



GETTING TO
GROUNDBREAKING

March 2016-01

Residential Building Approval Processes In Metro Vancouver

Year 2: Focus on WoodFrame Apartments

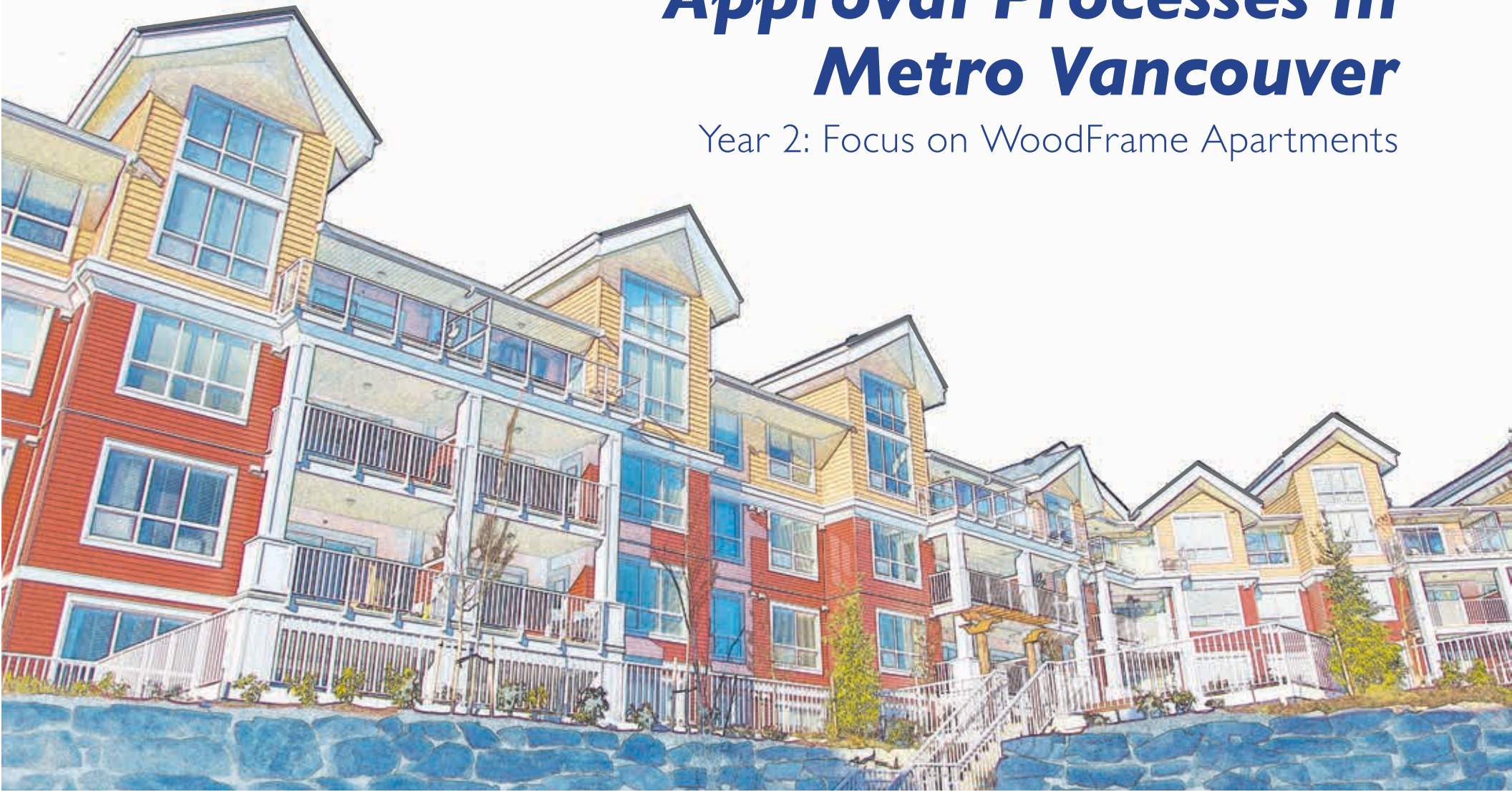




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What's New in this G2G Report?

- Highlights best practices in residential development approvals processes
- New recommended best practices from municipalities and home builders
- Updated 3 year average trends in new home construction and estimated housing demand
- Approval process and cost details for a typical 4-storey woodframe apartment building development scenario we call "CroftPoint"
- Focus on the role of amenities in desirable higher density living
- Explores approaches to Community Amenity Contributions (CACs)
- New efforts in public consultation
- Results of a representative sample survey of Metro Vancouver residents' attitudes and voice in new apartment development



G2G Year Two: Focus on Woodframe Apartments

Getting to Groundbreaking (G2G) examines the building approval process from the perspectives of municipalities and home builders in order to identify differences and similarities in practice. **G2G** relies upon the active participation of these groups, as well as development industry stakeholders and Metro Vancouver. The findings contribute to improved working relationships, time and cost saving measures, and identification of best practices. This phase of the project focuses exclusively on woodframe apartment buildings.

In this second round of the project, we again surveyed municipalities and home builders throughout Metro Vancouver. We undertook a review of existing housing stock and development patterns with respect to apartments, conducted a comparative analysis of development approvals policy, and surveyed residents on their opinions towards development. Lastly, we gathered feedback from municipalities about the development approvals cost, processing time and procedure, and potential outcomes of a simulated case study 4-storey apartment development proposal.

Our key findings point to a number of best practices, as well as positive messages that serve to better inform development processes and contribute to information sharing and process transparency. The findings are summarized as follows:

- Application, processing, and development fees vary considerably across the region. We have aggregated these fees into a regional average for comparison. We found an average of \$100,000 can be saved when land is pre-zoned for apartment buildings.
- The development approval process can be shortened by an average of 15 weeks if it is proposed on land that is already zoned for apartment use. The approval process can be again shortened if building permits are processed concurrently with the development application.
- Homebuilder feedback on the negotiation of community amenity contributions (CACs) is polarized. There appear to be instances of negotiation styles within the region that are contradictory to best practices recommended by the Provincial government, and others

which are perceived by home builders as fair and straightforward.

- Survey results indicate public sentiment toward a typical woodframe apartment development scenario is evenly split. Those who oppose, however, are more likely to strongly disapprove.
- Of 11 municipalities reporting, 4 indicated opposition would exist for their chosen location of our case study development.
- Amenity space in apartment buildings offers more than just onsite recreation. We provide case studies to 'extend the suite'.
- Public consultation methods are evolving. Contributors reported on recent improvements to their process. The report includes empirical recommendations provided by both home builders and municipalities for improved engagement.
- We checked in with municipalities and home builders on the best practices they recommended to us in our 2014 report. The feedback and the new best practices are on pages 7-8.

By 2041, Metro Vancouver will need nearly one-half million new homes for more than one million new residents. Existing land use designation identifies only 15% of the metro land base for residences; therefore new housing development requires infill and densification. In each year of 2013 – 2015, apartments accounted for more than 50% of all new residential units in the region, making both the quality of these developments and their integration into the existing urban network critically important to ongoing liveability within the region. New legislation in BC allows 6 storey woodframe buildings, allowing more intensive use of a housing style that has cost advantages for homeowners, builders, and municipalities alike.

As the metro region reaches the tipping point of more than 50% overall apartment stock, we discuss the importance of land use planning, communication, public engagement, and transparency of policy and process towards acceptance of change and its contribution to a cohesive and livable region.

Purpose and Outcomes of Getting to Groundbreaking

Purpose of G2G

1. Examine the residential building approval process from the perspectives of municipalities and home builders.
2. Identify differences, similarities, and best practices among municipalities and home builders in the approval process. In 2014, our focus was on townhouses; for this report we turn out attention to wood frame apartments.

Expected Outcomes of G2G

1. Promote best practices in building approval processes amongst municipalities and home builders, leading to improved working relationships supporting the public interest.
2. Identify ways to reduce unnecessary time and cost in residential development approvals without sacrificing quality outcomes.
3. A better understanding of steps in the development approvals process and improved transparency of process across municipalities, home builders, decision makers and the public region-wide.

Who should read this report?

This G2G report was steered by an advisory group consisting of members of the home building industry, the GVHBA, Urban Development Institute, municipalities, Metro Vancouver, and others. The research, data analysis, and writing was conducted by researchers at the Simon Fraser University Urban Studies Program.

We present the results of the 2015 research into processes, experiences, and policies in residential building approvals processes. It is intended for a wide audience of people with an interest in housing in Metro Vancouver, including:

- Home Builders
- Mayors, councillors and municipal staff
- Regional, provincial and federal governments
- GVHBA and UDI
- Housing journalists
- Housing researchers
- Housing advocates and other interested groups
- Members of the public

Supplying Housing for a Growing Region

By 2041, Metro Vancouver will need nearly half a million new homes to house more than one million new residents.

Our regional population is growing at a rate of 3,000 new residents per month [1]. We are responsible for accommodating this influx with homes that meet residents' needs in a way that preserves and enhances quality of life. Municipalities and home builders are key actors in this effort and need to work together to implement plans, identify best practices, and encourage the best housing outcomes possible.

The large graph below shows the 3 year average net housing growth for each of the municipalities, as well as the estimated housing demand by municipality [2]. We see that Vancouver, Richmond, and North Vancouver City are the three municipalities that are outpacing their estimated

demand with new housing construction. New Westminster, Port Coquitlam, Delta, White Rock, West Vancouver, Pitt Meadows, Langley City and Coquitlam are at or close to meeting their estimated demand. A group of municipalities, Surrey, Langley Township, Burnaby, Maple Ridge, North Vancouver District, and Port Moody, are building less than their estimated demand.

The insert chart shows that, from 2012 – 2015, housing growth across the region was less than estimates for housing demand. One way of interpreting this is that the region has fallen short of meeting housing demand estimates. An alternative interpretation is that housing demand is less than what was projected [3].

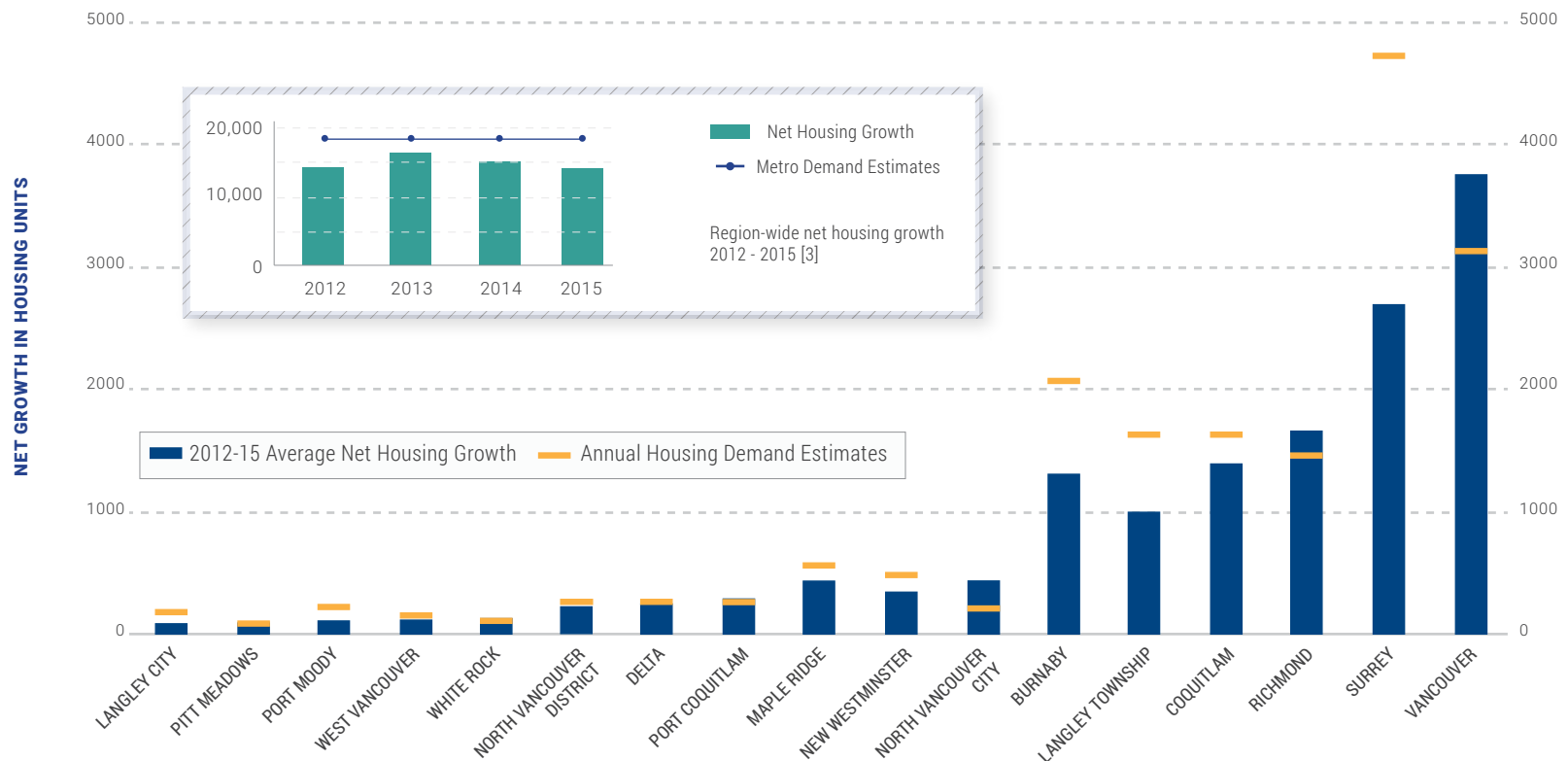


Figure 1. Net housing growth and housing demand estimates [2]

Ratings of Best Practices

In our 2014 report, we identified 10 Best Practices in development approvals that were recognized by both municipal staff and home builders. This year, we revisited these to ask municipalities to rate the relative importance of the practices and to ask home builders to rate municipal performance on each. The following chart represents averaged ratings from municipal and home builder survey respondents [4]. While good correspondence exists for the practices of pre-application meetings and predictable fees and charges, work remains to build a partnership and "team-based" approach (See page 36 for a Glossary of Best Practices).

	How important is it? Municipalities	How are municipalities doing? Home Builders
Improving public engagement	★★★★★★	👍👍👍
Providing clear policy	★★★★★★	👍👍👍👍
Providing pre-application meetings	★★★★★★	👍👍👍👍👍👍👍
Providing predictable fees and charges	★★★★★★	👍👍👍👍👍
Building efficient partnerships for development	★★★★★	👍
Having file champions and coordinated teams	★★★★★	👍
Offering concurrent processing	★★★★	👍👍
Enforcing completeness of applications	★★★	👍👍
Empowering municipal staff	★★	👍👍👍👍👍👍
Providing accessible and complete information online	★	👍👍

NOTE: You can find definitions of the Best Practices on page 36.

Additional Best Practices

In addition to what we identified in 2014, home builders and municipalities who responded to our survey for this report volunteered other procedures that they recognized as best practices.

In these two lists we can see, based upon the different priorities offered by home builders and municipalities, that work is needed in order to improve practice.

Municipalities' Priority Best Practices

Design Review Group of relevant city staff that reviews development proposals comprehensively.

Pre-zoning land for multifamily development in target areas.

Developing zoning that allows for a greater mix of housing typologies.

Inviting stakeholders or members of the public to participate in small groups to provide input, facilitated by staff.

Pre-establishing design requirements in the OCP, with substantial community input.

Home Builders' Priority Best Practices

Checklist for application submission.

Ability to utilize third party lawyers to prepare legal documentation and templates for legal agreements.

Option for Certified Professionals at the Building Permit stage.

Availability of phased permitting.

At the same time, the best practices still may be shared by municipalities and home builders. For instance, municipalities noted a priority in pre-zoning land for multifamily development. This practice is widely supported by home builders as well. Convergences like this will be investigated in the future work of G2G.

Moving toward a crowded or a vibrant region

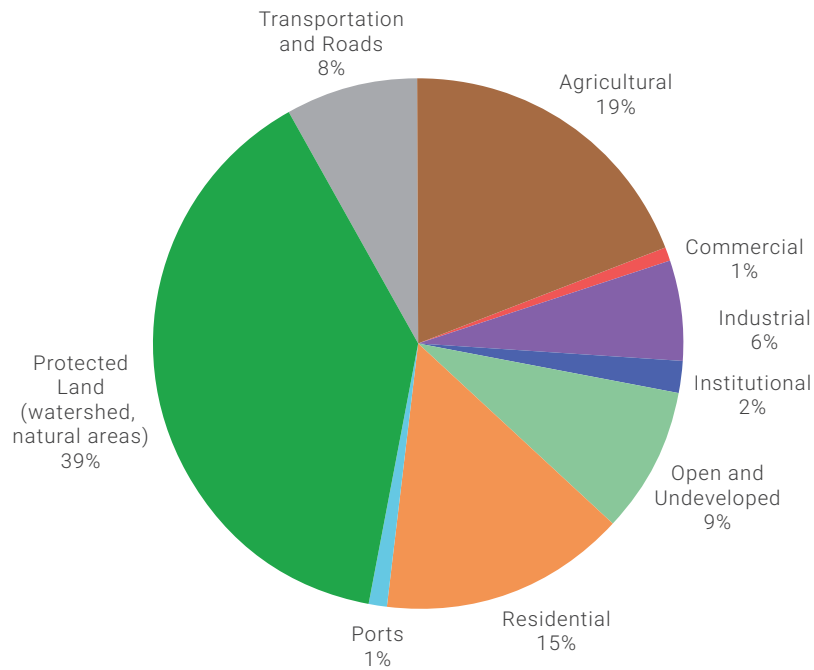


Figure 2. Land use proportions in Metro Vancouver [5]

Between 2011-2041, our region will grow by an estimated one million people. Whether that growth constitutes crowding a region that is already “full” or contributing new vitality and strength to our existing patchwork depends considerably on land use, infrastructure, and amenity planning.

Figure 2 shows that, based upon designated land uses in the region, less than 15% of the region’s land base is available for residential uses. Much of this is already developed, meaning that most new dwellings will require infill development and densification within existing neighbourhoods.

Quality of life in our region benefits from a robust regulatory scheme and planning framework. To achieve this requires planning at the neighbourhood, city and regional scale, for short and long-term policy outcomes. These planning processes provide opportunities for municipalities and residents to engage in big picture, long term thinking.

The residential development approvals process is one component of layers of process and policy with which to address the expectations of municipalities, developers, and the public regarding new developments.

Municipalities are responsible, through the development approvals process, for making sure new residential development proposals are in context. This is particularly important in a growing region where new housing is being built into existing neighbourhoods.

The addition of infrastructure and amenities associated with new developments is often taken for granted. When appropriately planned for and implemented, however, these shared facilities can improve livability and provide social, economic and environmental benefits by improving mobility, reducing aggregate housing costs, avoiding sprawl, and contributing towards community vibrancy.

Role of woodframe apartments in the regional housing supply

Figure 3 shows the majority of new housing across the region is in the form of apartments. While we do not know from this data what proportion of these new apartments are high or low-rise, we do know this distinction has a critically important relationship to the desirability of apartment buildings, their public acceptance, and ultimately their livability. The growing proportion of multifamily buildings in the region suggests public demand for this type of housing is increasing.

Wood frame buildings, as opposed to concrete and steel, offer an edge on affordability because of lower building material cost, estimated by the Building Industry and Land Development Association at 8-15% cost savings. Because they are lighter weight than concrete, such wood frame buildings can bring additional savings in sub-grade structure and ground preparation work required. Wood frame apartments - such as the four

storey 'CroftPoint' scenario presented in this study - are also promoted by many municipal plans as a means to increase density and improve neighbourhood livability, particularly along transit corridors, in town centres, and in mixed-used neighbourhoods. A growing number of Metro Vancouver households are finding apartment living provides excellent opportunities to reap the benefits of a more urban lifestyle. These include improved access to jobs, amenities, services, and public transit, alongside reduced commute time and automobile dependency. In fact, wood-frame apartment buildings 5- and 6-stories tall are now accepted in BC, Alberta, Ontario and Quebec, with the new National Building Code and National Fire Code also to reflect allowances for these types of buildings. In BC, the first province to permit 5- and 6-storey wood-frame buildings in 2009, more than 250 such buildings are complete or close to it, province-wide [6].

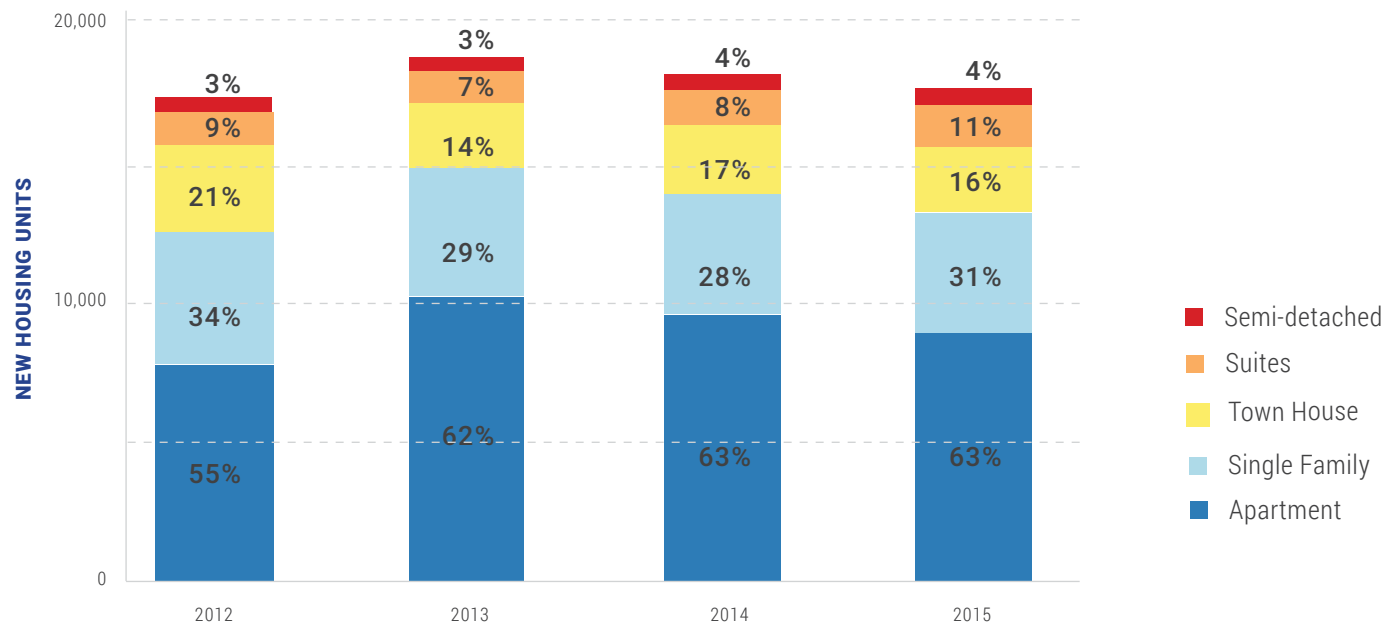


Figure 3. Change in Housing Type Mix and Housing Completions, Region-wide, 2012-15 [7]

Map of housing stock showing share of apartments [8]

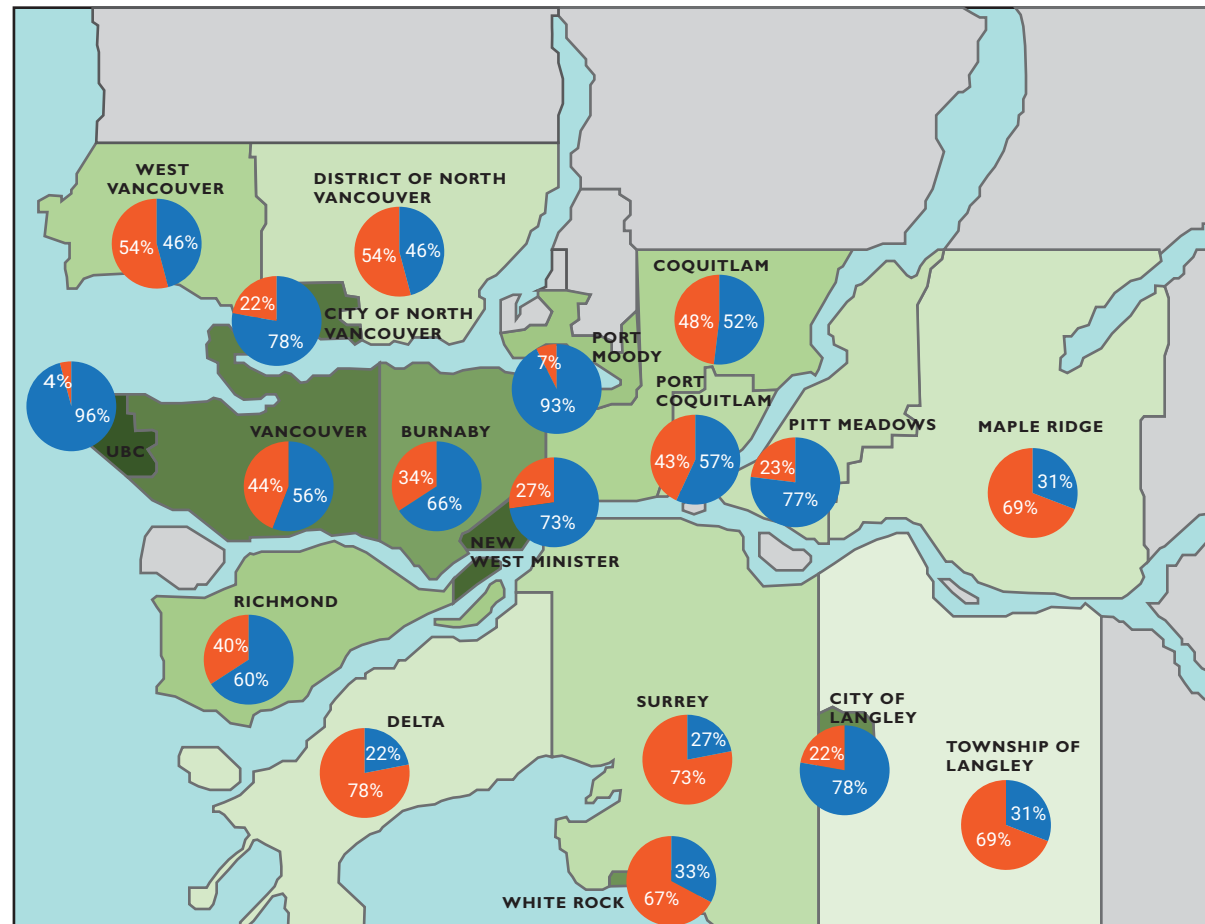
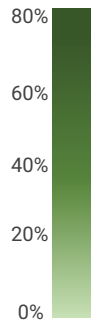
This map depicts a region in which ground-oriented housing still predominates 60% of the region's housing stock overall, but with the share of apartments increasing across the map as well. Pockets of the region, such as New Westminister and the City of North Vancouver, already have over 60% apartments within their housing stock. Between 2012 – 2015, only Delta, Langley Township, Maple Ridge, the District of North Vancouver, Surrey, West Vancouver and White Rock built a majority ground-oriented housing; the other 11 municipalities shown on the map all built a majority of apartments in this period. Across the region as a whole, the share of apartments built just barely edged out the share of ground-oriented units built, at 51% to 49%.

NEW HOUSING TYPE AS %
OF ALL HOUSING BUILT
(3 yr avg. 2012-14)



■ % Apartment
■ Ground-Oriented

APARTMENTS AS %
OF ALL HOUSING STOCK



Municipal innovations in residential development processing in 2015

As shown in the table below, municipalities documented a wide array of innovations that they adopted in 2015 with a view to improving upon the efficiency and effectiveness of their residential development approval processing. Diverse contexts sometimes guide what innovations will and will not work in different municipalities. A number of the innovations listed below promise to reduce time from application processing time, without sacrificing the quality of the review.

Langley Township	Increased the frequency of public hearings .
Delta	The electronic field inspection project gives staff the tools needed to issue inspection reports for single family development in the field, in real time.
Maple Ridge	Council approved resources for two new development staff positions.
Port Moody	New and updated development information guide brochures for all types of applications.
Port Coquitlam	Organizational change to move Development Engineering Department into Development Services Department to better integrate development functions.
White Rock	Implementing an electronic permitting and application processing system across departments.
Vancouver	In response to historically high volumes of applications, Council voted to raise rezoning and other fees and use the proceeds to hire additional staff .
Burnaby	Council adopted priority community amenity projects for each city quadrant, sometimes eliminating need for a case by case amenity negotiation as part of the city's Amenity Density Bonus Program.

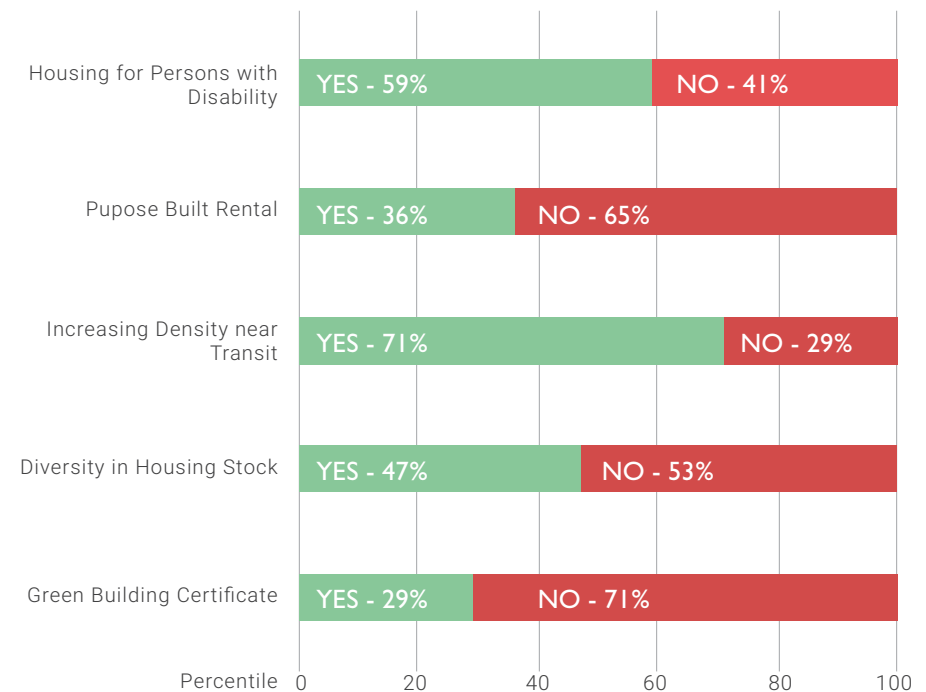
Municipal planning and the private sector

Municipalities cannot achieve their planning goals working alone. Housing built by private sector companies accommodates 95% of our region's residents [8]. With the constraints, limits, and challenges of finding suitable housing that meets household needs in the Metro Vancouver region, we surveyed home builders on whether the apartment housing they built in 2012-14 meets key needs identified in regional and municipal plans. In addition to goals related to green building, these goals also correspond to those of the Metro Vancouver Draft Regional Affordable Housing Strategy (2015):

- Expand the supply and diversity of housing to meet a variety of needs
- Preserve and expand the rental housing supply
- Meet housing demand estimates for low to moderate income earners
- Increase the rental housing supply along the Frequent Transit Network [9].

As Figure 4 shows, the majority of home builder respondents (71%) are building apartments that increase density near transit, where transportation and housing affordability can be optimized and pressures of growth on the transportation system can be minimized. A majority (59%) are building accessible apartments (for those with disabilities and mobility challenges) which also well serves the aging demographic of the population. Some are building purpose-built rental housing (36%), adding new housing forms to the neighbourhood (47%), and seeking green building certification (29%).

Figure 4. Does the wood frame apartment housing you built in 2012 - 2014 meet the following planning goals? (N=19) [10]



Municipal uniqueness and regional cohesion

Diverse local conditions and histories, different political opportunities, geographic constraints and sensitivities, and a collaborative regional governance system all point toward the lack of a one-size-fits-all approach to land use regulation in Metro Vancouver. Municipalities reported a number of factors that impede or aid an efficient new residential development process – some factors do both in different instances.

Municipal uniqueness does not mean that we can't work toward better coordination; indeed, our context necessitates such coordination. G2G is based on the expectation that better, more open and explicit communication can improve outcomes in diverse municipal contexts. The table summarizes the responses we got from municipalities when we asked what factors make them unique when it comes to processing applications for wood-frame apartment buildings. Generally, the unique factors on the left were mentioned as factors limiting new development of this kind, and those on the right were mentioned as factors facilitating it. However, with better communication and an improved partnership approach, we can envision turning some of the factors currently seen as limiting into more constructive elements of the municipal residential development process.

Unique features mentioned by Metro Vancouver municipalities

Limiting Factors	Facilitating Factors
Limited staff capacity at peak times	Strong internal communications in the municipality
Active groups, citizens and elected officials take an interest in new development in the city	Key reviews can be undertaken early and up-front
Suburban or rural character	Collaborative approach, delegation of authority
Age of municipality	Prezonings and incentive programs mean rezonings often not required
Lack of public acceptance of higher densities	Allowing applicants to apply for permits at the same time (concurrency)
Lack of municipal expertise in higher density forms of housing	Standardized and all-inclusive fees and charges

Overview of the residential approvals process

The residential development approvals process involves many considerations, a range of demands for input and expertise from different groups within municipalities, including elected officials, as well as other experts and regulators, the development industry, and the public. While many specific steps vary amongst municipalities, Figure 5 presents an overview of the general steps involved in the residential development approval process for a typical apartment project and the different roles envisioned for applicants, municipal staff, municipal elected officials, and members of the community.

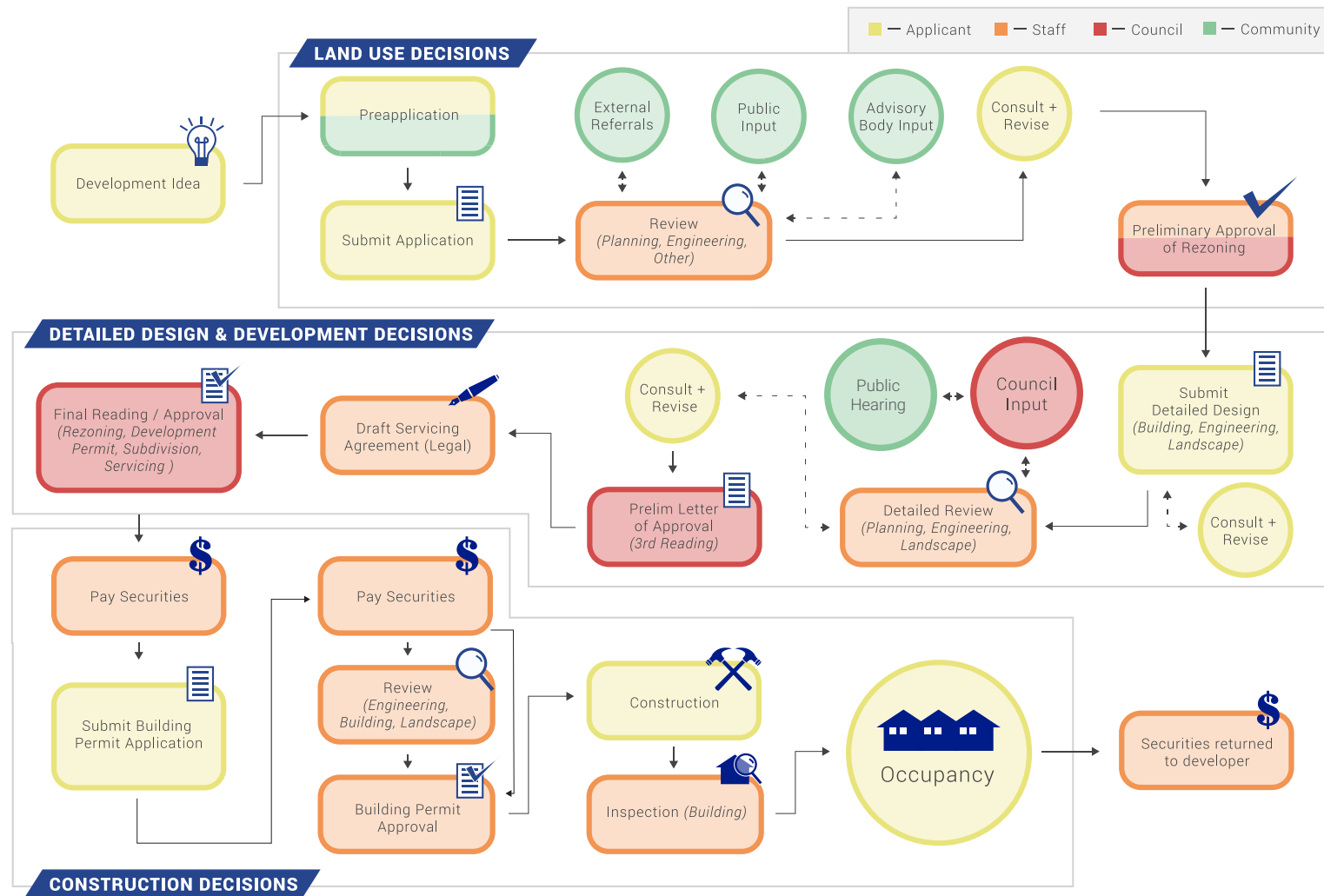


Figure 5. Schematic of Development Application Process

Why do residents support or oppose new 4-storey apartment buildings? [¹²]

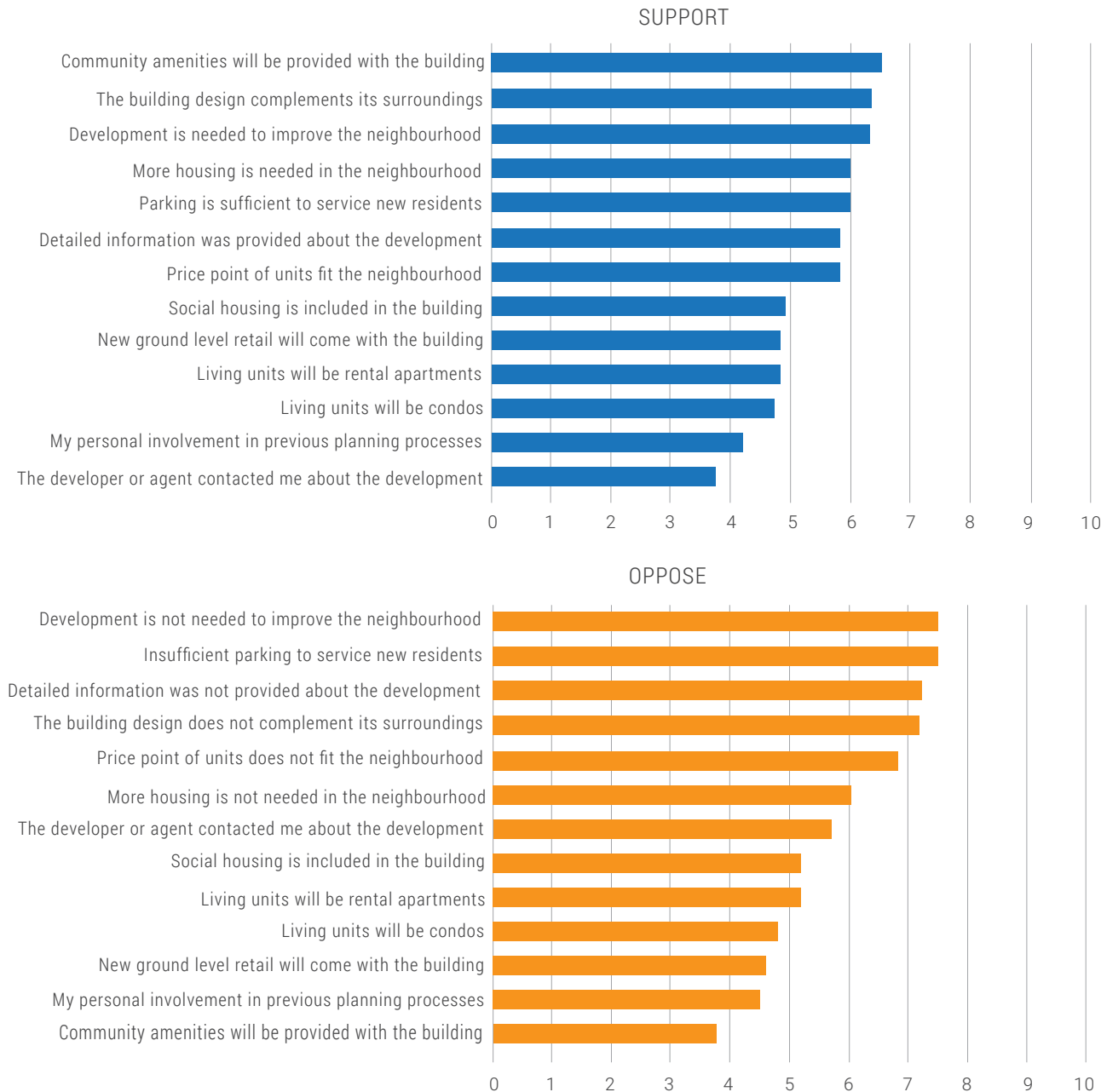


Figure 6 shows that the addition of needed community amenities is the most significant reason driving members of the public to support the development of a new 4-storey apartment building, over other reasons to oppose this development.

Opposition is driven most strongly by a sense of development not being needed for the neighbourhood to thrive, concerns about parking space, and a sense that not enough information was made publicly available or that the building's design was not a good fit.

Figure 6: Strength of opposition or support on a scale of 1 – 10. (N=500)

Application scenario and methodology



CroftPoint Development:

Four-storey, wood-frame case study application scenario

- Land may require rezoning (RZ) depending on the neighbourhood
- Development permit and subdivision (lot consolidation) is required
- 27,500 sq.ft. (0.25 ha), no dedications
- Proposed 4-storey wood frame apartment building, 60 units yield
- Total square footage is 55,000 sq.ft. (5100m²), 2.0 floor space ratio (FSR)
- 12 units (2 BR + den); 12 units (2 BR); 36 units (1 BR + den). Average size of 779 sq ft (72m²)
- Building construction costs assumed at an estimated regional average of \$180/sq.ft. (\$1936/m²): \$9,900,000
- Off-site infrastructure estimate includes adjacent roadworks, water/sewer/sanitation, sediment control, stormwater management and off-site landscaping: \$630,000
- On-site landscaping cost estimate: \$145,000
- Corner site with two frontages, rear laneway access, and an existing adjacent building at the property line

Year 2: Residential building approval processes in Metro Vancouver. Focus on four-storey woodframe apartment buildings

To understand the development approval process of four-storey wood frame apartments in Metro Vancouver, we created a hypothetical application scenario for a project called CroftPoint. Municipalities were asked to provide the typical timing of steps, fees, charges, design requirements, amenity requirements, additional incentives and regulations involved in processing this four-storey apartment building. The same scenario was presented to all municipalities in the survey.

In all scenarios, CroftPoint would be located within a growing area of multifamily apartments not far from the city centre or town centre in each municipality.

In addition to the scenario, we surveyed home builders and municipalities about their experiences and thoughts on best practices, challenges and priorities in policies and regulations related to housing development in the 2012 to 2014 period [13].

Study Limitations

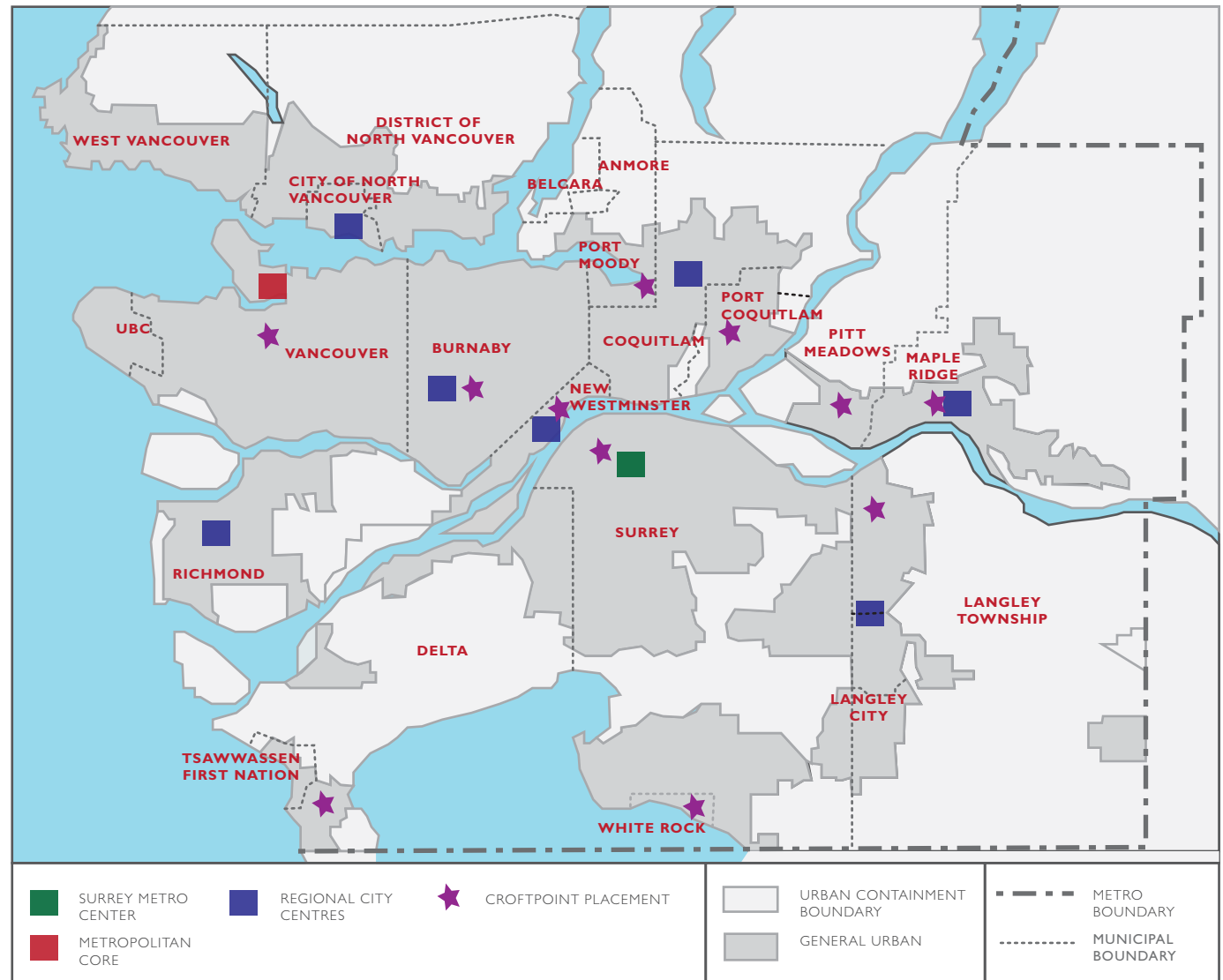
The generalizability of these findings is somewhat limited by our small sample. While results of the home builder survey should not be disaggregated to individual municipalities, they are indicative of experiences at the regional scale during the past three years. Other data used in this report is drawn from our survey of 12 municipalities, a representative public survey, and published housing data.

Placing CroftPoint in our communities [14]

Municipalities were asked to locate the CroftPoint development where they considered most appropriate. Municipalities locate apartment developments like this in specific places in order to take advantage of favourable zoning and Official Community Plan goals

The following, shown by the stars in this map, were the municipalities' selections:

Langley - Yorkson
Delta - 56 St., between 14B and 16 Ave, Tsawwassen
Maple Ridge - Town Centre
New Westminster - Victoria Hill
Port Moody - Moody Centre
Port Coquitlam - Downtown
White Rock - apartment area
Vancouver - RM zone
Burnaby - Royal Oak
Surrey - Edge of City Centre
Pitt Meadows - Harris Road
Corridor



Variations in Process Timing for CroftPoint

CroftPoint requires a series of administrative steps and political decision making in order to realize application completion. This includes submission of applications for rezoning, subdivision (consolidation), development permit, and building permit, along with Council consideration and approval. Municipalities have different procedures for how these stages of application review are processed, including when components of the application can be submitted or reviewed, when they are considered by Council, and whether they can be reviewed concurrently or sequentially.

The overall timing of steps in the development application process across municipalities varies considerably, from a total of 22 to 64 weeks, with an average across 10 municipalities of 40 weeks (Figure 7). For municipalities able to locate CroftPoint on a site where rezoning would not be necessary, a substantial time savings is seen. The average application timeline without rezoning was 29 weeks, whereas with a rezoning it was 15 weeks longer, 44 weeks (Figure 8).

Concurrent processing of the rezoning and development permit components of applications was consistent across the sample of municipalities. The rezoning process considers questions of land use

and the development permit process considers questions of building form and character. Because the function and form of a development site are closely interrelated, these aspects of approval can usually be considered together, adding efficiency without sacrificing care.

At the building permit stage, where questions of engineering and construction are finalized, 7 of 10 municipalities indicated that a building permit application could be processed concurrently with a development permit application. The concurrent processing of a building permit, across our sample of municipalities, represents a time savings of 4 to 36 weeks depending on the time required for processing. A building permit could never be issued until all development approvals were complete. Three municipalities indicated that a building permit application could not be made until the development application was complete, which in these cases added anywhere from 7 to 12 weeks to the development timeline. The concurrent processing of building permits represents a considerable time savings, given the potential total time of application processing and the additional time necessary to review a building permit [15].

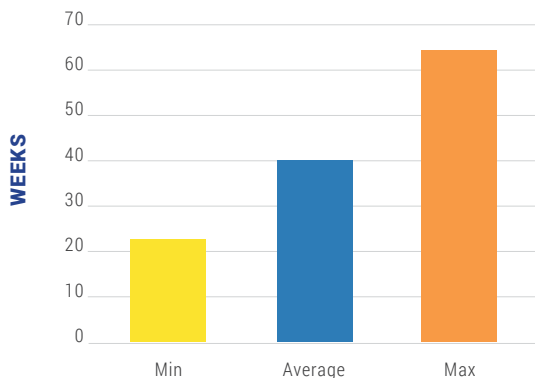


Figure 7. Average, Minimum, and Maximum Time Required to Process CroftPoint Application (N=10)

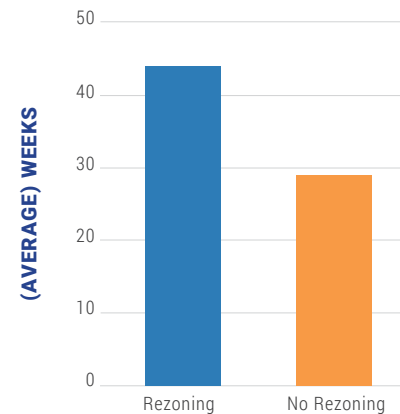


Figure 8. The Difference Rezoning Makes to CroftPoint Processing Time (N=10)

Explaining variations in fees and charges for CroftPoint

When looking at the timing of process steps in different municipalities, the clearest trend is that for those municipalities able to locate CroftPoint on a site where rezoning would not be necessary, namely Port Coquitlam, New Westminister, and Vancouver, processing time would be reduced drastically. The other cost of processing, the fees and charges that accompany the applications, are presented in Figures 9 and 10. For CroftPoint, once again, these fees vary. This variation is necessary because of differences in governance, challenging terrain, environmental risks, pace of growth and future growth trajectories, as well as community visions and plans.

For CroftPoint, as shown in Figure 9, municipal fees and charges per unit varied from a low of \$7,452 to a high of \$25,963. The average cost of fees and charges in the reporting municipalities in Metro Vancouver was \$13,144. Note that because 3 municipalities (New Westminister, Port Coquitlam, and Vancouver) located the project in an area where rezoning would not be required, their reported fees and charges omitted a rezoning fee. Also, a majority of municipalities responding indicated that other unspecified charges may apply, which could not be accounted for here.

The impact of these costs on home buyers depends on a host of factors and in many cases does not relate directly to the price of the new housing. Fees and charges may affect the rate of development over the long term. It can be noted in Figure 10 that the total proportion of fees and charges that application submission fees represent, across all municipalities, is less than 13%; the more substantial cost of development is in servicing costs and associated development cost charges 54% of the total.

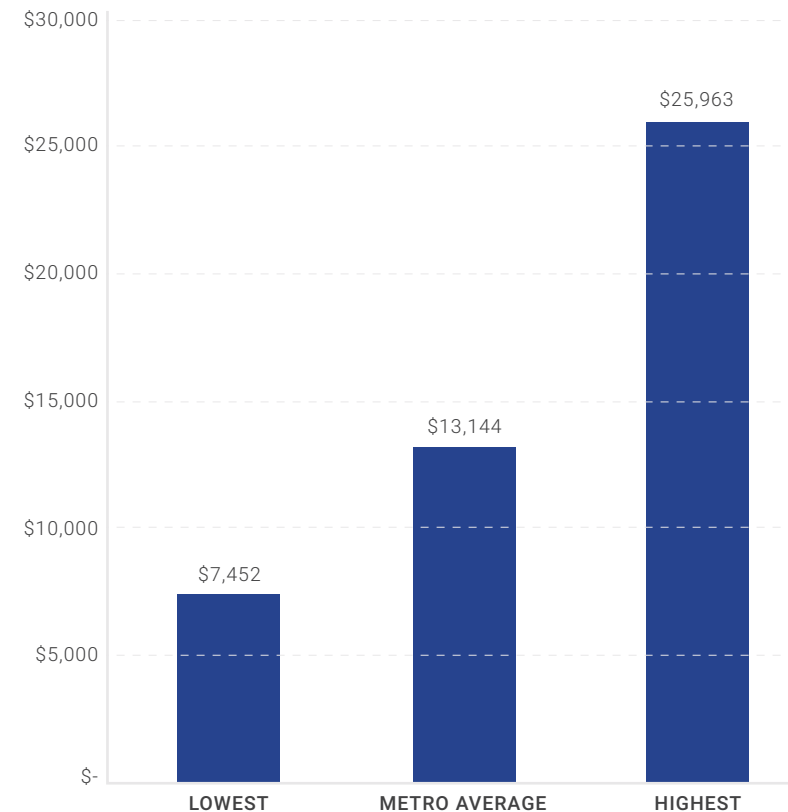


Figure 9 . Highest, Lowest and Average Fees Per Unit, CroftPoint [16]

Figure 14. Metro Vancouver Average Fees and Charges by Type, CroftPoint Scenario

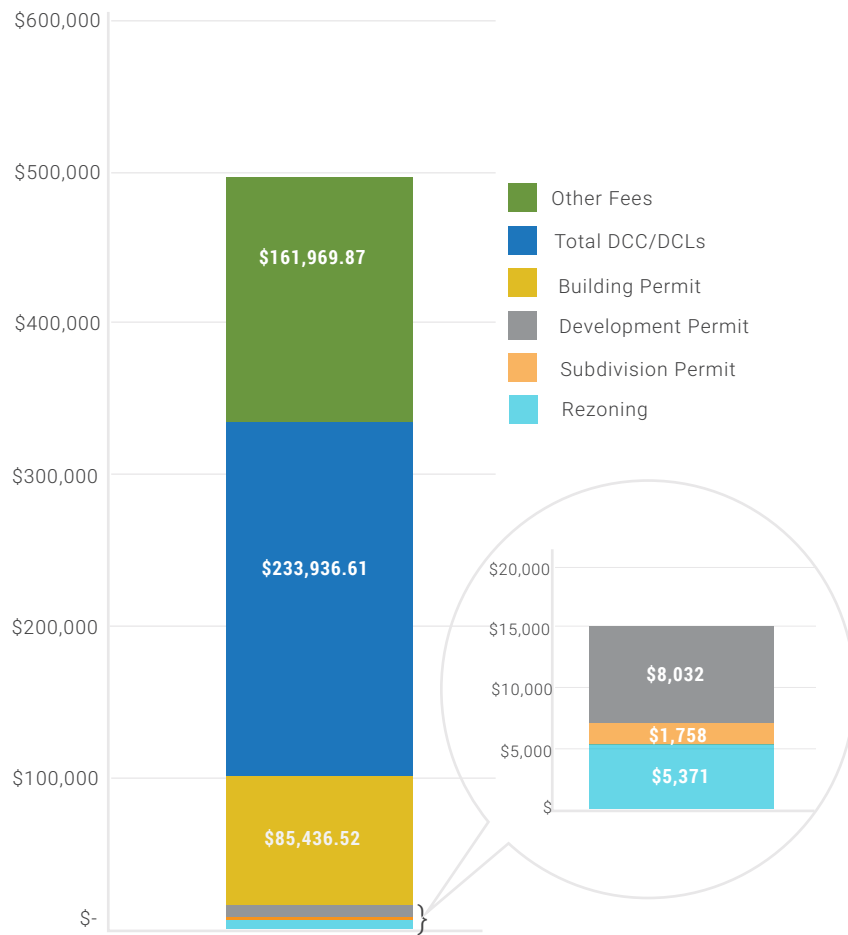


Figure 10. Metro Vancouver Average Fees and Charges by Type, CroftPoint Scenario

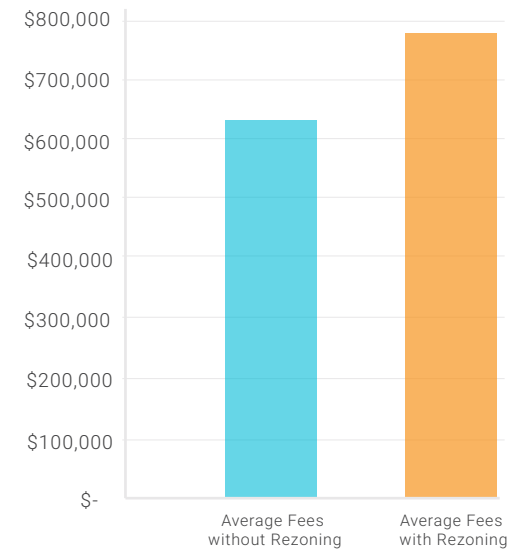


Figure 11. Difference in Total Fees With and Without Rezoning, Metro Vancouver Average, CroftPoint

Figure 10 shows the total fees and charges that the CroftPoint project would incur, on average, in the region.

Figure 11 shows that, on average, those municipalities with a pre-zoned location available to place CroftPoint without triggering a rezoning would create a cost savings of \$144,392 for the project, compared to those municipalities where the development would need to go through rezoning. This is in addition to the reduced carrying costs resulting from time savings.

Causes of delays in home building approvals

Applicants encounter delays at different points in the approvals process. In this year's survey, we heard that off-site servicing of roads and easements caused the most unexpected delays, followed by work involved with ensuring conformity with municipal plans. This is shown in Figure 12 below.

Figure 13 below demonstrates that development proposals predominantly require revisions and resubmissions across all permit types. This too is a costly piece of the puzzle, for all parties.

Figure 12. Causes of delays: When municipalities review your plans, where do you encounter the most unexpected delays? (N=32 projects)

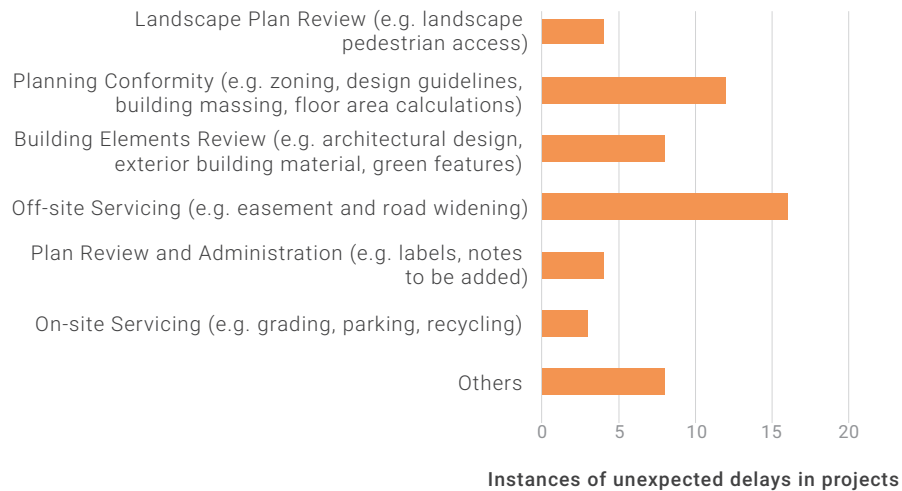
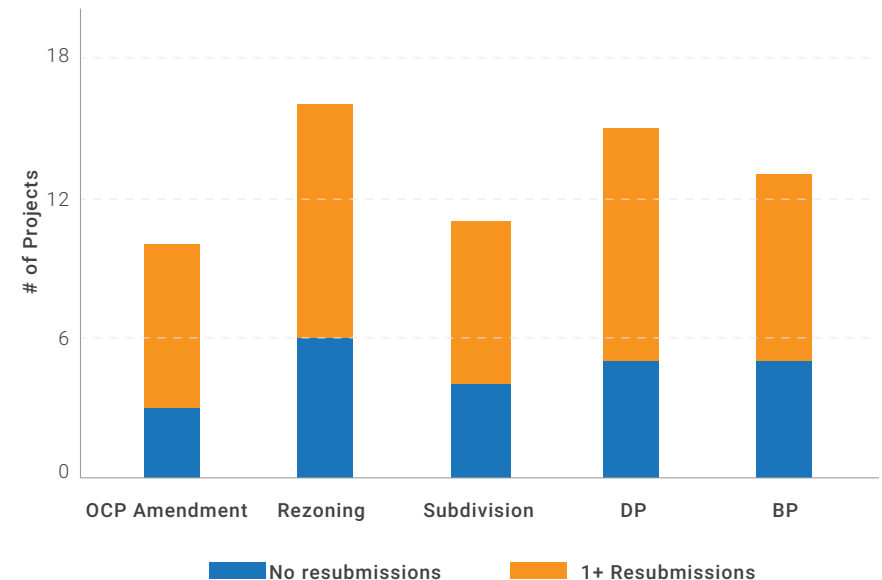


Figure 13. Resubmission "churn": After initial submission, how many full resubmissions did you make per permit type, for an average wood-frame apartment project between 2012-2014?



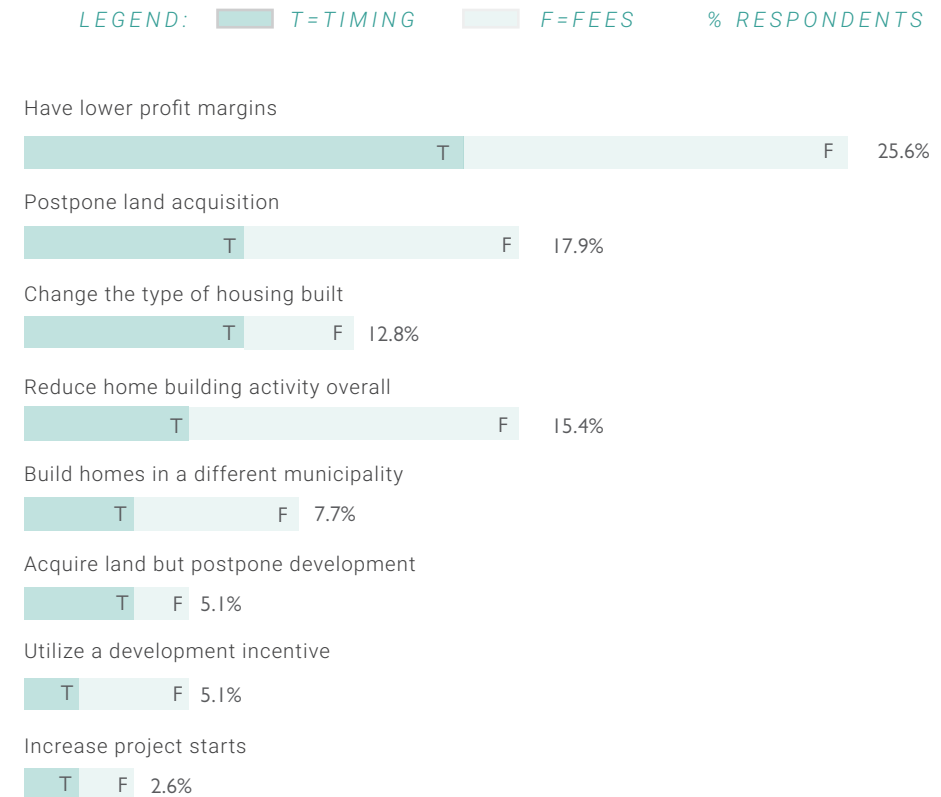
Impacts of delays in home building

In last year's report, our research showed that 30% of home builders responding to our survey felt that they were absorbing more costs, and/or lowering profit margins, due to municipal processing times, fees and charges – and that the impact of the time spent in the process was more significant than the impact of the fees and charges themselves. This year's survey results mirror this, with 26% of respondents reporting this same trend.

“Based on a review and in consultation with the development industry, the City of Vancouver determined that it will need to raise fees for rezoning, among other fees, 329%, over a period of years, in order to reflect the cost of processing the rezoning. The response of home builders was that “the fee increases would be acceptable if the proceeds were used to hire more staff to speed up the application process.”

--Vancouver Sun, Nov 17 2015

Figure 14. During 2012-2014, did either the TIMING or the FEES in the municipalities where you worked cause you to (N=32):



Amenities: What are they?¹⁷

Amenities fall within two categories: public and private. Private amenities are non-commercial common spaces or facilities that are for use by all residents of a multi-unit development on privately owned property (typically common property owned by a strata corporation, as defined by the *“Strata Property Act”*). They may be outdoors or indoors, and often include exercise rooms, playgrounds, shared patios, and other multi-purpose spaces. Amenity space excludes public streetscape improvements that may be required of a developer, such as separated sidewalks, decorative street lighting, bike lanes, and street trees or boulevard plantings.

A minimum amount of amenity space is typically required by a municipality as a component of a rezoning. Certain amenities, like those that cater to generations and families, are considered essential components of liveable multifamily developments and may be specifically required. Other amenities may be at the discretion of a developer, but could considerably increase the market desirability and livability of a particular development.

Public amenities are distinguished as being available to and benefitting any resident of the community. They include facilities such as public parks, recreation and/or senior’s centres, day cares, libraries, greenways, public art, affordable housing, and other civic facilities. Public amenities are funded, in part, through Community Amenity Contributions (CAC) and are described on the next page.

What makes a good amenity?

It is important to municipalities seeking to maintain quality of life to require amenity space and combine this with other public amenities available throughout the community. In a context of adding new housing and densifying existing neighbourhoods, a good amenity extends the living space beyond the suite. In our survey, several municipalities noted high levels of acceptance amongst builders of their desire to see quality amenities provided with new developments.

When is an amenity not an amenity?

Municipalities raised concerns about a trend in recent apartment developments to provide very small sized or limited amenities along with a cash-in-lieu contribution. Another concern, held by municipalities and builders alike, is that amenities may be required or intended for one group, like children, whereas it would better meet demand if more suited for a different group, like seniors.

Homebuilders raised concerns that larger and more elaborate amenity space design can compromise affordability of the development or be underutilized. Residents want amenities that are large enough to be useful, suited to the needs of their household, and that do not cost more to maintain than the value they get from having them. Where private amenities are sometimes provided as cash-in-lieu, such cash contributions are not to be confused with CACs. More discussion and examples of private amenities are provided on pages 37-40.



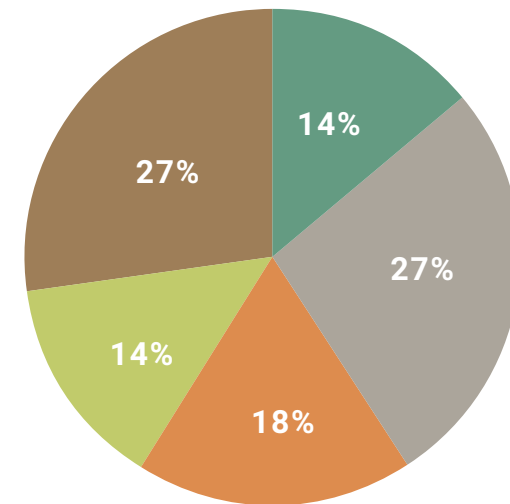
CACs: What are they and how are they calculated?¹⁸

Community Amenity Charges (CACs) are agreed upon between developers and municipalities and are levied at the time of rezoning. They are used to fund public amenities that cannot be paid for through Development Cost Charges. CACs are a cash contribution made by an applicant, levied at the time of final adoption of a rezoning by-law. An increasing number of municipalities in Metro Vancouver are utilizing this tool, in addition to other density bonus options, to help fund public amenities, as described on the previous page, that are required with urban growth to reduce the impact of densification on the community and taxpayers.

The first **G2G** report identified that home builders are looking for certainty and transparency with respect to CACs. In 2014, the Province of BC released a guide intended to inform municipalities in the application of CACs. Of the four common approaches to obtaining amenities, this guide recommended three:

1. Adopt an 'affordability by design' approach to writing bylaws, meaning including design and zoning specifications that make more affordable housing forms possible.
2. Use density bonus zoning, tied to developer contributions for density in desired zones.
3. Set targets for CACs, which are open to negotiation at time of rezoning.

The guide recommends against a 4th option of negotiating CACs based upon an intent to capture the expected proportion of land value 'lift' from rezoning, reasoning that this approach may negatively affect land costs and ultimately housing costs.



- Adopting an "affordability by design" approach to zoning bylaws
- Using density bonus zoning
- Setting target with willingness to negotiate at time of rezoning
- Negotiating CAC's based on lift
- No Answer

Figure 15. Home builders' experience with the approach taken by municipalities to calculating CACs

Responses from home builders about their experience with CACs in their 4-storey woodframe apartment projects during 2012-14 indicate that a range of practices and approaches are in operation. The largest proportion of home builders who paid CACs, 27%, experienced a density bonus approach. A smaller proportion, 14%, encountered a negotiation based upon extraction of a portion of land value "lift," the method that is not favoured by the provincial guide.

Home Builder experiences with CACs

When asked their experience with CACs in the municipalities where they worked in 2012-14, home builders did not object to paying for some amenities. Instead, they reacted negatively to CAC negotiations that they perceived as unclear, unfair when compared with the way other projects were treated, and lacking clear objectives. Others applauded their experience with Community Amenity Contributions because they were transparent, fair, and clearly matched to community needs. It is clear, as demonstrated by the feedback below, that experiences of the negotiation of CACs vary widely across the region.

“Extremely frustrating and opaque. The process appears to be intended to extract as much as possible from each development with no consideration to an overall strategy or objectives. ‘Land lift’ calculations are commonly applied, but use of this methodology is denied when the application is before Council. It appears to be a deliberate attempt to “pull the wool over the eyes” of Council.”

“Brain numbing. Irritating. Frustrating.”

“The density bonus process is fair and transparent. No problems encountered.”

“It is so bad I would not even bother to try.”

“Fairly straight forward. Not a lot of negotiation and seems relatively fair across the board.”

“They are done as per unit charge by neighbourhood and they are fixed and known, the way it should be done.”

CroftPoint: Outdoor and indoor amenity spaces

For CroftPoint, most municipalities indicated that they would exercise flexibility with regard to amenity procurement. Of the 3 municipalities that specified an outdoor amenity space requirement, Maple Ridge, Port Coquitlam, and Delta, the range in requirements was wide, as depicted in Figure 16. For those four municipalities that specified an indoor amenity space requirement, shown in Figure 17, there was also a wide range.

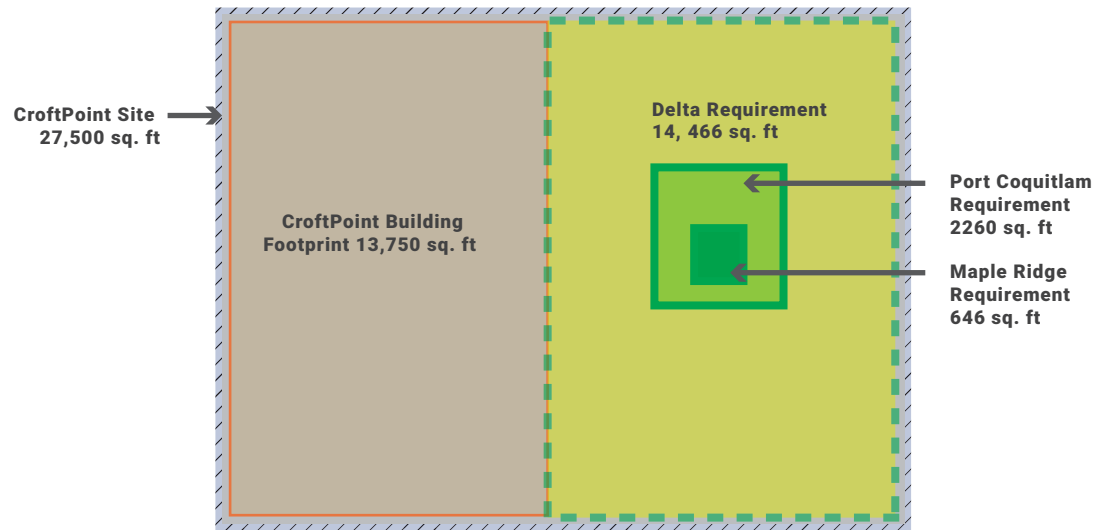


Figure 16. Outdoor amenity space requirements in some municipalities

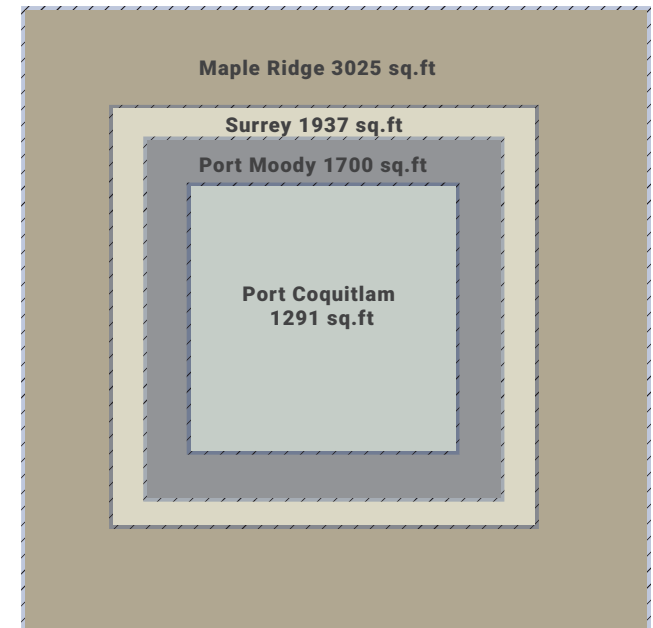


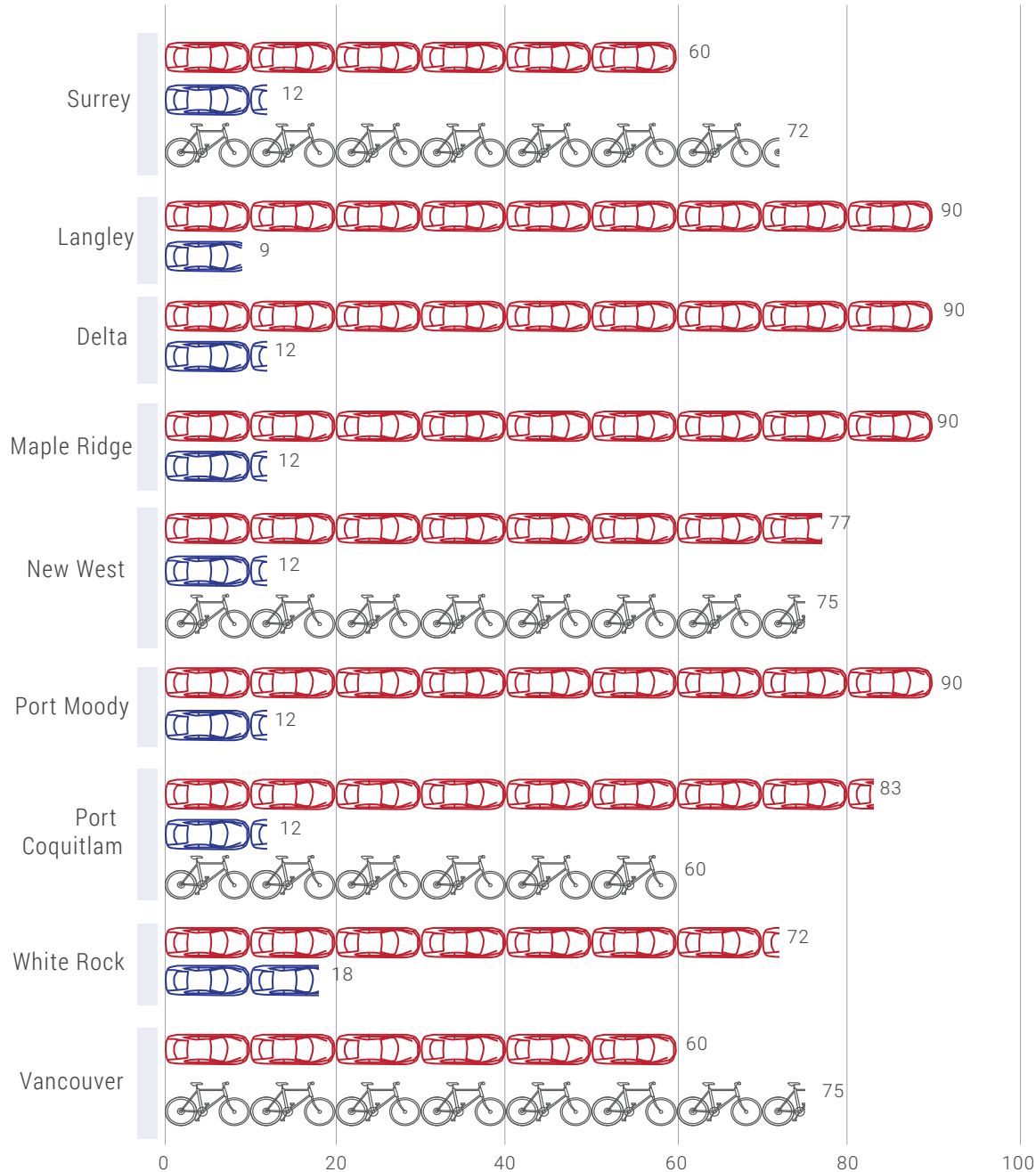
Figure 17. Indoor amenity space requirements for CroftPoint in some municipalities

CroftPoint Community Amenity Spaces

Community open space and public amenity facilities are often encouraged to connect a new development like CroftPoint with the surrounding community. These amenities are separate from the CACs described on Page 25. While most municipalities expressed a flexibility in what they would require, some municipalities are developing policies to encourage certain qualities and features in community amenities to ensure that these meet their community needs.

MUNICIPALITY	AMENITIES
Surrey	Plaza space may be provided that is publicly accessible. Onsite pedestrian connections may be provided.
Langley	Pedestrian connectivity paths, street furniture, community gardens, contributions to park facilities, public art, public access rights of way, "green links."
Delta	Not required, but provision of pedestrian connectivity, public bike racks, public seating areas would be accepted/encouraged where appropriate.
New Westminster	Pedestrian paths and benches are the most common community amenities provided.
Port Moody	Community amenities requested would depend on particular circumstances but could include greenways, parks, public access rights, rights of way, public art, affordable housing.

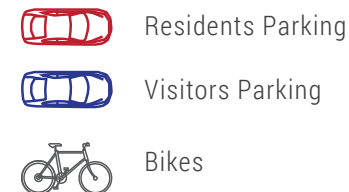
Figure 18. Bicycle and motor vehicle parking stalls required for 60 unit CroftPoint development



CroftPoint parking and transportation facilities



























How we travel from home to work and to school, and to shopping and recreation, is another key feature of livability in our region. When housing unit density is low, it becomes cost prohibitive to operate an efficient public transportation network. Translink estimates the population threshold required for cost effective frequent transit service to be 50-55 people per hectare (20-22 ppl/acre). On the other hand, the cost of building a single parking space for an apartment building, on average, is \$20,000-\$45,000. Higher parking requirements, which are a necessity where transit service is inadequate, are therefore a significant contributor to housing unaffordability: low population density and car dependency are directly related to higher costs of housing and transportation.

By 2041, regional growth projections indicate that approximately 40% of residents will still live outside the Frequent Transit Network. This reality is reflected in the diversity of parking requirements for CroftPoint for the municipalities listed here [19].



CroftPoint special requirements

Figure 19. Special Requirements for CroftPoint development

	Sustainability Checklist	Green Building	District Energy	Tree Replacement
Pitt Meadows				
Port Moody				  2:1
White Rock				  2:1
North Vancouver District			 Lower Lynn Canyon	
Delta				  2:1 + Street
Port Coquitlam				
Maple Ridge				 
North Vancouver City			 All Multi-family	
Langley Township				  30 per acre
Richmond			 Alexandra	
Surrey			 Surrey Centre	 
Vancouver			 Multiple	 
West Vancouver				  2:1

Municipal planning creates liveable places by leveraging policy requirements in order to bring value from new residential developments to the public's benefit. Regulations in place for sustainability and green building technologies, adaptable design, and tree replacement, among other things, chart a course for a community that will thrive into the future. At the same time, the variation in these approaches, alongside other objectives, can cause confusion and challenge the establishment of best practices that serve the region's interests as a whole.

In the selection of special requirements that appears here, a common tree replacement standard recognized by Port Moody, White Rock, Delta, and Surrey is a minimum ratio of 2:1. In terms of the other special requirements listed here, 7 municipalities find a sustainability checklist to be useful and have measures in place to encourage district energy systems. Six have specific green building requirements.

Neighbourhood change and new development

Community opposition to apartment development is considered to be a major barrier to growth of this housing type. We know that neighbourhood change can create opposition. Reasons vary, but resistance could be specific to the type of change proposed, or more generally towards the pace of change.

Sometimes vocal opposition creates space for better solutions to neighbourhood concerns and broader needs. Other times, community opposition can block projects that could create quality livability and density. This can lead to development patterns, such as development in greenfield and car-dependent locations, which work against the region's long-term interests and livability.

Figure 20, tabulated from a representative survey of 500 Metro Vancouver residents, demonstrates that public sentiment for and against development of a new 4-storey wood frame apartment building is split with 50% of people opposing such a project to some degree, and the other 50% supporting it to some degree. Those who are opposed, however, express stronger feelings about their opposition than those who are supportive.

Figure 20. Resident rating of support for a new 4-storey apartment building in their neighbourhood (1: very opposed - 10: very supportive [20])

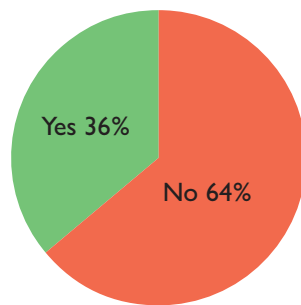
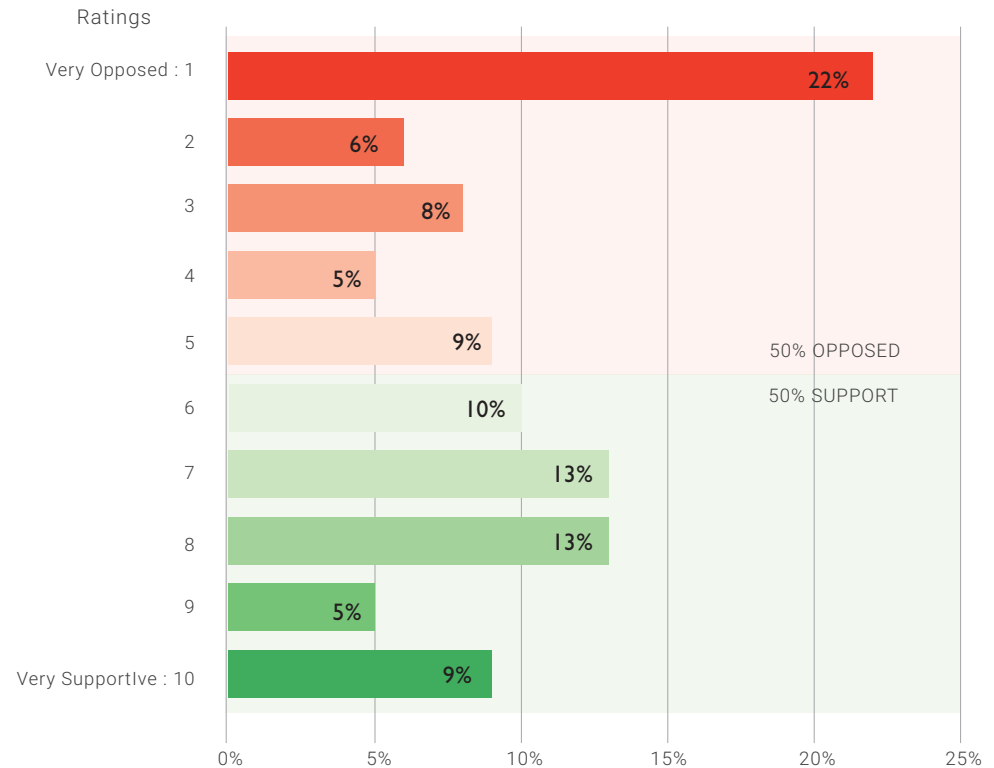


Figure 21 . Would CroftPoint be likely to generate community opposition if proposed here?

Similarly, we asked municipalities whether the CroftPoint development proposal, placed in the area of their choice, would be likely to generate community opposition. As Figure 21 shows, in 4 of 11 municipalities responding, the answer was "yes", whereas in 7 of 11 communities, opposition was unlikely to be generated. As described in the following pages, community concerns must be managed appropriately.

Home builders on consultation

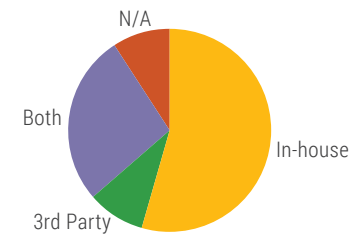
Figure 22 . Does your company have a clear policy, process, or guide for public consultation? (N = 17)



Just over half of home builder respondents had a formal company guide on public consultation. Advice received by G2G from home builders and municipalities about effective public consultation includes:

- Undertake early and ongoing consultation beyond the minimum requirement, even before a formal application is submitted. Engage directly with community groups. Encourage both those who do and do not support the development to attend the public hearing.
- Require applicants to provide detailed records of information meetings that they host, including meeting record, analysis of

Figure 23. Did your company handle public consultations in-house or did you employ a third party consultant for wood-frame apartment building projects between 2012-2014?



results from questionnaire they distributed, plan to address issues and concerns identified. Encourage a wide range of public participation, both those in support and those with concerns, to attend the public hearing.

- Take a flexible approach to consultation, adapting to the situation that arises. This could mean, for example recognizing a need to switch from informal to formal presentations or dialogue.
- Be responsive to expressed concerns, recognizing the essential nature of the public consultation.
- Make effective, multi-channel use of electronic communications, including website, email notices, and social media

What happens with public consultation feedback?

Different municipalities make different requirements of home builders when it comes to collecting public input in residential development approvals. While provincial legislation requires that municipalities provide a public hearing [22] for any rezoning process, many municipalities recommend or require much more extensive public feedback opportunities than this. Additionally, many home builders voluntarily include increased consultation opportunities for the public. Figure 23, on previous page, shows that, of 22 home building projects considered, slightly more than half handled public consultation in-house and slightly less than half hired a third party consultant for this work. Figure 25 shows that most reported back to the municipality in a summary report.

Figure 24. What happens to information presented at an open house?

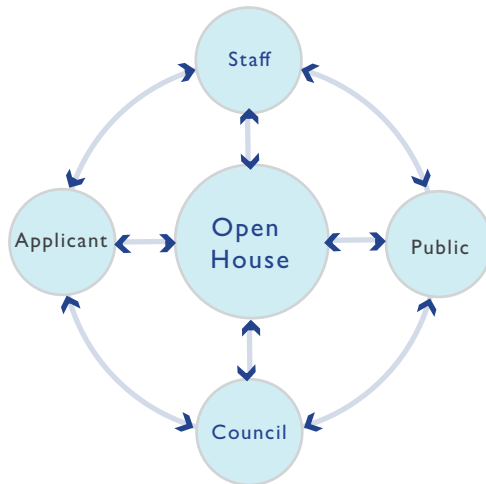
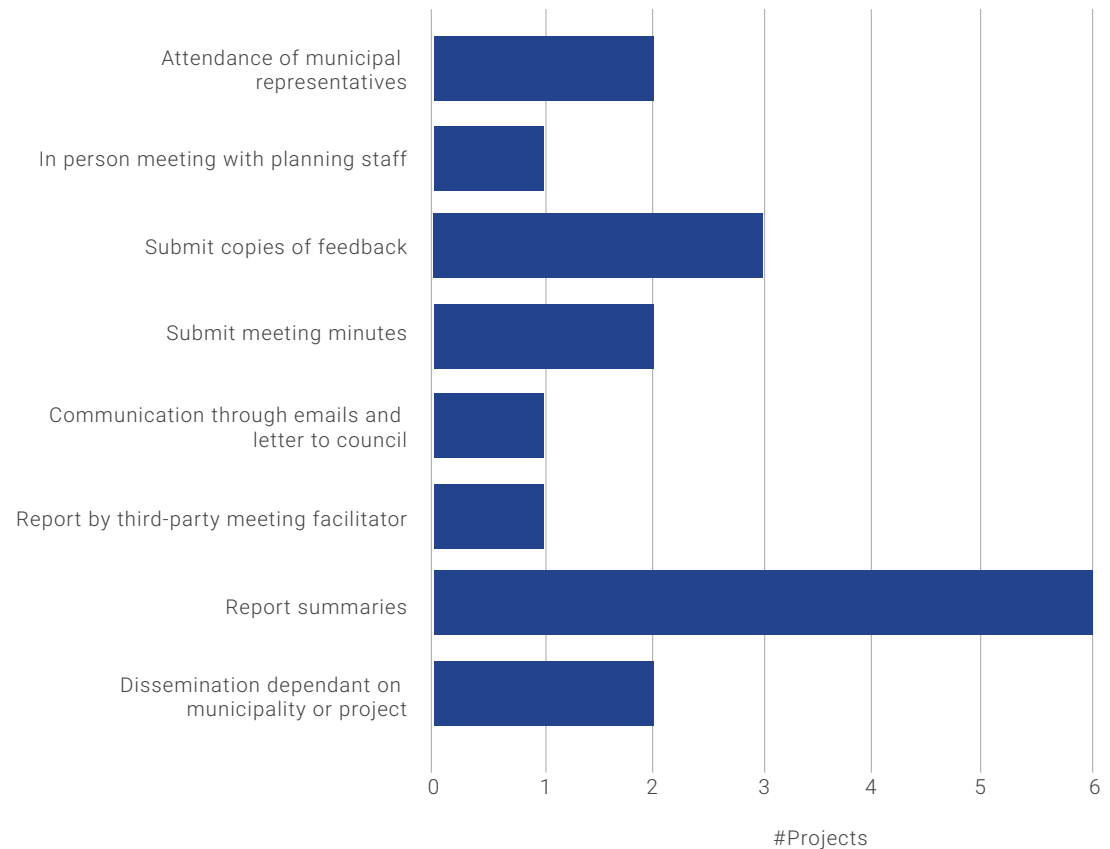


Figure 25. How is information you collect during public consultations passed on to the municipality?



The public voice in residential development

In a survey conducted by the Township of Langley, of 17 municipalities in Metro Vancouver and the Fraser Valley, 88% of respondents said that they provided other channels for public feedback into development proposals, beyond the legislatively required public hearings for rezoning or community plan amendments. Based upon our **G2G** research, a minority of municipalities in the region have a formal policy to guide efforts in public consultation. Existing policies include the District of West Vancouver's Corporate Policy on Public Involvement (2004), the City of Surrey's Consultation Principles (2011), and Delta's Public Information Meetings for Development Applications Policy (2014). Recognizing the need for more effective public engagement, municipalities are taking a closer look at how to improve this aspect of planning for new housing. Efforts include the following:

Municipal efforts to improve public engagement ^[21]

New Westminister	Public Engagement Task Force (2015) Enhancing community public engagement and encouraging greater civic participation.
Maple Ridge	Mayor's Open Government Task Force (2015) Increasing citizen participation, engagement and collaboration in addressing community issues, increasing transparency.
Langley Township	Public Engagement Standing Committee (2015) Implemented a survey of other municipalities on public engagement best practices.
Vancouver	Mayor's Engaged Task Force (2012) "Enhancing how the City engages with citizens ... improving the way the City consults with citizens on policy."
Delta	Public open houses held to engage and inform on municipal issues (2015); TalkDelta and other social media channels used.
Pitt Meadows	Citizens' Committee on Open Government recommended actions for a more transparent and responsive government (2015).

Conclusions

This **G2G** report focused on the development of woodframe apartments. In our growing Metro Vancouver region, half a million new homes are needed between 2011-2041 to accommodate expected population growth. While the housing sector booms in a few municipalities, our region as a whole has not met estimated housing demand for the period of 2012 – 2015. We also need to scrutinize carefully whether the right types of homes are being built to house our population, with the planning, infrastructure and amenities to ensure that they are contributing to a thriving, liveable region.

Since 2013, most new homes being built in the region are apartments. Apartments can offer an appealing housing form, increasingly attractive for a growing group of the region's residents. Whether new apartments contribute positively to existing neighbourhoods depends a lot on the neighbourhood plan and process surrounding their development.

A Partnership of Municipalities and Home Builders

In this context of growth, the role of municipalities and home builders at the front end of the development process is crucial, beginning from the time that a development application is submitted at the front desk of city hall, until the time that a building permit is issued. It is during this period that the outcome of the development is largely determined: how it fits into the existing neighbourhood, how it is serviced by roads, transit, green space, and other essential infrastructure, what the design of the building will include in terms of unit size, characteristics and qualities, and what amenities will accompany the homes. The approach taken to resolving these crucial questions, and the costs, fees and charges associated with the process, all determine the quality and the cost of the outcome.

Identifying Best Practices

Each municipality in our region manages the residential development approvals process differently because each has a unique context and plan for its future. Nevertheless, G2G is collecting best practices in this process that are recognized by home builders and municipalities alike. In this report, we asked home builders and municipalities to rate best practices identified in our 2014 report as well as suggest new best practices and innovations

that they are working on to improve the residential approvals process.

CroftPoint Scenario

Our municipal survey presented municipal development planners with the CroftPoint development proposal. CroftPoint is a simulated case study, 4-storey woodframe apartment building. We asked municipalities where they would recommend locating it, how long the process of obtaining permits and approvals would be, what fees and charges would be imposed, and what parking, amenities and other special requirements would accompany this development. We report on the variability in treatment of this development proposal here. Because apartment development proposals can sometimes face opposition from the existing residents, we also asked municipalities about how they engage and consult with their publics on such projects, and we report on some of the work underway to improve public consultation.

Survey Insights

Our home builder survey sought insight into the experiences of builders of woodframe apartments over 2012-2014. We include the same themes covered in the municipal survey, from the home builder perspective: experiences negotiating special requirements and community amenity charges, public consultation practices, where they experience delays and what the impact is of these delays. We also profile a number of unique amenities projects that highlight what can be done to diversify the nature and quality of amenities offered by home builders in our region.

Looking Ahead

G2G was designed to focus on best practices and typical municipal approval processes for different types of development scenarios through the G2G report. The specific housing types include:

- Townhouses (2014)
- Wood frame apartment buildings (2016)
- Single family homes
- Highrises

Glossary of best practices

The following are Best Practices in development approval processes, identified through our research into needs from both the municipal and builder sides.

Accessible and Complete Information

Online: This includes information about process, web-based application tracking and other open data technology applications, and a single point of reference for all fees and charges.

Pre-Application Meetings: Successful pre-application meetings feature good preparation, the “right” people in the room, and laying out a feasible set of expectations and timelines.

Predictable Fees and Charges:

Clarity about how fees and charges are calculated and applied adds certainty to the development planning process.

Complete Applications: Applicants must ensure professional attention to detail and completeness. For fairness and efficiency,

municipalities should use an application checklist and refuse to accept incomplete applications.

Concurrent Processing: Concurrent review of different stages of the development application (e.g. rezoning and development permit), when planned for carefully, can add efficiencies.

File Champions and Coordinated Teams:

A single point of contact or file manager for both municipality and applicant team helps with accountability, due diligence, and flow of information.

Better Public Engagement: Providing neighbours and interested groups with up-front and accessible information and opportunities for feedback on proposed development.

Municipal Staff Empowerment: Delegation of authority to staff to interpret policy, find context-specific solutions, and manage the review process.

Effective Partnership: All parties benefit from occasional development forums hosted by municipalities to educate applicants on unique processes and needs. Sharing practices enables a culture of collaboration and continuous improvement.

Policy Clarity: Providing Official Community Plan, zoning bylaw, housing development plans and housing policies that are unambiguous will assist builders to make applications that meet the desired objectives.

Case studies: Amenities that extend the suite

Background

One concern about high density living is the lack of space and amenities traditionally found in detached homes. As the region is confined by physical boundaries and experiences population growth, building indoor and outdoor as well as community amenities can help to expand the definition of high-quality living in higher density buildings.

Some common amenities found in apartment buildings or on site include meeting rooms, reception rooms, study spaces, gyms with exercise equipment and space for yoga, play rooms, lounges with kitchens, theatre rooms, guest suites, and outdoor patios with shared barbeques.

Home builder respondents to our survey, identified some innovative amenities that have proven to be popular with residents. Separated suites for guests of tenants are frequently well-used and appreciated in buildings. These suites allow residents to host out-of-town guests. For residents with pets, some include a space to groom and wash their dogs and cats. Also, as municipalities and communities work to increase the accessibility of local and fresh food, home builders are responding with amenities like garden plots.



Lounge with billiards table in the clubhouse - The Grove, Surrey



Guest suite for visitors - Harvard Gardens, Surrey



Outdoor terrace with barbecue zone - The Grove, Surrey

Case Study 1: Amenities that serve the community

Heywood on the Park, North Vancouver

Heywood on the Park, located in the City of North Vancouver, is a 67-unit market residential building with commercial-retail space on the ground-level. The original property straddled MacKay Creek situated inside Heywood Park. In order for the proposed development to move forward, rezoning the C-2 General Commercial Zone to a Comprehensive Development Zone was required.

Through discussions with the City, Marcon Construction Ltd. and PC Urban Properties Corp. came to an agreement in which the home builders would donate a part of their property divided by MacKay Creek to the municipality, overall expanding Heywood Park. In exchange, the home builder received a smaller piece of land located on the southern edge of the building site. In addition, the home builder agreed to upgrades that would further benefit the community at large. The upgrades included:

- New park entry and landscape improvements along Marine Drive
- Drainage improvements
- Selective removal and replacement of existing trees
- Removal of an old vehicle bridge
- Removal of invasive plants
- Restoration of Mackay Creek

The environmental remediation work and the land donation to the City constituted the home builder's community amenity contribution.



MacKay Creek Restoration - Heywood on the Park, North Vancouver



Heywood on the Park, North Vancouver



Lynn Valley Church Development, District of North Vancouver



Turnkey Child Care Facility as a part of the Lynn Valley Church Development, District of North Vancouver

Lynn Valley Church, District of North Vancouver

In a joint partnership with Marcon Developments Ltd., Lynn Valley United Church leveraged its land in order to replace its deteriorating church and to build a new four-storey apartment building. As the project required a rezoning from "Institutional" to "Comprehensive Development Zone 75, land use" a Community Amenity Contribution (CAC) package was negotiated to include amenities to benefit the wider community. The CAC package included:

- Four accessible rental apartment units to be owned by the North Shore Disability Resource Centre
- The construction of a new daycare to replace the existing facility that was located inside the church
- Funds for public art
- Restoration and protection of the Hastings Creek riparian area.

Case Study 2: Amenities for all ages

Amenities for all ages

The **G2G** home builder survey identified children's play areas as one of the most common outdoor amenities found in wood-frame apartment building projects. Such spaces are great for children, but do not always serve the recreational needs of other age groups. Below are examples of spaces that have been identified as popular with residents from a range of ages.

Harvard Gardens, Surrey

This master-planned community's club house by Polygon features amenities that are suitable for all ages. For example, there is a giant outdoor chess set surrounded by benches. This recently completed amenity has proven to be a popular with older adult residents. Another amenity that is expected to be in high-demand is the grass court in which residents can modify the flexible space for various activities; such as bocce. Additionally, amenities like table-tennis located inside the clubhouse have been widely-used by residents of all ages.



Giant chess set - Harvard Gardens, Surrey



Table tennis table in the games room - Harvard Gardens Surrey



Gymnasium - Harvard Gardens, Surrey

The Grove, Surrey

Beyond the playground amenity for children, the Grove in Surrey constructed a floor hockey rink complete with a viewing area and penalty box. This amenity has been frequently used by children but has also been booked regularly for adult tournaments and friendly games.



Hockey rink - The Grove, Surrey

Case Study 3: Sharing amenities with tenants and the wider community

Generally, project amenities serve the residents of specific buildings or groups of buildings but below we highlight how sharing amenities more broadly can lead to wider benefits for the community and neighboring residents with potential cost and maintenance savings overall.

The Gardens, Richmond

In most projects, amenity club houses are limited to resident use. However, in the case of Townline's 'The Gardens', a master-planned development with five, four-storey buildings, amenities are extended to retail tenants. The club house which features an indoor gymnasium, fitness centre and a bicycle end-of-trip facility with secure bike storage, showers and change rooms can be accessed and used by 'The Gardens' commercial tenants and their staff. The end-of-trip amenity has made commuting by bike more feasible.



The Gardens by Townline gives amenity access to retail tenants and their staff.

The Grove, Surrey

The Grove by Townline is a 141 park homes project in Clayton, Surrey. The clubhouse features an indoor floor hockey court, theatre, fitness room, lounge with kitchenette and a terrace lounge with a BBQ grill. Residents of The Grove also have full access to the neighbouring Clayton Rise development's clubhouse, also built by Townline. The Clayton Rise clubhouse has a fitness centre, movie theatre and heated pool. Residents of the two developments pay for the use of just one clubhouse via their strata fees and can enjoy the amenities of both.



Outdoor terrace and floor hockey court are just two of the many amenities accessible to residents of The Grove.

Notes and References

1. Metro Vancouver 2011. Metro 2040. (Table A.4).(Updated October 30 2015).
2. Net housing growth is housing completions minus demolitions, from Metro Vancouver, 2015 Housing Data Book (http://www.metrovancouver.org/services/regional-planning/PlanningPublications/MV_Housing_Data_Book.pdf). Housing demand estimates from Metro Vancouver Regional Planning, Nov 2015, Projected Increase in Housing Demand for Metro Vancouver and Municipalities 2016-2026 DRAFT. Housing demand estimates are projections prepared for planning purposes, not intended to be used as targets. Also, because most residential development today is multifamily, net completions can vary dramatically from year to year due to the nature of the development process. Does not include completions of purpose-built rental housing units.
3. Metro Vancouver 2011. Metro 2040. (Table A.4) and Metro Vancouver Regional Planning, Nov 2015, Projected Increase in Housing Demand for Metro Vancouver and Municipalities 2016-2026 DRAFT.
4. Presented on a 7-point scale of aggregated and weighted "extremely important," "very important," and "somewhat important," and "extremely well," "quite well," and "moderately well" ratings from municipal and home builder respondents, respectively.
5. Metro Vancouver 2006. Generalized Land Use by Municipality.
6. Sustainable Prosperity. 2015. Creating complete, compact and energy-efficient communities in BC: how fiscal tools can be an opportunity for local governments. Ottawa. http://www.sustainableprosperity.ca/sites/default/files/publications/files/BC_report.pdf. CMHC. 2016. Mid-rise residential wood construction. Article 1 - Feb 2016. https://www.cmhc-schl.gc.ca/en/hoficlincl/observer/load_er.cfm?csModule=security/getfile&PageID=319238
7. Metro Vancouver, 2015. Housing Data Book. New housing units are more than what appears in Figure 1 because Figure 1 data account for demolitions while Figure 3 does not.
8. Metro Vancouver 2015 Housing Data Book.
9. Metro Vancouver. 2014. Metro Housing Strategy Update Discussion Paper.
10. Metro Vancouver. Aug 2015. Regional Affordable Housing Strategy Update, Revised Draft. The Metro Vancouver Regional Affordable Housing Strategy Update also includes a fifth goal, End homelessness in the region, which is not something we are able to contend with in the context of this report.
11. Green building demonstrated by Metro Vancouver. Aug 2015. Regional Affordable Housing Strategy Update, Revised Draft. The Metro Vancouver Regional Affordable Housing Strategy Update also includes a fifth goal, End homelessness in the region, which is not something we are able to contend with in the context of this report.
12. Survey conducted by Mustel Group for SFU Urban Studies, using a panel of 500 respondents constituting a representative sample of Metro Vancouver residents. Data are weighted by age within gender within community, where "community" consists of the following groupings of municipalities: City of Vancouver and UBC; North Shore; Burnaby and New Westminister; Port Coquitlam, Port Moody, Maple Ridge and Pitt Meadows; Richmond and Tsawwassen; and Delta, the Langleys, Surrey and White Rock. The margin of error for the total sample of 500 is +/- 4.4% at the 95% confidence level.
13. Municipalities within Metro Vancouver participating in this research were Burnaby, Delta, Maple Ridge, New Westminister, Port Coquitlam, Pitt Meadows, Port Moody, Richmond, Surrey, Township of Langley, Vancouver and White Rock. North Vancouver City and District, District of West Vancouver and Coquitlam declined to participate. Anmore, Belcarra, Bowen Island, Lion's Bay, Tsawwassen First Nation and UBC were excluded due to small size and limited 4-storey woodframe developments. Home builder participants were drawn from members of the Greater Vancouver Home Builders Association and Urban Development Institute, who had built at least one 4-storey woodframe apartment building in the period 2012-2014. In total we received 17 responses that reflected work on 32 such projects across Metro Vancouver. Companies of a range of sizes and capacities were represented.
14. Base map from Metro Vancouver 2011. Metro 2040.
15. Based on application process timing estimates provided by 11 municipalities for the CroftPoint scenario application. Assumptions included no delays and results attainable for similar projects in the 2012-14 period.
16. Fees and charges based upon calculations provided by 12 municipalities and calculations made by the research team from published fees information for two additional municipalities (North Vancouver City and District), for the CroftPoint scenario application. Assumptions included no variances.
17. The Strata Property Act [SBC 1998] is available online. Langley Township provides a useful example of action to ensure amenities respond to live community needs. In 2014, Langley passed an Age-Friendly Strategy, which has shifted its amenity procurement priorities toward age-friendly design and considerations, whereas previously they had required Child Friendly Amenity Areas. The BC Housing Design Guidelines and Construction Standards (2014) provides certain general guidelines for private amenity provision.
18. Development Cost Charges (DCCs) (Development Cost Levies within Vancouver) are permitted by Provincial legislation in order to recuperate the costs incurred in providing new infrastructure. DCCs can be spent on a restricted range of items, specifically water, sewer, drainage, roads and parks. DCCs are a fixed rate charge established by by-law and are levied as part of a subdivision or rezoning. The provincial guide related to the application of CACs by municipalities is: Ministry of Community, Sport and Cultural Development. 2014 (Mar). Community Amenity Contributions: Balancing community planning, public benefits and housing affordability. Victoria, BC.
19. Density estimate calculated per gross hectare. Actual achieved density with the FTN in 2011 is 61.8 persons, combining employment and population density. Translink. 2013. Background #7: Urban Centres and Frequent Transit Corridors. New Westminister. [http://www.translink.ca/-/media/Documents/plans_and_projects/regional_transportation_strategy/Backgrounders/Urban_Centres_and_Frequent_Transit_Corridors_Backgrounder.pdf#search=%22frequent transit network background%22](http://www.translink.ca/-/media/Documents/plans_and_projects/regional_transportation_strategy/Backgrounders/Urban_Centres_and_Frequent_Transit_Corridors_Backgrounder.pdf#search=%22frequent%20transit%20network%20background%22) Metro Vancouver. Sept 2012. The Metro Vancouver Apartment Parking Study. <http://www.metrovancouver.org/services/regional-planning/PlanningPublications/AptParkingStudySummaryBooklet.pdf>
20. From survey described in footnote 12. N=500
21. New Westminister: http://www.newwestcity.ca/city_hall/committees/committee-meeting-schedules/2014-committee-meeting-schedules-and-minutes/articles/4356.php, Maple Ridge: <http://www.mapleridge.ca/DocumentCenter/View/4774>, Langley Township: <http://www.civicinfo.bc.ca/302n.asp?newsid=6131>, Pitt Meadows: <http://www.pittmeadows.bc.ca/assets/Committees/F.1%20Small%20file%20size%20-%20Pitt%20Meadows%20Open%20Government%20Final%20Report%20with%20Appendix.pdf>
22. A public hearing is a opportunity for elected officials to hear from members of the public about proposed land use changes. Legislation requires that a public hearing be held for a rezoning or Official Community Plan amendment.

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This project has been designed and implemented as a partnership between the home building industry, the region's municipalities, and other government and research interests. A hallmark of our effort is its iterative and consultative approach across the spectrum of participants in the residential development process. We hope the result is a timely, constructive contribution to answering complex questions around providing housing in our region. We hope to stimulate more informed debate about how to build the homes and communities that our growing region needs, and to seek new information and fresh perspectives in order to develop more creative solutions.

We thank all the municipalities and home builders who contributed to this, our second round of research and reporting. Participation demands valuable time, as well as trust in the project. We hope this 2016 report does justice to your contributions and rewards your willingness to face the friction of debate around this piece of the housing puzzle. We hope to be able to count on continued and growing participation in constructive and informed dialogue into the future.



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