space, includes policies for curbside space needs today and in the future, provides a clear guide for allocating curbside space across the City, and outlines a framework for managing curbside space informed by demand.

It includes policy direction not only for general vehicle parking, but also for loading zones, accessible parking, and special use parking.

EXPERIENCES PARKING AND ACCESSING THE CURB

Staff frequently receive feedback about parking from community members and businesses. Each individual that travels in the City has different uses and needs for curb space.

In many cases, our curbs are used for mobility purposes, with transit priority lanes or mobility lanes creating safe and reliable ways for people to travel sustainably. In certain locations, there are short-term loading spaces to safely pick up and drop off goods or passengers. We have new curb space needs with bike-share parking, and taxi, ride-hail, and car-share spaces. We also have dedicated police and fire zones to ensure emergency services are efficient.

Beyond transportation uses, curb space is used for public place-making, with parklets, plazas, and patios providing spaces to linger and enjoy the City, while also providing economic benefit for businesses.

We undertook comprehensive community engagement to understand curb space challenges, and to discuss proposed solutions.

From feedback received through both phases of engagement, it is clear that community members recognize the need to address the current parking and curb space challenges in the city. These challenges cannot be addressed by a single change but must combine a variety of approaches to create an efficient system of curb space management. A number of key takeaways addressing this have been identified following Phase 1 and 2 engagement:

- Pay parking does not have universal support, but is recognized as an effective method of managing parking demand in busy areas.
- There is understanding that modernizing the Resident and Visitor Parking Policy is necessary, with support for a fair approach that maintains resident priority.
- There is support for more short-term loading zones to accommodate pick-ups, drop-offs, and quick deliveries.
- There is demand for more accessible parking spaces for people with disabilities, particularly in busy areas.
- There is recognition that special-use parking can provide benefits, and that it should be carefully considered before adjustment and/or implementation.
- Ongoing communication is critical for any changes to parking policy and regulation on our streets.

Balancing curb space demand is complex. Policy changes in this report are in direct response to the challenges being experienced by North Vancouver residents and businesses today, and those expected in future. Engagement Summary Reports can be found online at www.cnv.org/curb.

MEETING PARKING NEEDS OF TODAY AND TOMORROW

As the City grows and develops, there is a need to balance the supply and demand for curb space. Staff continue to develop policies, programs, and infrastructure to encourage sustainable modes of transportation, reducing the demand for car parking.

Where parking management is required, a range of tools is available, including time-limited parking, resident exemptions, and paid parking (using a price that influences demand to better match supply).

Many other municipalities actively manage curb space to meet transportation, business access, and livability goals (*see examples in the sidebar*). This is particularly the case as demand for curb space increases, recognizing that supply of this space is finite. Everyone – drivers, transit riders, cyclists, pedestrians, business owners, residents, and visitors – benefits when curb space is managed effectively and creates space for a range of needs.

The Curb Access and Parking Plan will allow more people and businesses to reliably access curb space when and where needed.

How nearby cities are managing curb space needs:

District of North Vancouver and **District of West Vancouver** have both recently implemented pay parking in areas of high demand.

City of Vancouver manages parking through time-based and cost-based tools, with resident permits to support neighbourhood needs.

City of New Westminster uses a similar combination of tools to CNV, and is actively reviewing parking management alongside anticipated population growth.

City of Coquitlam's City-wide Parking Review is updating on-street and off-street parking policies for effective curb space management.

District of Squamish is developing a phased parking management implementation plan including on-street paid parking and pay parking at key attractions.

Curb Space and How We Move¹

- **97%** of usable curb space in the City is dedicated to private vehicle parking
- **37%** of our trips are made without a private vehicle, by walking, cycling, or transit
- **52%** of survey respondents indicated they were unable to find parking in busy commercial areas, such as Lower and Central Lonsdale
- **40%** of our off-street public parking spaces are available in Central and Lower Lonsdale, even during the busiest times of day

¹ Data points are from CNV internal analysis and data collection, 2023 North Shore Transportation Survey, and the Curb Access and Parking Plan Phase 1 & 2 Engagement Survey responses.

PLAN OBJECTIVES

The policy changes included in this report are designed to meet the following plan objectives:



Improve the reliability of finding parking in high-demand areas of the City



Update our parking policies to promote fairness, so more people can access curb space when and where needed



Support businesses through improved curb space management

These objectives align with those in other City policies, plans, and strategies, including our Official Community Plan, Mobility Strategy, and Council Strategic Plan.

What if we continue to manage curb space the same way as we have in the past?

The City's existing curb space policies were developed in the 1990s to navigate issues of the time. These dated approaches limit the ability for staff to manage the challenges of today. Without changes to how we manage curb space, we anticipate:

- More congestion, pollution, and lost time spent circling for parking;
- Safety and congestion issues as deliveries and drop-offs struggle to find dedicated space;
- Shortage of accessible parking for people with disabilities;
- New housing with limited off-street parking in some areas, increasing pressures on-street without demand management;
- Many residents continuing to not be eligible for on-street parking near their homes in permit parking areas;
- Lack of reliable parking turnover in front of businesses, frustrating patrons and impacting business; and
- Busy residential streets near commercial areas struggling to manage competing demands.

MANAGING CURB SPACE

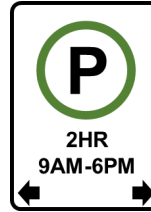
Parking Signage and Regulations

The City can manage curb space in various ways, depending on needs and context for a specific neighbourhood or corridor.



Unrestricted parking

In residential neighbourhoods outside of the Regional City Centre, the majority of curb space is unrestricted parking (no signage). Vehicles are allowed to park in these areas for up to 72 hours.



Time-limited parking

Time-limited parking is applied as a tool to increase vehicle turnover in busy areas.



Time-limited parking except with permit

In areas adjacent where there is high demand for curb space, we have several areas with resident permit parking. Permit parking helps residents find available spaces to park near their homes.



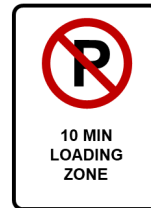
Pay parking

The City manages high-demand parking through pay parking, which promotes greater turnover to benefit more people.



Pay parking except with permit

Pay parking except with permit maintains resident priority on residential blocks adjacent to commercial areas.



Loading Zones

Loading zones provide a dedicated space for vehicles to safely load and unload passengers and goods.



Accessible Parking

These spaces provide priority to people with an accessible parking placard.

Curb Space Occupancy

Curb space occupancy refers to how many spaces on a block are occupied at any given time.

If 10 vehicles occupy 10 spaces, the curb is 100% occupied. If 6 vehicles occupy the same space, the curb is 60% occupied.

If occupancy is consistently above 85%, this generally means it is difficult to find a space to park. Many cities use this threshold as the marker for when to use tools to manage curb space. Conversely, if occupancy is observed below 60%, this means there are opportunities to relax tools and policies so there is an increase in curb space use.

Many of the policy changes in the following sections outline how the City will maintain occupancy between 60% and 85%, so there are a few spaces available on every block.

Current state - Occupancy is at or near 100%, so there is rarely a space available



Future state - Occupancy is managed to be < 85%, so there are always a few spaces available



Figure 1: Managing demand of current and future curb space occupancy

Curb Space Equity and Affordability

Our current parking management system allows vehicles to park for free, or for a small fee. This has led to consistently high occupancy in many neighbourhoods, resulting in vehicles that are actively circling for parking and contributing to congestion on our streets. There is an associated impact on everyone's time, along with environmental impacts.

Unpriced parking results in households that drive less (or not at all) subsidizing those that drive more. The current economic structure we follow is regressive, especially when considering vehicle ownership increases with income.² User-pay parking is fairer than financing parking facilities indirectly through taxes, where costs are borne by non-users.

This plan includes equity and affordability considerations through that will continue to balance community needs and demand management.

² 2023 North Shore Transportation Survey

CURB ACCESS AND PARKING POLICY CHANGES

The five parking policy changes are based on best practices in curbspace management, technical analysis, engagement feedback, and meeting plan objectives. The focus of these policies will occur in the curbspace lane and associated changes to regulatory signage.

Change 1: Expand pay parking in high-demand areas to increase parking turnover and availability.

There is a finite supply of curbspace near commercial areas. Parking in many of these locations exceeds 85% parking occupancy, resulting in vehicles being unable to reliably find a space to park. While time-limited parking was effective at managing demand decades ago, they are no longer appropriate for the demand we are seeing today, and have led to compliance and enforcement challenges. The following tools are available to support the implementation and on-going effectiveness of pay parking.

Current State	Anticipated Future State
Observed occupancy tends to be near 100%, resulting in significant circling for an available parking spot.	Demand is regulated through pricing, ensuring that each block hits a targeted occupancy around 85% with a few spaces per block available at any given time.

Apply demand-based parking management.

The City will apply a demand-based management system to ensure parking spaces are appropriately utilized. This means areas with pay parking can be reviewed annually (or more frequently) based on occupancy, and pricing can be adjusted to manage utilization.

Enable digital pay parking to make payment convenient and seamless.

Encourage more payment-by-phone transactions to occur through intuitive street signage. Seek to install pay stations every 100m within pay parking zones, balancing access with street clutter.

Apply transitional reduced rates for quick stops at the curb.

An initial short-term reduced rate can be implemented for on-street pay parking to encourage more frequent turnover, applying a graduated increase in rates the longer the stay. This rate can be applied to areas where pay parking is being introduced for a transitional period until regulations are understood and a regular rate can be phased in.

Direct longer-term stays to off-street parking spaces.

In many cases, curbspace provides prime convenience compared to off-street parking lots. However, current pricing and management suggests the opposite to be true. Best practices encourage prime on-street spaces to be reflected as such through pricing, while directing longer-term stays off-street with more affordable rates. While it may take time, the City and its partners need to begin the process of bringing on-street and off-street pricing into correct alignment for this type of parking behaviour to occur.

Change 2: Update the Resident & Visitor Parking Policy by expanding the geographic coverage, and adjusting the eligibility criteria and costs.

The City's Resident & Visitor Parking Policy is now 30 years old and no longer aligns with the types of housing and mixed-use buildings being built, nor can it keep pace with the rate of growth and changing curb space demands in the City. The following changes will bring the policy in line with project objectives.

Current State	Anticipated Future State
Resident Exempt (RE) permits are available to residents living in housing with three or fewer units and select older multi-family buildings. Many residents are ineligible for permits despite needing access.	Regardless of housing type, parking permits are available for purchase by residents who need them. Permit rates will reflect demand for the space and be adjusted as needed to balance demand and supply.

Enable equitable parking permit eligibility.

As the City continues to grow, more people expect access to curb space. All residents within permit zones will be eligible for parking permits, regardless of housing type or tenure. Permit pricing will be adjusted annually to a fee that reflects demand for each permit zone.

Include tools that discourage purchasing multiple permits per household.

The City will establish a fee and policy structure to discourage multiple parking permits per addressed household. This is to encourage use of off-street parking, increase sharing of vehicles within households, and increase the use of other modes, including transit, cycling, car-share, and ride-hailing.

Extend time of day restrictions in resident permit parking areas.

Residents in many parts of the City are finding it difficult to find parking near their homes outside of daytime hours. Most of our existing time-limited resident-exempt permit areas end at 6PM. The City will extend this end time to 9PM to maintain evening priority for residents with permits.

Update the process for expanding and removing resident permit parking.

The City will install time-limited resident-exempt permit parking on residential streets that consistently have peak occupancy greater than 85%. The City will also update the petition process so it is easier for residents to request expansion or removal of resident permit parking, which will use occupancy thresholds of 85% needed for expansion and 60% required for removal or reduction of permit parking areas.

Replace "Resident Permit Only" areas with resident-exempt permit parking areas.

The City currently has two types of parking permits, Resident Permit Only (RPO) and Resident Exempt (RE) permits. RPO reserves parking for permit-holders only, and does not allow others to use the space. In the future RPO permit areas will be phased out. RE permits exempt permit holders from a posted time limit (e.g., 2 hours) while non-permit holders can park up to the time limit posted. Moving forward, time-limited RE permit parking areas will be expanded to maintain priority for residents in busy neighbourhoods, while not privatizing public road space for specific individuals. This will also include using pay parking except with permit in mixed commercial and residential neighbourhoods.

Transition to a neighbourhood permit zone approach.

Currently, permit areas are implemented on a street-by-street approach. A neighbourhood permit zone approach allows residents to find parking nearby, even if no space exists immediately in front of their homes. As the number of units and residents increases throughout the City, we need to create permit zones that allow for a greater number of people to participate in the permit program, while also managing demand.

Change 3: Expand short-term loading zones for the efficient and safe movement of people and goods.

The movement of people and goods has changed significantly since our streets were originally designed. There are substantially more deliveries occurring across the City, thanks to the onset of e-commerce. There are also more ride-hailing trips being taken than ever before, requiring more short-term spaces to pick up and drop off passengers.

Current State	Anticipated Future State
Demand exceeds supply of loading zones, resulting in double parking where vehicles park in general travel lanes, creating unsafe conditions.	More loading zones for people and goods – in both commercial and residential areas – reducing double parking and improving safety.

Expand and manage short-term loading zones to facilitate safe loading and unloading.

Sufficient loading zones are critical for improving the safety of our streets. It is common to see delivery vehicles parked in general traffic lanes (i.e., double parking) or mobility lanes, which creates unsafe conditions for all travelers. Adding short-term loading zones where demand exceeds supply will allow for more safe and efficient deliveries to take place. If demand continues to exceed supply following expansion, a user pay system can be explored similar to how pay parking is used for managing general vehicle demand.

Design for longer-term loading and unloading of goods to be undertaken off-street.

Long-term loading should occur off-street in dedicated locations considered in building design, leaving on-street spaces for short-term deliveries and higher turnover.

Manage congestion from ride-hailing vehicles through pricing.

Following the ride-hailing regulatory framework that Council endorsed in November 2019, update the Congestion and Curbside Management (CCMP) fee to manage curb space demand and further encourage use of transit, walking, and cycling during peak curbside demand periods. Maintain the 50% discounted fee for zero-emission vehicles and the 100% discounted fee for accessible ride-hailing vehicles.

Change 4: Provide more accessible on-street parking spaces for people with disabilities in close proximity to shops, services, and key destinations across the City.

There are over 3,000 accessible parking permits issued in North Vancouver by the Social Planning and Research Council of BC (SPARC). Demand for accessible parking spaces across the City continues to exceed supply, particularly near commercial streets. On-street accessible parking spaces are sited and designed to accommodate a range of accessibility challenges as best they can. To use an accessible parking space, vehicles must display a valid SPARC parking permit.

Current State	Anticipated Future State
Accessible on-street parking is sporadic and occupied most of the time.	Accessible parking is provided at regular intervals and turns over regularly.

Increase the supply of barrier-free accessible parking spaces through development processes.

There is ongoing demand for barrier-free accessible parking spaces that follow best practices for accessible parking space design. These spaces often require angled or perpendicular parking, which is rare for on-street parking in the City. Development processes are the best opportunity for increasing the supply of barrier-free accessible parking spaces, where curb configuration can be adjusted to accommodate these types of spaces.

Expand supply of priority accessible parking spaces near commercial areas.

The City can increase the supply of on-street priority accessible parking spaces. Priority accessible parking spaces still require a SPARC permit, and will be suitable for most (but not all) users. Barrier-free accessible parking design is difficult to fully accommodate in curbside parallel parking spaces. Where possible, these spaces should exist on the City's east-west blocks, recognizing that many north-south blocks are on a steep grade.

Dedicated accessible parking spaces (priority and barrier-free) will be subject to time limits in most locations to manage demand. These spaces will not be subject to pay parking in the near-term, and will be reviewed on an ongoing basis to determine if pay parking is required to manage demand. SPARC permit holders will be required to adhere to sign requirements in pay parking areas, while being exempt from time limits in resident permit parking areas.

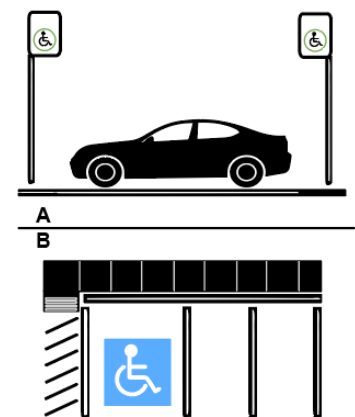


Figure 2: Conceptual diagram of A) priority accessible space, and B) barrier-free accessible space

Develop and maintain an online parking map with all accessible public parking spaces in the City.

This map will include data on features of each space such as whether it is a priority accessible parking space or a barrier-free accessible parking space. Additional details on the map will include time limits (if they exist), the side of the street the space is located on, whether it has side-loading/rear-loading wheelchair access, and a picture of the space.

Change 5: Enable unique special-use parking to ensure a wide range of curb space needs are achieved.

There are many different needs for curb access. The following actions can increase space efficient ways to travel, contribute to local economic development, and reduce our carbon pollution and impact on the environment.

Current State	Anticipated Future State
Most unique special-use parking needs are underserved (e.g., car-share, bike parking, shuttle buses, etc.).	More space for special-use parking needs.

Enable the use of more car-share through curb use regulations.

Car-share vehicles occupy curb space for shorter durations than private vehicles because multiple drivers can book and use them throughout the day. This means spaces become available more frequently. Car-share is a lower-cost transportation alternative to car ownership.

The City will align its regulations with nearby cities (e.g., Vancouver) to allow one-way car-share vehicles access to pay parking stalls, while maintain existing allowance in permit areas.

Investigate opportunities for more shuttle bus parking.

Tour bus parking is needed in close proximity to attractions. Tour buses and school buses are effective at moving many people in one vehicle, and contribute to local economic development.

Maintain and monitor curb space for on-street bike parking.

In some parts of the City, there is insufficient space for public bike parking infrastructure (racks, bike lids, lockers) to be located on the sidewalk. Similar to the North Shore's current e-bike share parking spaces found on-street, dedicated bike parking in the curb lane (of local, collector, and minor arterial streets) can be an efficient use of space, with several bikes being able to occupy the same amount of space as one vehicle.

Maintain public EV charging infrastructure at specific hubs.

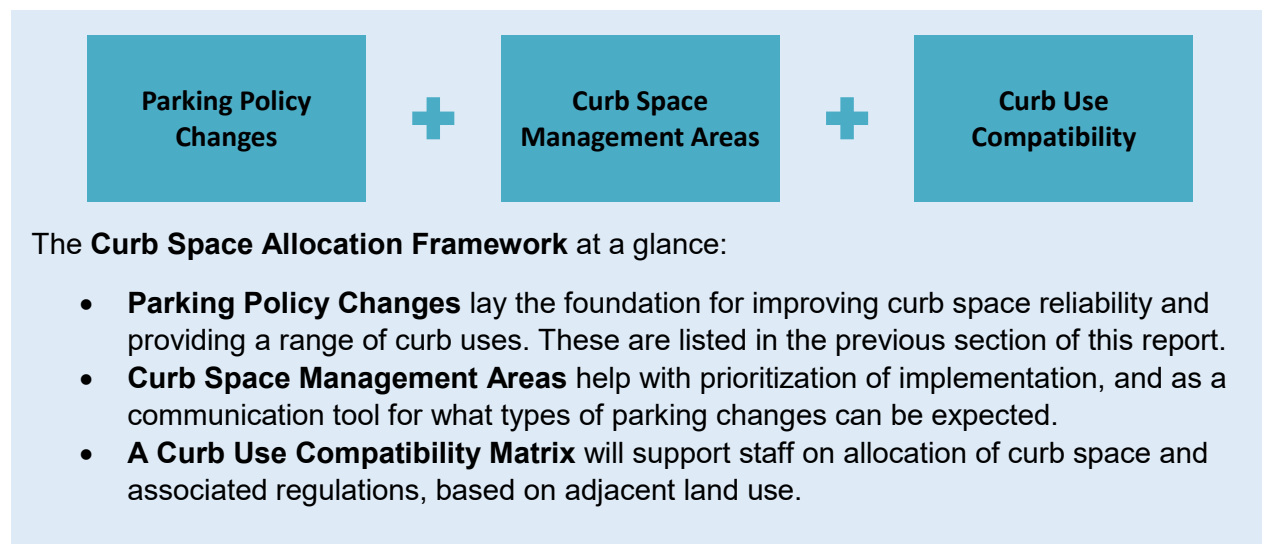
The City owns and operates a public charging network of Level 2 and DC Fast Charging stations across the City to support residents without access to home or workplace charging, as well as visitors to the City. A number of private businesses and other organizations also provide charging. The City will continue to oversee its public charging network alongside private operators to support the transition to zero emission vehicle adoption, as outlined in the CNV Electric Vehicle Strategy (2018).

Continue to implement curb access and parking actions from the City's Safe and Active School Travel Program.

Schools often have unique curb space demands, where most travel demand is condensed to a short window in the morning and afternoon. Each location is planned, in coordination with school administration, to improve safety for children, families, and neighbours.

CURB SPACE ALLOCATION FRAMEWORK

The Curb Access and Parking Plan has employed a data-driven approach to allocate curb space uses across the City. The City recognizes that demands for curb space will continue to change over time, and have developed accordingly a forward-thinking and fair approach. This process has formed a curb space allocation framework that will be used to provide ongoing direction on how parking regulations are adjusted over time, to continually meet plan objectives.



Curb Space Management Areas

Curb space management areas have been created based on parking occupancy observations and land use demand mapping (see Appendix 2 for more detail). Each management area has general characteristics but is not limited to a specific land use type.

- Management Area A encompasses the most densely developed blocks of the city. This includes mid- and high-rise apartment buildings, retail goods and service establishments, office space, and light industrial use. Curb space in this area is in highest demand and has the most diverse set of uses.
- Management Area B corresponds to medium density blocks, representing a transition zone between higher and lower density parts of the City. Adjacent block faces contain a mix of townhomes, row houses, mid-rise apartment buildings, office space and service establishments, and light industrial use. Curb space in this area is in high demand with several different uses.
- Management Area C covers all other areas. This area is generally lower density and includes a mix of single and multi-family dwellings, small apartment buildings, office space, and light industrial use. Curb space in this area is generally in lower demand and has less variety in uses.
- Special Study Areas are also included on this map to indicate neighbourhoods where there is comprehensive community development in progress, or planned for the near future. This includes Capilano Mall and Harbourside Waterfront Development areas.

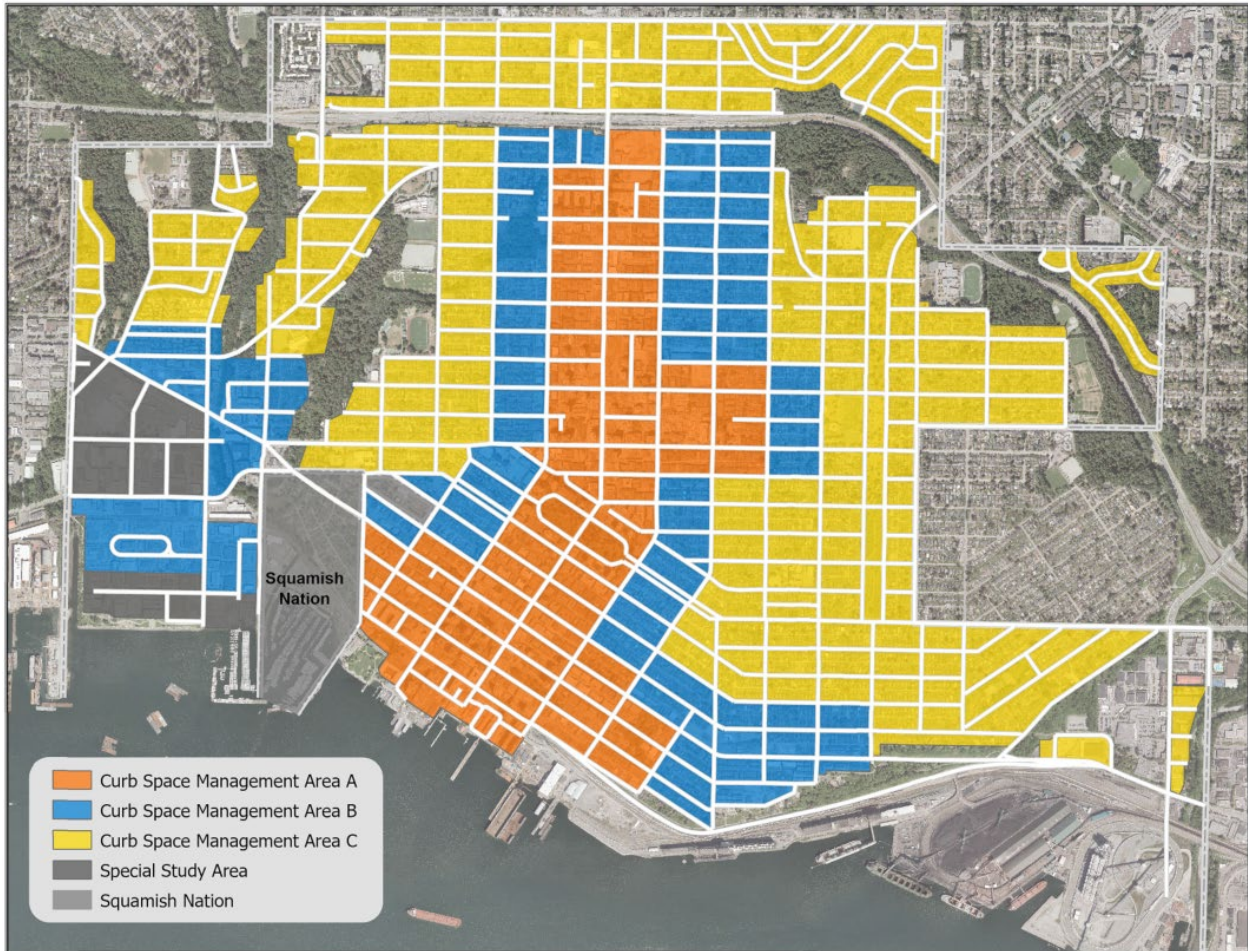


Figure 3. Curb space management areas.

These curb space management areas have been developed for long-range implementation prioritization. A subset or combination of management areas may be considered for initial implementation to address commercial and residential parking needs.

Curb Use Compatibility

A compatibility matrix has been developed to guide staff on the allocation of curb space and associated signage regulations. Curb space is a limited resource, and trade-offs will continue to exist.

The matrix includes uses that occupy the majority of curb space: short and long-term general parking, pick up and drop off zones, commercial loading and delivery zones, and accessible parking. Additional curb space uses are listed in the special considerations callout below where there are exceptions to this matrix.

Adjacent land use in the matrix is divided into four types: lower density residential, higher density residential, commercial, and industrial. In mixed-use neighbourhoods and corridors, a mix of curb space uses are expected to be applied. Similarly, where a block transitions from one dominant land use to another, curb use is also expected to be adjusted. Additional considerations for curb use compatibility include local need, safety, and access.

		On-Street Curb Space Use				
		Short-term Parking	Long-term Parking	Pick-up & Drop-off	Loading & Delivery	Accessible Parking
Adjacent Land Use	Lower Density Residential					
	Higher Density Residential					
	Commercial					
	Industrial					

Legend
Low Compatibility
Moderate Compatibility
High Compatibility
Very High Compatibility

Figure 4. Curb use compatibility matrix

- **Lower Density Residential** curbs have a lower diversity of needs. The majority of curb space will be dedicated to long-term parking (with or without resident parking permits, depending on demand). Short-term loading zones or accessible parking spaces may also exist depending on local demand.
- **Higher Density Residential** curbs serve many uses. To manage the diverse needs of many users, a variety of curb space regulations will be applied. This includes short- and long-term parking, short-term loading zones, and accessible parking spaces. Commercial loading zones may also be applied in some cases.
- **Commercial** curbs also serve many uses. These tend to be busy areas with lots of short stops at the curb. As such, short-term parking, pick-up and drop-off zones, and commercial loading zones can all be expected.
- **Industrial** curbs accommodate a range of needs. Employee and customer parking is often in high demand, and while long-term loading typically occurs off-street, there may be need for on-street spaces as well.

Special Considerations

While the curb space allocation framework takes into account the majority of uses on our streets, there are several unique instances and exceptions that are worth noting:

- **Police and Fire Zones:** The City will continue to install and maintain police and fire zones on our streets where there is a direct need for emergency services and access.
- **Bus Priority Lanes:** Bus priority lanes are undertaken through specific corridor studies and in coordination with TransLink. While existing curb space use is considered through these studies, these lanes are an exception to the allocation framework.
- **Mobility Lanes:** Similar to bus priority lanes, mobility lanes (for use by bikes, scooters, and other devices) are undertaken through a separate project process which considers the development of a complete network. Learn more on [CNV's Mobility Network page](#).
- **Parklets and Patios:** Parklets and patios occupy curb space to activate and expand our public realm. Parklets and patios will continue to be monitored, and updates to our private outdoor patio dining application will look to better analyze impacts on vehicle travel times.
- **Additional unique parking uses:** Other unique uses occupy <1% of curb space in the City. This includes parking for tour buses, taxis, car-share, and bicycles. These will continue to be considered on an ongoing basis as demand arises.

MONITORING APPROACH

Parking Management for General Use Parking

The City will follow best practices for managing general use and permit parking, seeking to maintain curb space occupancy at less than 85% for peak periods (midday weekday), so there are a few spaces available on any given block (see Managing Curb Space on page 7).

On streets where observed occupancy exceeds 85%, additional tools will be used to manage demand. Alternately, on streets where occupancy is less than 60%, management will be relaxed, as there is sufficient capacity and less of a need for pay or permit parking.

The installation and monitoring of loading zones, accessible parking, and other special use parking will be incorporated through policy changes outlined in this plan.

Ongoing Monitoring and Adjustment

The primary objective of the monitoring program is to adjust types of parking, or associated rates, so that there are a few spaces available on every block. The following types of parking will be applied to blocks where parking occupancy is consistently greater than 85%.

- *Pay parking* is best applied in commercial areas to increase access for more vehicles near shops and businesses.
- *Pay parking except with permit* is best applied in mixed residential commercial areas. This provides residents with priority to park near their homes for the cost of a resident-exempt permit, and allows other vehicles to still use the space through pay parking.

- *Time-limited parking except with permit* is best applied on busy residential blocks. This provides residents with priority to park near their homes for the cost of a resident-exempt permit, and allows other vehicles to use the space for a time-limited period.
- *Time-limited parking (no exemption)* may continue to be applied in some situations where parking turnover is desired but without sufficient demand to require pay parking (e.g., schools, small commercial nodes).

Managing rates

Pay parking and permit rates will begin at a value selected based on a review of peer municipalities, existing curb space occupancy, and off-street parking rates in the City of North Vancouver.

If occupancy in a given zone is observed to be consistently greater than 85%, the rate for pay and permit parking in that zone will be increased the following year. If occupancy in a given zone is observed to be below 60%, the rate for pay and permit parking in that zone will be decreased. Specific rates for pay and permit parking, and their associated zones will be set out in the Fees and Charges Bylaw No. 9000.

If occupancy continues to be less than 60% for a permit or pay parking zone after three consecutive years of adjustment, the parking area will be adjusted or removed the following year.

Figure 5 provides an example of how parking management would apply in practice for a pay parking area. In this example, Block Example A and Block Example B are both priced at \$3.00 per hour. During observations, Block A is 100% occupied, while Block B is 40% occupied.

For the following year, based on existing occupancy observations, Block A's rate is raised to \$3.25/hr, while block B is reduced to \$2.75 an hour. The next round of observations show that Block A now has an occupancy of 80% and Block B is at 60%, both within target occupancy.

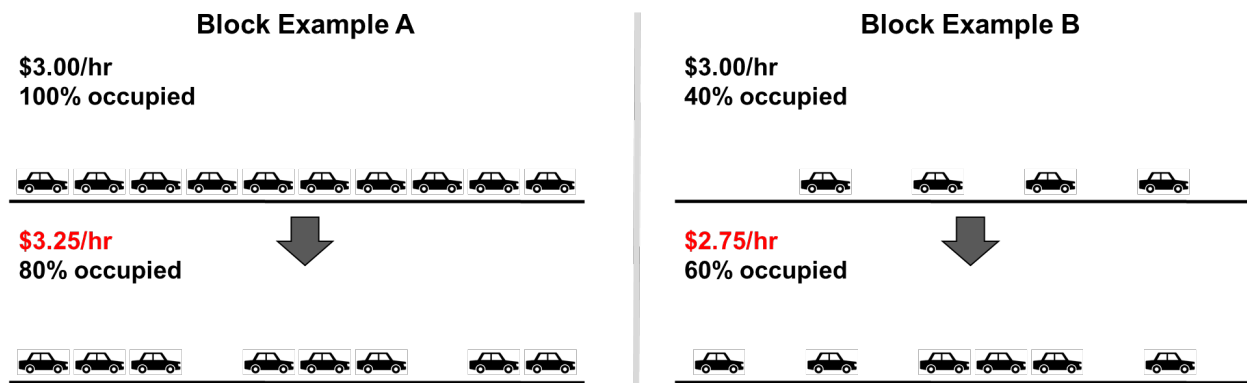


Figure 5. Demand-based parking management example

Special use parking (loading zones, accessible parking, car-share, etc.) will also be monitored for occupancy and compliance. Allocation of special use parking will be determined based on policy in this plan.

Occupancy Observations

Occupancy Observations

The purpose of occupancy observations is to identify peak consistent occupancy.

- Daytime observations will be based on the average occupancy reading of 3 observations undertaken between 9am-6pm.
- Evening observations will be based on the average occupancy reading of 2 observations undertaken between 6pm-9pm.
- Long-term construction will not be counted towards supply or occupancy.
- Vehicles parked illegally (e.g., in a no stopping zone) will not be counted. Only vehicles or motorcycles parked in a usable curb space section will be counted.
- Special-use curb space parking (e.g., loading zones, accessible parking spaces) will have occupancy observations undertaken separate from general use parking.

Ongoing Assessment

Ongoing assessment will include parking data collection, and review of management area boundaries. Public and interest-holder engagement is an important input for ongoing management of this program, and will be integral to the comprehensive assessment.

APPENDIX 1: CURRENT AND FUTURE CURB SPACE COMPOSITION

Existing and anticipated future usable curb space is shown in Figure 6 below. Usable curb space includes general use and permit parking (unrestricted parking, time limited parking, pay parking) and special use parking (loading zones, accessible parking, etc.). It does not include no parking and no stopping areas.

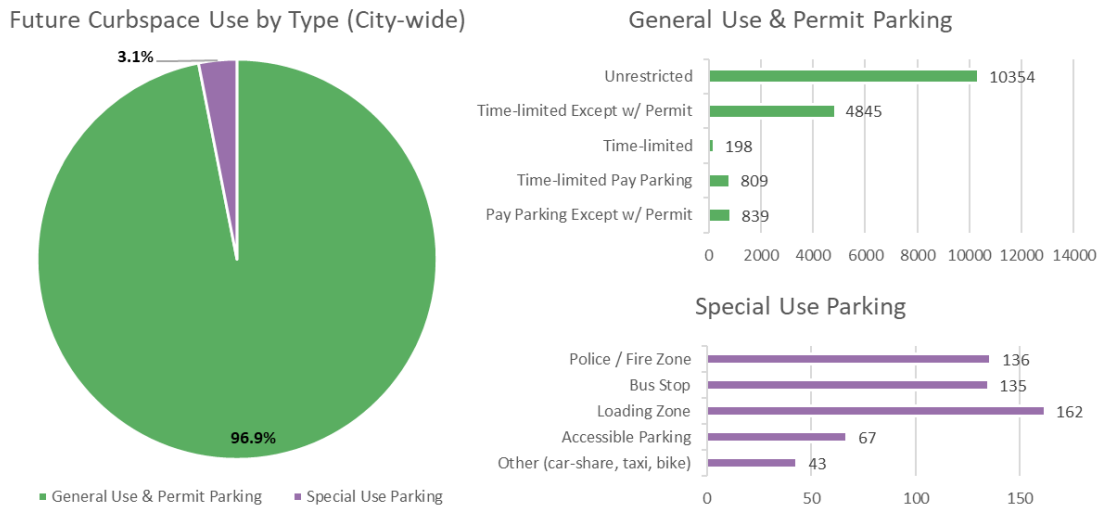
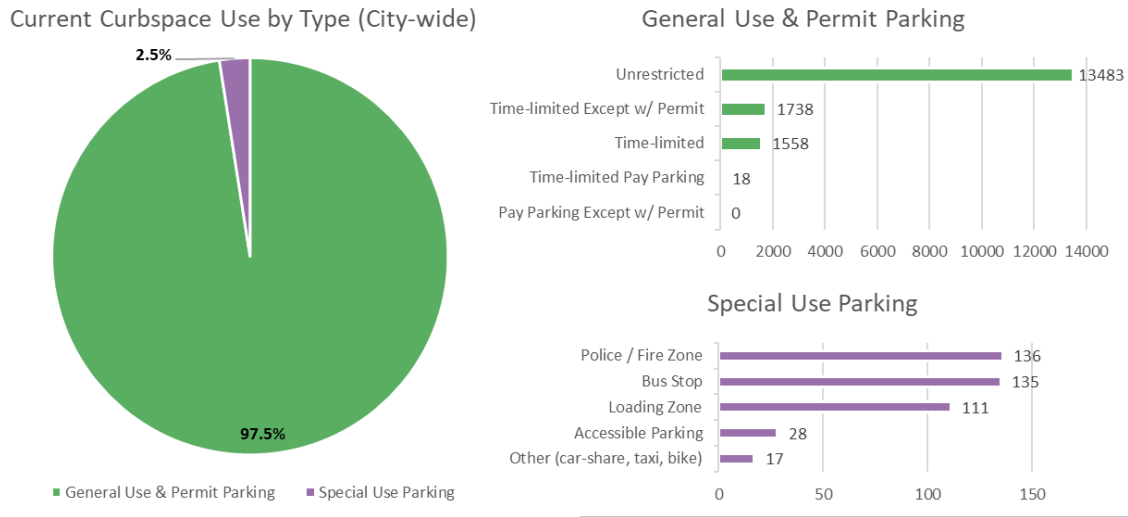


Figure 6: City-wide Current and Future Curb Space Allocation

APPENDIX 2: CURB SPACE OCCUPANCY AND ANALYSIS

Curbspace occupancy is a core indicator in determining how well a street is operating. When streets are observed at full occupancy, increased management is required to reduce occupancy, so that there are available spaces to park for those who need it.

Two different approaches were applied to determine curbspace occupancy:

- Modeled Curbspace Demand Mapping shows where modeled curbspace occupancy will be the highest and lowest, based on population and employment density, and adjacent land use type.
- On-Street Parking Occupancy Observations is the actual observation of the number of vehicles occupying parking spaces on all streets of the City, at different times of day, on weekdays and weekends.

Combined, these two methods of observation and analysis provide the City with a current benchmark that contributes to the curbspace management areas.

Modeled Curbspace Demand Mapping

Staff analyzed several indicators to determine modeled curbspace demand. Population and employment density provide clear proxies – where there is high population and employment density, it is anticipated there will be high demand for curbspace. Similarly, land use types (e.g., commercial, high-density residential) provide an indication of where curbspace is in high demand. Alternatively, areas with lower-density residential, further from commercial centres, are expected to have lower curbspace demand. These indicators were combined to create a modeled curbspace demand map shown in Figure 7 below.

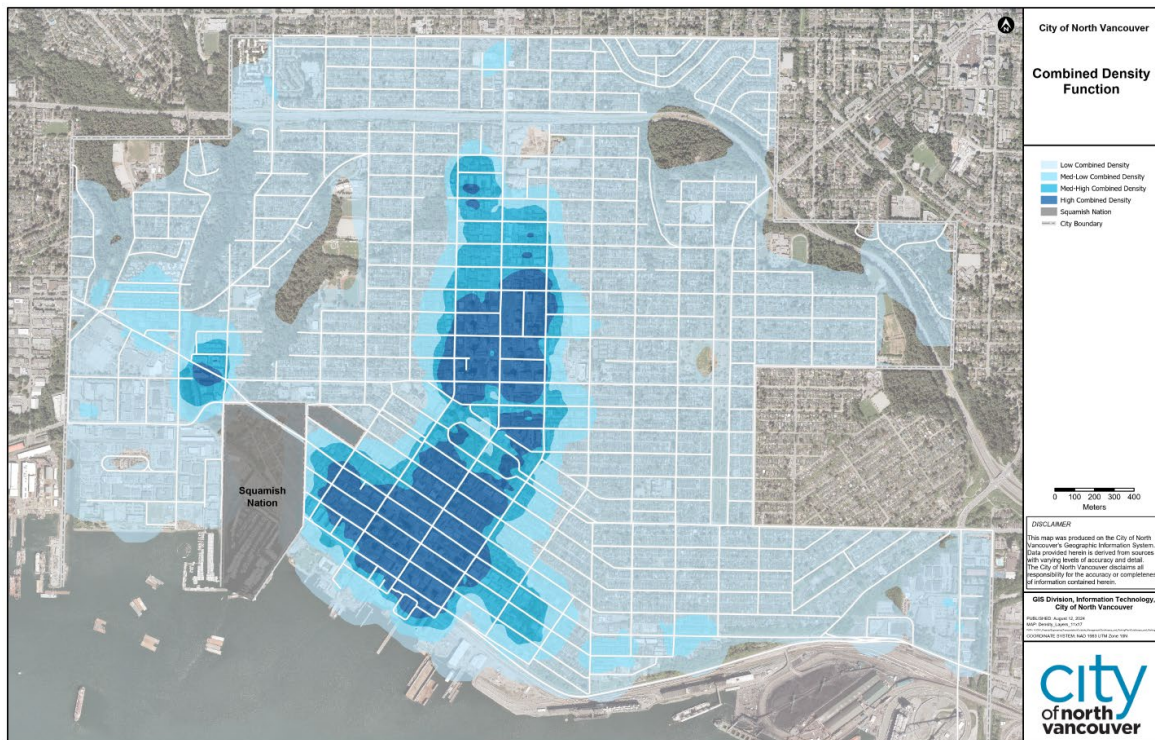


Figure 7. Modeled curbspace demand based on population and employment

On-Street Parking Occupancy Observations

On top of using population, employment, and land use as indicators of curb space demand, staff undertook city-wide curb space data collection in June and July 2024. The purpose of parking occupancy counts is to determine the peak occupancy, the time at which there is the greatest demand for parking. At least one midday count (11 am to 3 pm) was undertaken for all usable curb space in the City. In areas with known high parking occupancy (Central and Lower Lonsdale), up to four counts were undertaken: during the midday and afternoon, both on weekdays and weekends.

Occupancy counts were then consolidated at the block level. Only general use parking spaces were included in this assessment (unlimited parking, time-limited parking, and pay parking). All other uses were removed from occupancy and supply counts. Similarly, areas with construction or temporary no parking were removed from analysis. The results were benchmarked against existing years of occupancy data to verify for any outliers.

Block occupancy is broken into three categories: greater than 85%, between 60% and 85%, and less than 60%. Figure 8 shows how occupancy varies across the City.

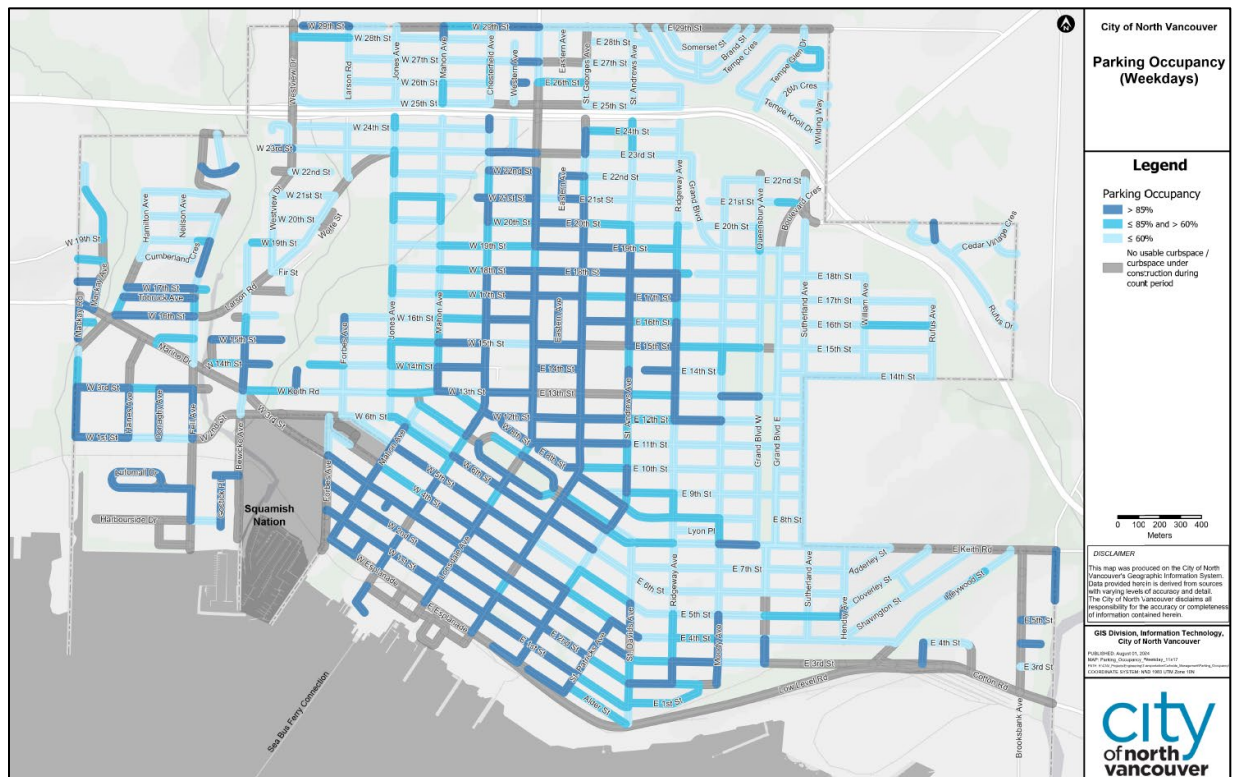


Figure 8: Peak on-street parking occupancy, from summer 2024 observations.