

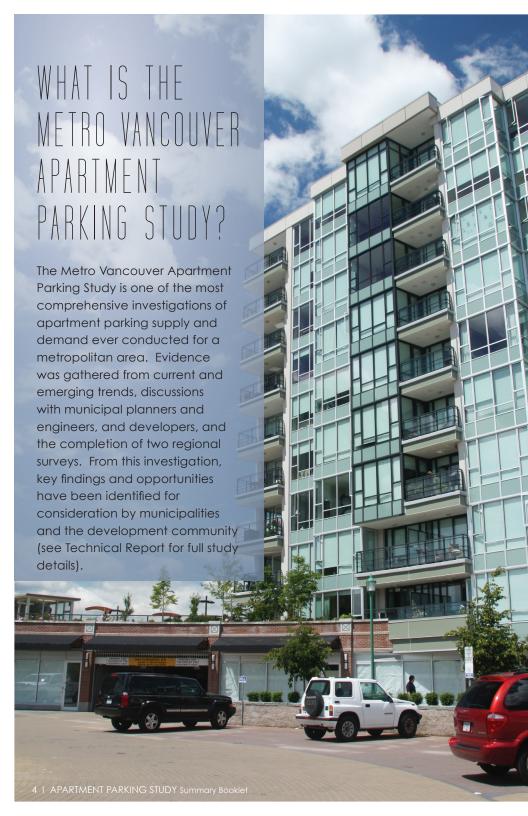
Car OWNERSHID is influenced by where we live and work. In the heart of high density communities with easy access to frequent transit and services, families own fewer cars. Many even foreao car ownership. Findings of this Apartment Parking Study point to the type of community and transit network we need to develop if we want to reduce our reliance on vehicles and costly parking structures. This study will help municipal planners and developers "right-size" parking for new apartment developments near frequent transit.

In some parts of the region, the findings of this study will have limited applicability in the near term. An isolated apartment building in an otherwise traditional suburban setting does not create the critical mass required to justify frequent transit service, leaving families little choice other than relying on cars. In communities transitioning to higher densities, inadequate services exacerbate the need for vehicles and parking. Attempts to reduce new apartment parking supply now may be premature and could lead to negative spillover effects onto neighbouring streets. For these communities, the information in this study will help leaders set long-term goals and benefit from any existing frequent transit.



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WHY IS APARTMENT PARKING IMPORTANT?

Supporting a Transit-Oriented and Sustainable Region

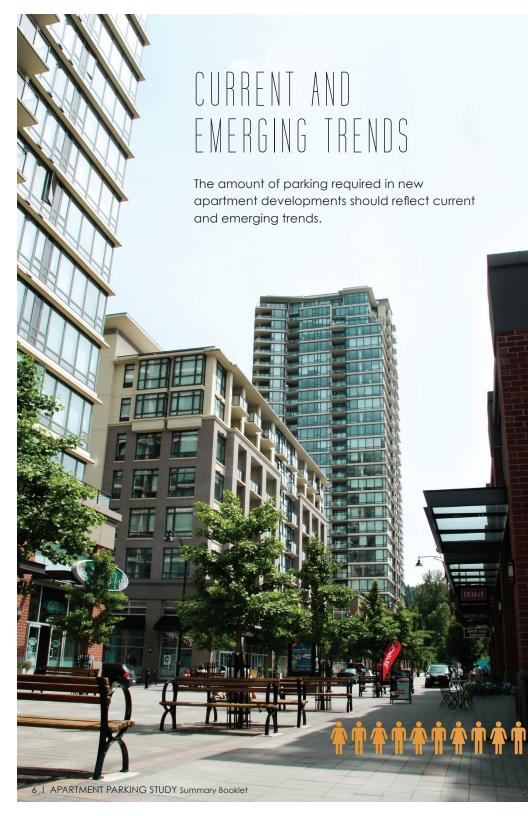
Encouraging compact communities, sustainable transportation choices, and housing affordability are well-established objectives in Metro Vancouver's Regional Growth Strategy and Regional Affordable Housing Strategy. Parking is at the nexus of these objectives. Municipalities are required to include policies in their Regional Context Statements that, in coordination with the provision of transit, maintain or establish reduced parking requirements in Urban Centres and Frequent Transit Development Areas, where appropriate.

Building Efficient and Livable Neighbourhoods

Getting parking "right" will have long lasting benefits for everyone. Undersupplying parking in new apartment developments leads to frustration for residents. Conversely, oversupplying parking is an extra cost that gets passed on to consumers through higher home prices. As the region adds one million more residents over the next three decades, and more apartments are built, ensuring parking supply matches demand is critical to supporting efficient and livable neighbourhoods.

Improving Affordability

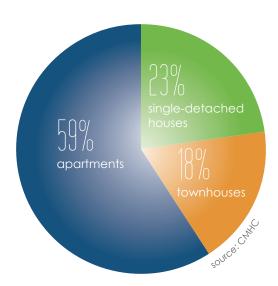
In metropolitan Vancouver, the cost of constructing on-site structured parking can range from \$20,000 to \$45,000 per stall, plus maintenance costs. Ensuring parking requirements match actual and anticipated demand can help reduce unnecessary housing costs.





Trend 1. Most New Homes are Apartments

The majority of new residential development in the region is in the form of apartments and townhouses. Of the average 16,300 housing starts per year between 2007 and 2011 in the region, 59 percent were apartments, 18 percent townhouse/rowhouse/semi-detached, and 23 percent single-detached houses.



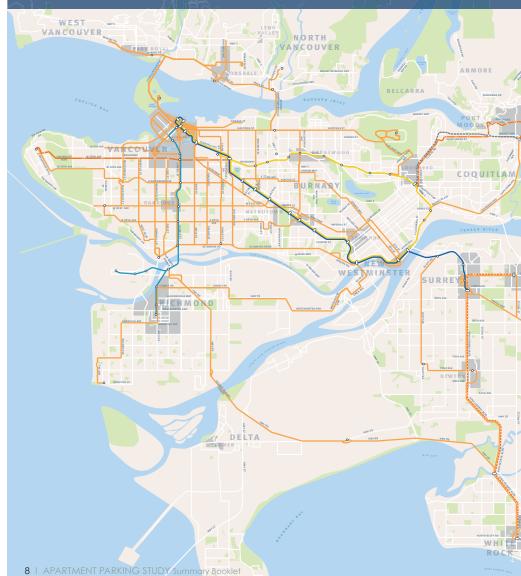


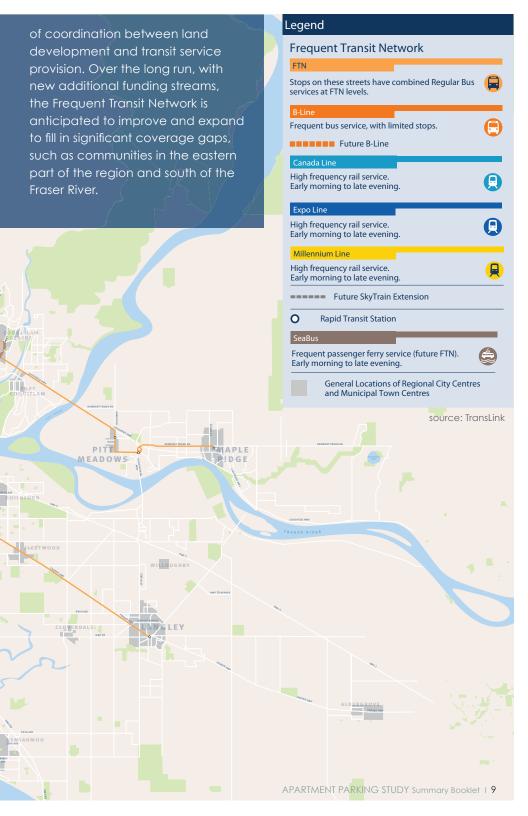
Trend 2. Emergence of TransLink's Frequent Transit Network to Serve and Shape Demand in the Region

TransLink has established the
Frequent Transit Network as an
easily identifiable brand for the
travelling public. On the Frequent
Transit Network, transit service
(independent of technology or

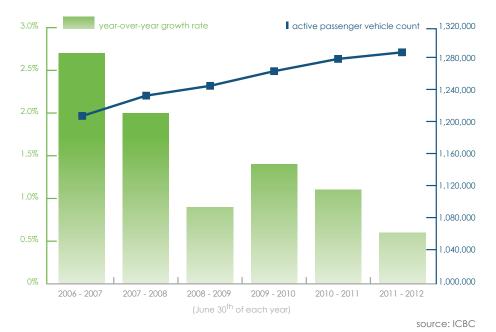
vehicle type) is provided at least every 15 minutes in both directions throughout the day and into the evening, seven days a week. The Frequent Transit Network provides travellers with the certainty of consistent service levels throughout the region.

It also influences land use decisions, so that there is a high degree





LICENSED PASSENGER VEHICLES IN METROPOLITAN VANCOUVER



Trend 3. Slowdown in the Growth of Cars and Trucks

Whether due to high fuel prices, the economy, improved transit service, waning interest in car ownership by the younger generation, or all of the above, the region is seeing a marked decline in the growth rate of actively licensed cars and trucks. Today's vehicle growth rate is a fraction of what it was in 2007.

Trend 4. Popularity of **Carshare Programs**

Carshare programs have surged in popularity in the past few years. Carshare programs can have profound impacts on private vehicle ownership by allowing a household to shed one or more vehicles, or delay the purchase of an additional vehicle. The implications for parking requirements in new apartment developments are immense, especially in locations near the Frequent Transit Network.



CURRENT PRACTICES

How is parking supply determined in new apartment developments?

Municipalities set minimum residential and visitor parking requirements for new apartment developments in their zoning bylaw. Developers must supply the minimum required amount of parking or seek a variance.

Most municipalities stipulate minimum parking requirements of at least 1.0 stall per apartment unit.

A few municipalities stipulate reduced residential parking requirements based on proximity to transit. Most allow for reduced requirements for non-market housing or seniors housing sites.

Minimum visitor parking requirements are typically set at 0.2 stall per apartment unit.

Comparing Metropolitan Vancouver to Other Jurisdictions

Parking practices in the region were compared to progressive parking practices in Calgary, Toronto, Montreal, Seattle, Bellevue, Portland, and Denver. These jurisdictions offer interesting lessons for metropolitan Vancouver.

FEATURES	METROPOLITAN VANCOUVER	OTHER CITIES: CALGARY, TORONTO, MONTREAL, SEATTLE, BELLEVUE, PORTLAND, DENVER
Minimum parking requirements	Most municipalities stipulate minimum parking requirements of at least 1.0 stall per apartment unit.	All of the cities reviewed have minimum parking requirements of less than 1.0 for their urban cores. Seattle and Portland have 0 minimums in specific geographic areas.
Maximum parking requirements	Only City of Vancouver and UBC Point Grey Campus stipulate maximum parking requirements.	Calgary, Toronto, Montreal, Portland, Bellevue have parking maximums.
Geographic- specific parking requirements	Most municipalities do not stipulate reduced parking requirements based on proximity to transit.	Calgary, Toronto, Montreal, Denver, Seattle, Bellevue, and Portland vary their parking requirements for specific geographic areas.
Consideration of frequent bus service	Planners and developers in the region typically recognize SkyTrain stations, but not frequent bus corridors, for marketing and potential parking reductions.	Toronto, Seattle, Portland, and Denver vary their parking requirements based on transit frequency, not technology.



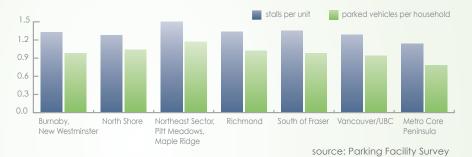
The only reliable way to evaluate whether current parking requirements are providing a good match with demand is through surveys of recently built and fully occupied apartment buildings in the region.

In the Fall of 2011, Metro Vancouver carried out two regional surveys. In the Parking Facility Survey, Metro Vancouver retained Acuere Consulting Inc. to count the number of parking stalls and parked vehicles in 80 participating apartment sites on weeknights. In the Household Survey, also assisted by Acuere, Metro Vancouver distributed surveys to apartment households, most of whom resided in the same sites as in the first survey, in order to obtain more information about parking habits and preferences. Over 1,500 households completed the survey, either online or on paper.

Apartment sites close to the Frequent Transit Network (generally within 400 metres of a frequent bus stop and/or 800 metres of a SkyTrain station) and further away were surveyed across the region. This snapshot provides a good indicator of where the region stands today and identifies the opportunities for possible improvements.



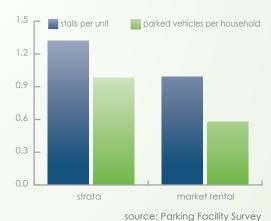
FINDING 1: PARKING SUPPLY EXCEEDS PARKING DEMAND ACROSS THE REGION



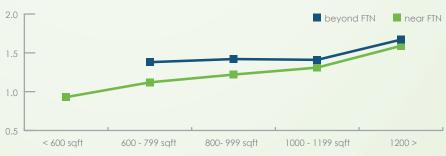
Residential parking supply in strata apartments generally exceeds observed parking demand in the range of 18-35 percent (based on demand estimates from the Parking Facility Survey and Household Survey).

FINDING 2: PARKING DEMAND FOR RENTERS IS LOWER THAN FOR OWNERS

The parking demand in purpose-built market rental apartments is generally lower than in strata apartments.



FINDING 3: HOUSEHOLDS LIVING NEAR THE FREQUENT TRANSIT NETWORK HAVE FEWER VEHICLES



The number of vehicles per household is generally lower near the Frequent Transit Network for a wide range of apartment unit sizes.

source: Household Survey



APARTMENT PARKING NEAR THE FREQUENT TRANSIT NETWORK

Updating parking requirements for apartments is a tall order for various reasons. What the study provides is objective evidence that communities and developers can use when determining the appropriate amount of parking in new apartment developments.

The greatest opportunities for change are new apartment sites near the Frequent Transit Network (generally within 400 metres of a frequent bus stop and/or within 800 metres of a SkyTrain station). High density communities with a robust network of frequent transit services offer the opportunities to put these findings into practice. For suburban communities lacking the coverage of frequent transit services, these opportunities may be treated as long-term goals.

In the long-run, the benefits of taking action will be more efficient and livable neigbourhoods in Urban Centres and Frequent Transit Development Areas, improvements to housing affordability and housing choice, and greater use of sustainable transportation choices.

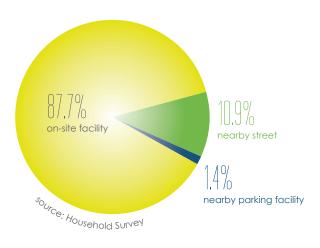


Treat On-Site and Street Parking as a System

A more holistic approach toward parking supply and parking demand management for new apartment projects is warranted. Attention should be paid to the availability, type, and relative permanence of street parking (e.g., free, paid, permit-only, and/or time-limited) and surrounding land uses, in association with any reductions to on-site parking requirements.

DISTRIBUTION OF LOCATIONS WHERE VEHICLES ARE PARKED

About one in 10 strata households parked one or more vehicles on a nearby street. Having adequate parking supplied on-site and appropriate street parking regulations will ensure "spillover" effects are minimized.





Encourage Parking Supply to Match Demand Near the Frequent Transit Network

Parking requirements should be set based on actual or expected demand with further reductions based on transportation demand management measures or other site-specific conditions.

The evidence provides support for any municipality wanting to explore reducing current minimum apartment parking requirements near the Frequent Transit Network. Reduced minimums provide flexibility for developers to meet market demand. For example, in Seattle, even though it is optional to provide parking in new apartment developments within

400 metres of frequent transit service, experience has shown that the actual parking supplied ranges from 0.6 to 1.0 stall per unit.

The evidence also provides support for any municipality wanting to explore introducing parking maximums near the Frequent Transit Network. Maximums provide a degree of assurance that parking will not be grossly oversupplied near high quality transit. Setting a range between the minimum and maximum rates provides flexibility for development sites near the Frequent Transit Network. For example, in Toronto, the min-max requirement for new apartments on surface transit corridors is 0.7 -1.6 stalls per unit.

ONE- AND TWO-BEDROOM STRATA APARTMENTS VEHICLES PER HOUSEHOLD



source: Household Survey

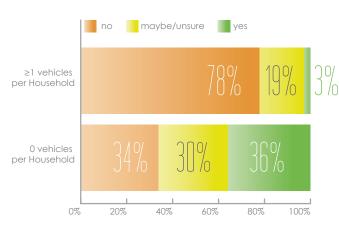




Encourage Parking Unbundling/Opt-Out

Selling parking stalls separate from apartments or allowing consumers to opt out of a bundled parking stall will increase choice, and provide the opportunity for consumers without cars to realize a modest improvement in affordability.

WILLINGNESS TO FOREGO A PARKING STALL



source: Household Survey

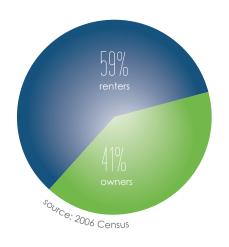
A high proportion of 0-vehicle households in strata apartments would have purchased/rented their current home without a stall, if it meant having a lower purchase/rental price. For households with at least one vehicle, 19 percent said they were undecided – a sizable proportion.



Encourage Rental Apartments Near the Frequent Transit Network

Apartment renters generally have lower parking demands than do owners, and living close to the Frequent Transit Network provides an opportunity to be less reliant on a private vehicle. For these reasons, it makes sense to encourage more rental apartment units close to the Frequent Transit Network.

PROPORTION OF APARTMENT HOUSEHOLDS WHO WERE OWNERS OR RENTERS



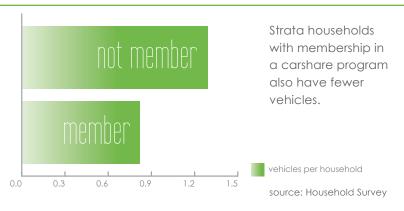
The 2006 Census counted 59 percent of apartment households as renters and 41 percent as owners.

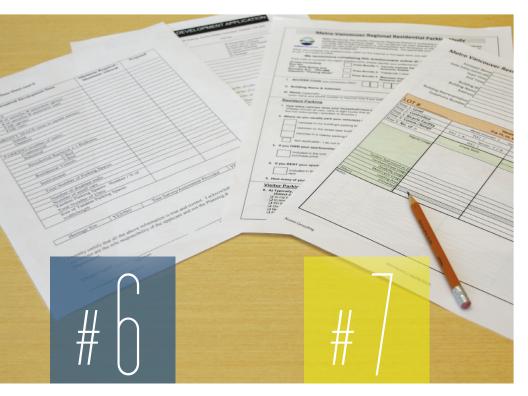


Encourage Expansion of Carshare Programs where Feasible

Municipalities and developers should encourage carshare providers to expand beyond current operating boundaries to such places as emerging Urban Centres and Frequent Transit Development Areas in suburban areas. One way is to encourage new apartment developments to include designated parking for carshare vehicles. A second way is to actively work with carshare vendors to identify suitable locations in the community to achieve synergies with new apartment developments.

CARSHARE MEMBERSHIP





Consider Allowing Amendments to Parking Supply After Pre-Sales

It is often only after apartment pre-sales that developers will have better data to support modifications to residential parking supply. By adapting municipal approval processes to accommodate amendments before construction, the parking efficiency of new apartment developments can be improved. In Toronto, this practice is business-as-usual.

Conduct Regular Post-Occupancy Parking Surveys

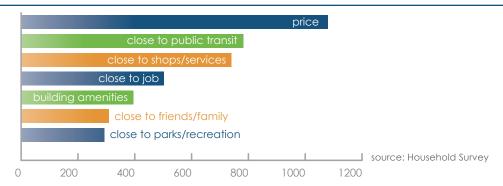
Regular and frequent postoccupancy surveys of apartment projects should be conducted to provide timely information on parking demand in recently-built and fully-occupied apartment developments. Industry groups, such as the Urban Development Institute and the Urban Land Institute, should contribute resources to these research efforts and support widespread dissemination of the findings.



Coordinate Frequent Transit Network Expansion

Uncertainties in the future stop or station locations of the Frequent Transit Network, and the staging of expansion, can affect parking supply and demand decisions. These uncertainties can be addressed effectively through enhanced information sharing and potentially through agreements between TransLink and municipal partners. At a minimum, TransLink and municipalities should actively seek opportunities to collaborate on subarea transit and land use planning, and to share the outcomes early on and widely to residents and the development community.

MOST IMPORTANT FACTORS FOR CHOOSING CURRENT APARTMENTS

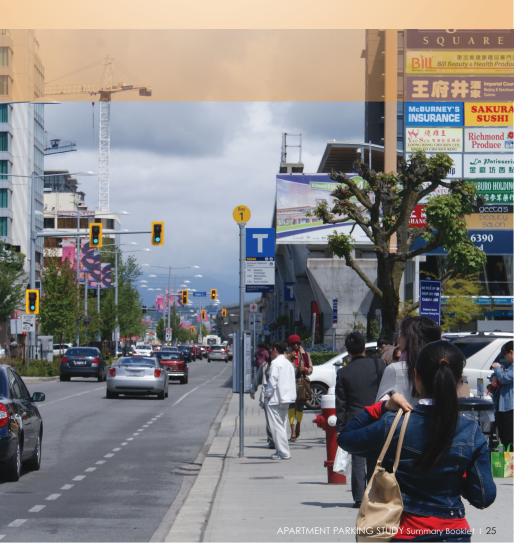


Apartment price, proximity to transit, and proximity to shops/services/ entertainment were consistently cited by the surveyed households as the top three factors when they chose their current home.

NEXT STEPS

Metro Vancouver's role is largely leadership through research, outreach, collaboration, and advocacy. This booklet serves to convey the key study findings and strategic opportunities for consideration by municipalities and the development community.

Metro Vancouver will continue to cooperate with partners to further the implementation of the Regional Growth Strategy and Regional Affordable Housing Strategy, including matters related to parking, through timely review of best practices and data collection.



KFY TERMS

Metro Vancouver:

Metro Vancouver is a political body and corporate entity that delivers regional utility services, planning, policy and political leadership on behalf of 24 local authorities.

Regional Growth Strategy:

Sets out the goals and actions to support a compact and livable region. The Regional Growth Strategy was adopted by the Metro Vancouver Board in July 2011.

Regional Context Statement:

A document prepared by each municipality articulating how its Official Community Plan is consistent, or will be made consistent, with the Regional Growth Strategy.

Regional Affordable Housing

Strategy: Sets out the goals and actions to support affordable housing. The strategy was adopted by the Metro Vancouver Board in 2007.

Strata Apartments:

Multi-unit housing built for the purpose of stratified condominium ownership.

Purpose-Built Market Rental

Apartments: Multi-unit housing built for the purpose of renting at market rates.

Non-Market Apartments:

Multi-unit housing targeted to lower-income households through subsidized rents.

TransLink: Metropolitan Vancouver's transportation authority responsible for the planning, financing, and managing of all public transit in addition to major regional roads and bridges.

Frequent Transit Network:

Public transit service (independent of technology or vehicle type) that is provided at least every 15 minutes in both directions throughout the day and into the evening, seven days a week.

Demand Management:

Incentives or regulations to influence behaviour, such as time-limited or metered onstreet parking to encourage short-term parking.



ACKNOWLEDGEMENTS

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This document is available online at www.metrovancouver.org (search 'apartment parking study')