



HOUSING APPROVALS
STUDY



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Housing Approvals Study

A review of housing approval processes in Metro Vancouver

2017 - Infill Housing



Executive Summary

The *Housing Approvals Study (HAS)* examines municipal building approval processes in an effort to reduce unnecessary time and costs for the delivery of an efficient supply of affordable housing across Metro Vancouver. HAS Best Practices (BPs) and a Composite Index are listed in an effort to foster transparent factual data-based information to encourage improvements in housing approval processes across the region.

The third edition in this series, HAS 2017 specifically examines Infill Housing forms defined as narrow-lot single family, duplex, triplex, quadplex, and the secondary suite, including laneway and coach houses.

REPORT FINDINGS AND RECOMMENDATIONS:

As a percentage of the total housing stock across Metro Vancouver, a small increase can be seen in the use of infill housing over the past four years, from 13.5 percent in 2012 to 15.5 percent in 2016. The growth of 2 percent is limited to the addition of rental stock in the form of suites within the single family home, vs the addition of affordable, ground-oriented ownership options such as the duplex, triplex and fourplex; the proportion of which remain flat at just 2.2 percent.

Looking at existing housing stock, a major cause of Metro Vancouver's housing affordability issue appears to be the inefficient use of the limited residential land base.

Representing 51 percent of all available housing stock in Metro Vancouver, 363,987 single family homes occupy 63% of residential zoned land, with many of these lot sizes ranging from 50 feet to 80 feet in width; significantly larger than the standard city lot width of 33 feet.

By dividing the land value into two, three or four households via subdivision, or redevelopment to duplex, triplex or quadplex forms, the proportion of land to total property value is reduced, making each individual unit more affordable, with the option of adding one or more rental secondary suites as "mortgage helpers" for the original property owner.

However, faced with the often drawn-out rezoning process, and deterrents such as 'lack of uniform policies, varying building permit fee schedules across metro Vancouver, and resistance to neighbourhood change noted by builders, many wanting infill housing adopt the 'path of least resistance' and build one-for-one replacement houses.

Processing time varies widely from 7 months in Langley City to 24 months in White Rock with no discernable pattern due to the variances realized in large vs. small municipalities, heavily urban vs. primarily suburban, geographic location, permit application volumes, etc.

As with processing time, there is a wide variation amongst Metro Vancouver municipalities in the fees and charges required to approve the Infill Housing scenario, from a low of \$18,000 in Port Coquitlam to a high of \$53,000 in Surrey.

Although variances will always exist due to each municipality's unique environment, **HAS Best Practices (BP)** are established to identify processes pertaining to Infill Housing that provide mutually-beneficial improvements for both local governments and industry to allow for the efficient flow of permit applications.

The nine identified HAS BPs include: **Pre-zoning**, Risk-based Permitting and Inspection Policy (Builders' **Nexus Lane** rewarding professional applicants with accelerated processing), Gatekeeper (used to prevent incomplete and/or poor quality applications from entering the system), E-Permit Online System, Single Point of Contact File Coordinator, Pre-Application Checklist, User-Friendly Geographic Information System Mapping software, Flexible Staffing Capacity, and Concurrent Processing.

Perhaps the most applicable Infill Housing Best Practice relevant to all municipalities is the pre-zoning of land to eliminate the lengthy rezoning process, and reduction of fees. By identifying areas where such development can take place, and gathering neighbourhood consensus at the Official Community Plan stage, vs on a project by project basis, housing units can be added by the much quicker development permit (DP)/building permit (BP) process, decreasing approval time by up to 18 months.

Based on recommended BPs and existing housing stock, the **HAS Composite Index** is established to highlight municipalities best poised to implement Infill Housing policies to achieve gentle densification of ground-oriented, family-friendly housing within existing neighbourhoods.

The top ten municipalities identified are: Burnaby, Langley Township, New Westminster, Richmond, Port Coquitlam, North Vancouver City, Port Moody, Delta, Vancouver and White Rock, noting this Index is not an endorsement of municipalities listed doing “all the right things”. While it is true that many have adopted some of the Best Practices identified in this report, there is still much to do, in the advancement of the Infill Housing form across all of Metro Vancouver.

Infill Housing options for single family dwellings help to address housing supply and affordability issues through gentle densification and the support for ‘complete liveable communities’, while maintaining and enhancing the integrity of existing neighbourhoods.

Municipalities who embrace gentle densification vs ‘keeping the status quo’ will benefit from an increase in their economic base from which local schools, businesses, amenities and services can thrive.

Research conducted on the existing housing of Metro Vancouver shows a continued shortfall in the Regional Growth Strategy by over 4,400 housing units per year, as the growth rate continues to increase by 3,000 new residents per month.

Even a small change can make a big impact. 18,000 new ground-oriented housing options can be built if just 5 percent of single family homes in Metro Vancouver are pre-zoned to allow for the more affordable duplex housing form.

A digital copy of this report, complete with interactive maps, charts and data showing Metro-wide and individual municipalities can be found online at www.gvhba.org/HAS.



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Purpose and Outcomes of the Housing Approvals Study

BACKGROUND

The 2017 *Housing Approvals Study (HAS)* is the third report of its type. The first two reports in this series, known as *Getting to Groundbreaking (G2G)*, were produced in collaboration between GVHBA, SFU and UDI, and examined the municipal approvals process for townhouses (2014) and low-rise wood-frame apartments (2016). HAS 2017 is a collaboration between the **Greater Vancouver Home Builders' Association (GVHBA)** and **Landcor Data Corporation (Landcor)** and focuses on Infill Housing (IH) in established single family residential zones across Metro Vancouver.

PURPOSE OF HAS

- Examine the building approvals process from the perspective of municipalities and home builders.
- Identify challenges and the Best Practices of the building approvals process in an attempt to foster collaboration between municipalities and builders
- Examine existing housing stock, in particular Infill Housing forms across Metro Vancouver.
- Establish a HAS Composite Index based on a series of criteria evaluating the municipality's ability to deliver the timely supply of Infill Housing to meet the demand of the region's growing population.

EXPECTED OUTCOMES OF HAS

- Address issues of affordability, supply of suitable housing types with appropriate density via relevant, fact-based report findings, and recommendations based on Infill Housing solutions.
- Recommend Best Practices in the building approvals process amongst municipalities and home builders to reduce unnecessary time and cost for the benefit of delivering an efficient supply of Infill Housing.
- Foster transparency amongst municipalities and home builders through fact-based information in an effort to achieve Best Practices.
- Identify opportunities across Metro Vancouver to help address the lack of affordable, ground-oriented housing supply.

What's New in the 2017 Housing Approvals Study?

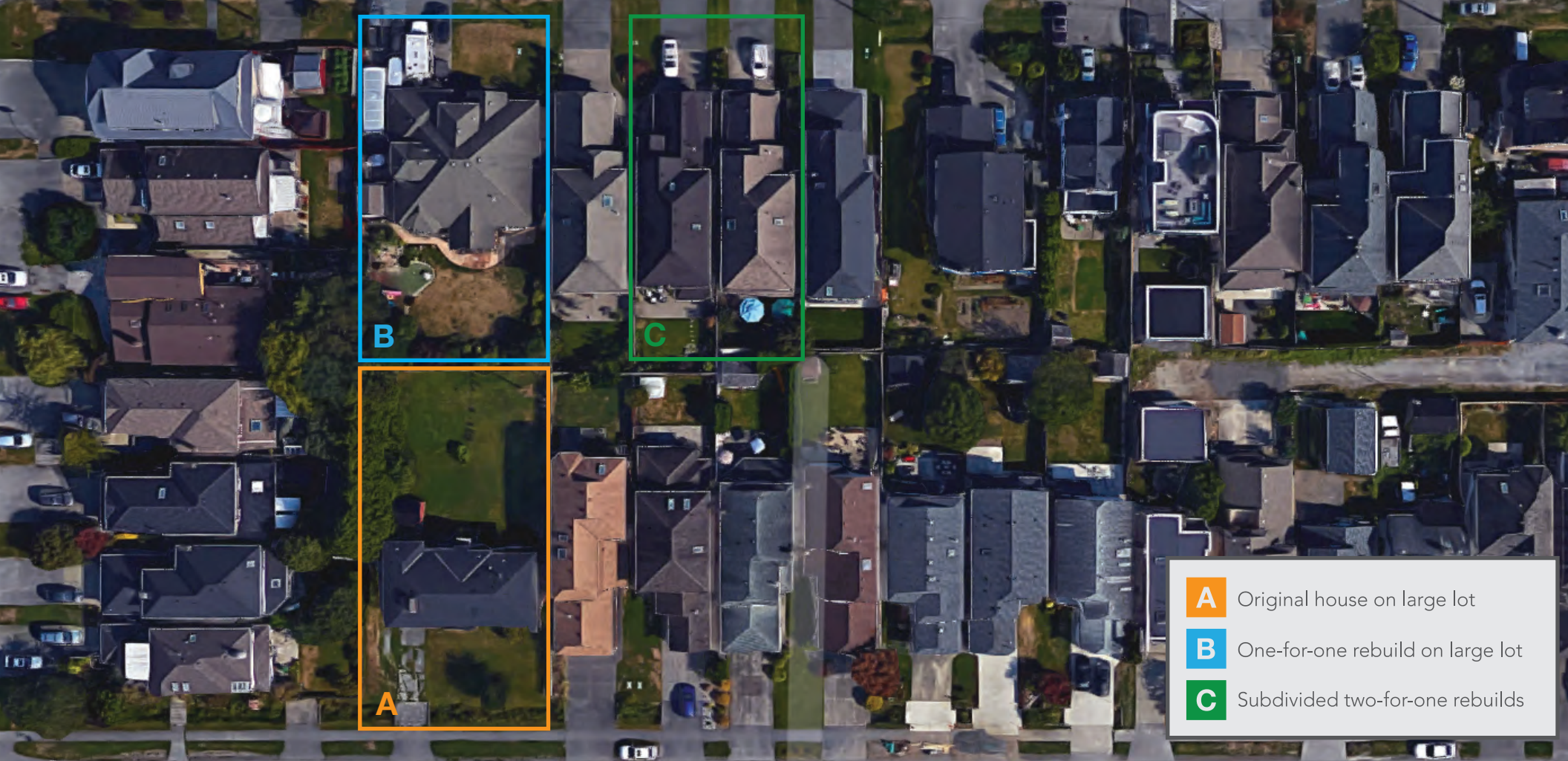
- This report examines the approvals process for single family homes, focusing specifically on infill housing forms such as a narrow-lot single family, duplex, triplex, quadplex, secondary suite, laneway and coach houses, collectively known as forms of 'gentle densification'.
- The new GVHBA/Landcor partnership provides access to the most reliable, up-to-date real estate information data source in British Columbia.
- An interactive online report allows for a 'deeper data dive' to showcase the relevance of findings at a granular, community-based level.
- A HAS Composite Index based on recommended Best Practices and existing Infill Housing stock identifies municipality successes and short-falls in meeting Metro Vancouver's projected housing supply estimates.
- Review of approvals processes and cost details for typical infill housing.



Sub-division (two-for-one): Existing 66' lot subdividable into two 33' lots, typical of Steveston, where smaller lot subdivision is included in Official Community Plan.



"An interactive online report allows for a 'deeper data dive' to showcase relevance of findings at a granular, lot-by-lot community-based level."



- A** Original house on large lot
- B** One-for-one rebuild on large lot
- C** Subdivided two-for-one rebuilds

Example of a neighbourhood undergoing infill development.
Photo source: Google Maps



"A 'complete community' requires a complete mix of housing stock to provide for the variety of demographic and housing needs. Neighbourhoods that embrace gentle densification vs 'keeping the status quo' will contribute to an increase in the municipality's economic base from which local schools, businesses, amenities and services can thrive, all while preserving the integrity of the existing neighbourhoods."

Why is HAS 2017 - Infill Housing Important?

- The regional population of Metro Vancouver continues to grow at 3,000 new residents per month, and continues to fall short of the Regional Growth Strategy by over 4,400 housing units per year. Home builders and municipalities are both responsible for accommodating this growth while expanding our housing options to meet residents' needs in a way that preserves and enhances the livability of our cities.
- We must utilize our limited residentially-zoned land in a more efficient manner. Representing 51 percent of all available housing stock in Metro Vancouver, 363,987 single family homes (2016) occupy 63 percent of residential zoned land, with many of these lot sizes ranging from 50 feet to 80 feet in width; significantly larger than a standard city lot width of 33 feet.
- Infill Housing options for single family dwellings can help to address housing supply and affordability issues through gentle densification and the support for growth of 'complete liveable communities', while maintaining and enhancing the integrity of our existing neighbourhoods.



Smallworks Studios / Laneway Housing Inc., Vancouver, 1.5 level laneway house.



"The long drawn-out rezoning process for infill housing leads many to adopt the 'path of least resistance', building one-for-one replacement houses."

- The HAS Composite Index will help to identify the leading municipalities of Infill Housing with transparent factual data-based information to foster improvements in the housing approvals process across the region.
- Adoption of HAS Infill Housing Best Practice recommendations will empower staff to process more efficiently with the outlook of eliminating the political approvals process required for every application.
- Even a small change can make a big impact. 18,000 new ground-oriented housing options can be built if just 5 percent of single family homes in Metro Vancouver are pre-zoned to allow for the more affordable duplex housing form.
- HAS provides factual messaging to enable meaningful engagement with those residents who resist any policies resulting in additional densification of their neighbourhoods.

Housing Forms used for this report: Although not the desired outcome from the perspective of optimal use of residential land stock, this report includes the most common Infill Form, a demolish-rebuild “one-for-one” replacement project to ensure a sufficient data source. The original methodology of examining the subdivision of larger 60’- 80’ lots to yield a two-for-one development or greater realized too few examples, drawing the conclusion Metro Vancouver has a large opportunity to achieve gentle densification through ground-oriented infill housing.

Note: The decision was made to exclude new “greenfield” subdivisions, because of the relatively low incidence of this form of development among the 17 sampled municipalities in Metro Vancouver. In contrast, infill single detached houses are constructed in virtually all jurisdictions.



“18,000 new ground-oriented housing options can be built if just 5 percent of single family homes in Metro Vancouver are pre-zoned to allow for the more affordable duplex housing form.”

HAS Best Practices Summary of Recommendations

HAS Best Practices (BP) identifies processes that provide mutually-beneficial improvements for both local governments and industry to allow for the efficient flow of permit applications, resulting in a more timely supply of new housing stock. Implementation of BPs are reviewed in each edition of the G2G/HAS report, however a BP ranking is not reported as not all recommendations are relevant to each housing form studied. In this report we have highlighted Best Practices, some new and some identified in previous reports, applicable to Infill Housing.

- Pre-zoning:** Pre-zoning neighbourhoods suitable for subdivision, with the public consultation process at the Official Community Plan or Local Areal Plan stage, vs rezoning on a project-by-project basis can dramatically reduce the time and cost required to build infill housing. Removing the rezoning hurdle at the development stage will encourage development of the 'missing-middle' housing form, Infill Housing.
- Risk-based Permitting and Inspection Policy:** A risk-based permitting and inspection policy, also known as a '**Nexus Lane**', can reward professional applicants with accelerated processing, reduced turnaround time and cost, and improved staff efficiencies. The tremendous value associated with this process will create a strong incentive for the builder to ensure future applications meet or exceed the necessary requirements.
- Gatekeeper:** The gatekeeper function is to prevent incomplete and/or poor quality applications from entering the system. Given the additional staff time required to deal with substandard applications, preventing their entry at the outset can improve staff productivity, and improve processing time for competent, professional builders submitting quality applications.
- E-Permit Online System:** A significant time-saver for builders, and improvement on staff efficiency, builders submit application forms, surveys, compliance letters, schedules and blueprints via an E-Permit online system. An online process enhances transparency and streamlines the deficiency/response process as builders can view permit status and inspection dates, eliminating the need for endless phone messages and emails.
- Single Point of Contact/File Coordinator:** A File Coordinator can improve municipal efficiency, and eliminate the need to source different files for each inquiry. This single point of contact fosters the builder/municipal working relationship, helping to facilitate the implementation of the Risk-Based Policy for permitting and inspections.



"Pre-zoning for subdivisions at Official Community Plan stage, vs rezoning on a project-by-project basis dramatically reduces time & cost."

- **Pre-Application Checklist:** Many builders of Infill Housing are smaller companies without access to in-house development planning staff or outside development consultants. Online access with simple, clear application requirements for rezoning, subdivision, development and building permits can eliminate unnecessary delays caused by incomplete or inaccurate information submitted. A Pre-Application Checklist, including sample forms, identifying the most common pitfalls of incorrect/incomplete applications, will aid in submissions of a correctly completed application.
- **User-Friendly Geographic Information System Mapping Software:** User-friendly GIS Mapping that provides clear, current and accurate information about the site, including dimensions, area, zoning, location of easements and rights-of-way will assist the builder in preparation of a complete application.
- **Flexible staffing capacity:** To respond to the inevitable ebb and flow of permit volumes, local governments can employ a number of innovative techniques to adjust their staff capacity. Examples include: acceptance of contracted Certified Professionals which reduces the need for staff to approve each and every form, document or diagram; and the City of Coquitlam's 'Saturday Work Days' as designated overtime days to allow staff to focus on the processing of file backlogs, without the weekday interruptions of emails, phone calls, or visitors.
- **Concurrent Processing:** Most municipalities allow applicants to proceed with multiple steps simultaneously in order to save time. There is some risk borne by the applicant, as changes required during the rezoning process, either by staff or council will require revisions to drawings and specifications in the development permit and/or building permit applications. These revisions will require additional costs and time, and will reduce the benefits of concurrent processing.



Subdivision alongside heritage restoration, New Westminster: Two-for-one achieved while maintaining neighbourhood character.

Housing Supply for a Growing Region: Who's Meeting Metro Vancouver's Regional Growth Strategy?

Municipalities and home builders need to work together to identify Best Practices, and implement strategies to encourage the best housing outcomes possible. By 2041, Metro Vancouver will need nearly half a million new homes to house more than one million new residents.

The accompanying graph shows the three year average net housing growth, and the estimated housing demand for each of the municipalities, based on the Regional Growth Strategy. Only the City of Vancouver, Richmond, and the City of North Vancouver are realizing construction of homes greater than these projections. Metro Vancouver as a whole continues to fall short of the Regional Growth Strategy by over 4,400 housing units per year, as the growth rate continues to increase by 3,000 new residents per month.

While the Annual Housing Growth Chart (Figure 1) clearly shows many municipalities suffer from a shortage of housing, it does not identify specific market characteristics such as housing forms, where the shortfalls lie, and where the market opportunities exist. To understand these market characteristics, we look to the HAS Infill report.

NOTE: HAS data is based on 'net housing completions' less units demolished, rather than 'housing starts' or 'permits', to more accurately represent supply.

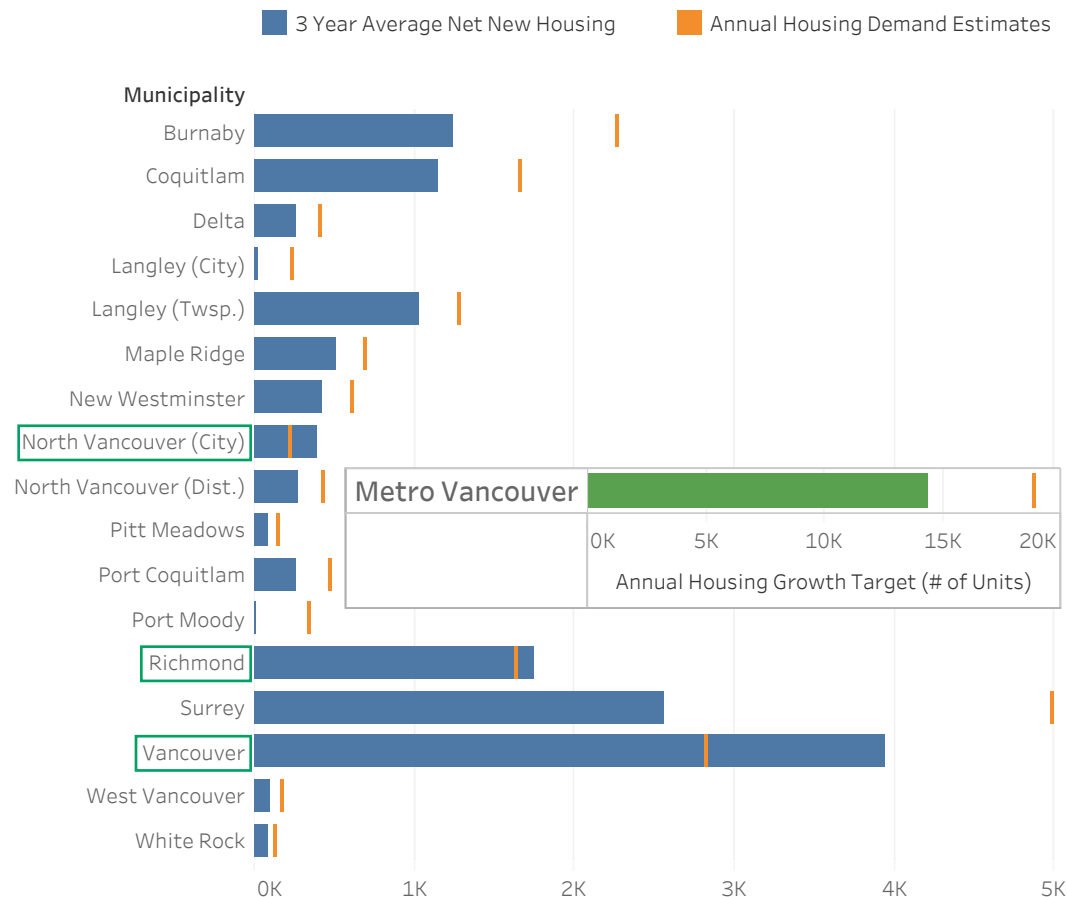


Figure 1: Net housing growth and housing demand estimates, 2014-2016.



“Metro Vancouver as a whole continues to fall short of the Regional Growth Strategy by over 4,400 housing units per year.”

HAS Composite Index - Top Ten Ranked Municipalities

Recognizing every municipality faces challenges unique to their areas, the HAS Composite Index factors in a city's existing environment including:

- Percentage of single family zoned properties with accessory dwelling units
- Permit fees and charges
- Estimated time for processing
- Incorporation of Best Practices, and
- Satisfaction comments from builders

RATIONALE/METHODOLOGY:

The 17 municipalities that are included in this study were ranked on the above-noted criteria. The HAS Composite Index is a summation of those rankings, with the lowest total values representing the highest positions in the ranking. All five criteria are equally weighted.

WHAT DOES IT MEAN TO BE ON THE LIST?

Based on this research, the HAS Composite Index represents those municipalities best poised to implement infill housing policies to achieve gentle densification of ground-oriented, family-friendly housing within existing neighbourhoods.

WHAT DOES THE LIST NOT REPRESENT?

This index is not an endorsement of municipalities listed doing "all the right things". While it is true that many have adopted some of the Best Practices identified in this report and previous G2G reports, there is still much to do in the advancement of the infill housing form, noting many jurisdictions currently lack the zoning, policies and processes necessary to incentivize infill housing.

HAS COMPOSITE INDEX

1 BURNABY	6 NORTH VANCOUVER CITY
2 LANGLEY TOWNSHIP	7 PORT MOODY
3 NEW WESTMINSTER	8 DELTA
4 RICHMOND	9 VANCOUVER
5 PORT COQUITLAM	10 WHITE ROCK

Metro Vancouver's Land use: Where are the Opportunities for Infill Housing?

THE REGIONAL CONTEXT: LAND USE MAP

The Lower Mainland's residential land base is dominated by single family zoning. As noted in the Land Use Map (Figure 2), Single Detached and Duplex zoned land represents over 64 percent of residential land – a figure that would be higher, if houses on rural lands (non-ALR) and mobile home parks were included.



"For a closer look, visit www.gvhba.org/HAS to view land use of individual municipalities and neighbourhoods."

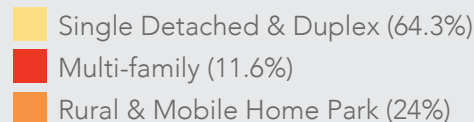
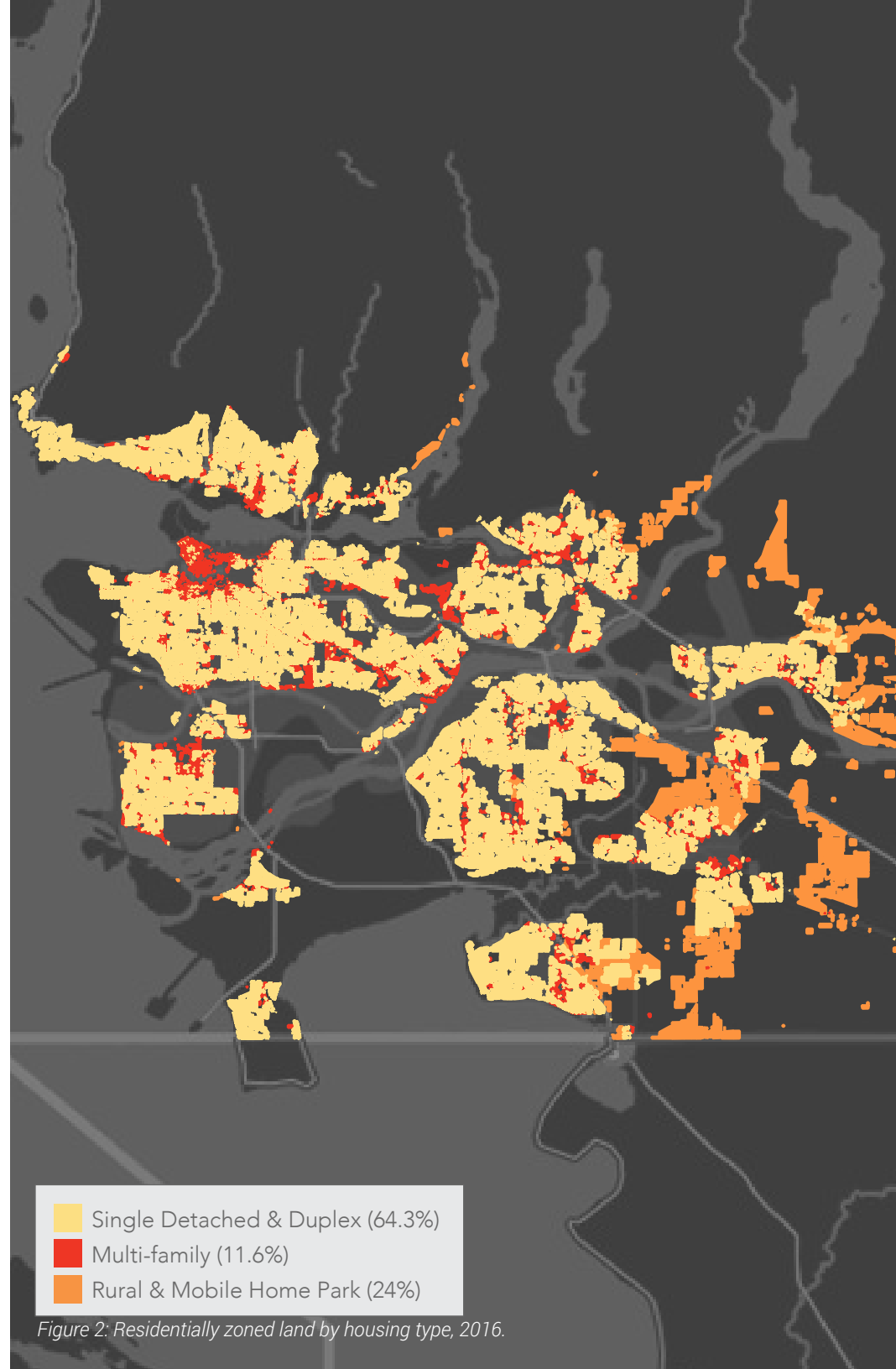


Figure 2: Residentially zoned land by housing type, 2016.

PERCENTAGE OF RESIDENTIAL AREA BY LAND USE DESIGNATION

Looking at Percentage of Residential Area by Land Use Designation (Figure 3), all municipalities have over two-thirds of their residential land designated as single family/duplex housing, except Langley Township, Maple Ridge and Pitt Meadows with the largest percentage of land use zoned rural.

Note: When discussing the potential for Infill Housing, this report references the SF/Duplex zoned lands shown in yellow below. The orange rural/mobile home park lands are considered to be covered under future Neighbourhood Plans as new development areas, and are therefore not included as an opportunity for 'Infill Housing'.

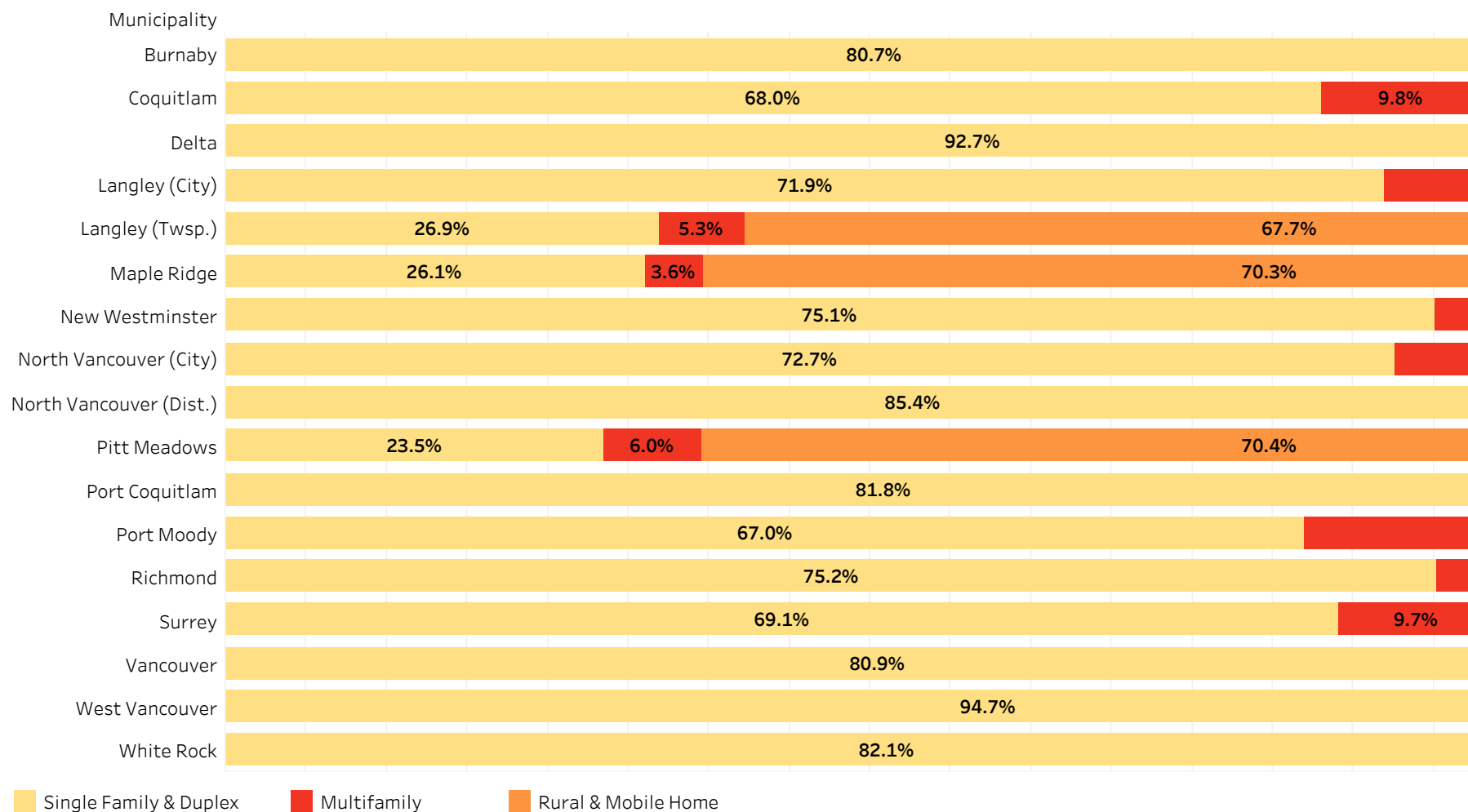


Figure 3: Municipal allocation of residentially zoned land by land use designation, 2016.

2016 RESIDENTIAL INVENTORY COUNT: PROPERTY TOTALS BY TYPE & INVENTORY COUNTS AND PERCENTAGE OF TOTAL INVENTORY

The size of the pie chart on the Property Totals by Type Map (Figure 4) is proportional to the volume of housing stock by municipality in relation to Metro Vancouver's total inventory. Based on the size of pie chart, and corresponding dark blue section, representing the single family housing, Vancouver (75,208), Surrey (80,864), Burnaby (27,705) and Richmond (26,483) represent the largest supply of single detached housing stock in Metro Vancouver.

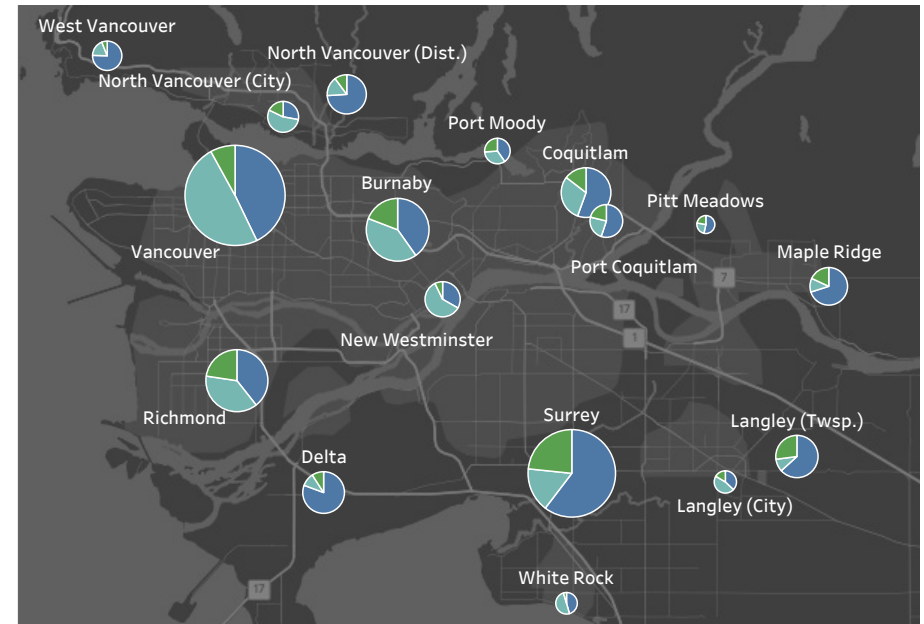
Looking to the Inventory Counts and Percentage of Total Inventory Table (bottom right), we see the total number of detached units in Metro Vancouver (363,987), which accounts for just over one-half of all housing units, resides on almost two-thirds of the residentially zoned land, as noted on the Land Use Map on page 14.

Conversely Condo/Apt and Attached units represent just under one-half of all units, and occupy less than 12 percent of the residential land base. While it would be inappropriate to suggest all single family zoned land be developed to high multi-family densities, looking at the numbers, it becomes clear we are underutilizing valuable land which can be used to address the growing need for and demand for ground-oriented housing.

To view additional data for years 2013 through 2016 and the view individual municipalities and neighbourhoods go to www.gvhba.org/HAS.



"We are underutilizing valuable land which can be used to address the growing need and demand for ground-oriented housing."



Municipality	Detached	Condo/Apt.	Attached	Grand Total
Burnaby	27,705 (3.9%)	28,010 (4.0%)	13,197 (1.9%)	68,912 (9.7%)
Coquitlam	24,001 (3.4%)	12,912 (1.8%)	6,294 (0.9%)	43,207 (6.1%)
Delta	24,524 (3.5%)	3,113 (0.4%)	2,769 (0.4%)	30,406 (4.3%)
Langley (City)	3,238 (0.5%)	4,048 (0.6%)	1,426 (0.2%)	8,712 (1.2%)
Langley (Twsp.)	19,797 (2.8%)	3,024 (0.4%)	8,467 (1.2%)	31,288 (4.4%)
Maple Ridge	17,346 (2.4%)	2,936 (0.4%)	4,470 (0.6%)	24,752 (3.5%)
New Westminster	7,211 (1.0%)	12,919 (1.8%)	1,546 (0.2%)	21,676 (3.1%)
North Vancouver (City)	4,666 (0.7%)	9,083 (1.3%)	2,976 (0.4%)	16,725 (2.4%)
North Vancouver (Dist.)	19,878 (2.8%)	4,263 (0.6%)	2,715 (0.4%)	26,856 (3.8%)
Pitt Meadows	3,025 (0.4%)	1,374 (0.2%)	1,256 (0.2%)	5,655 (0.8%)
Port Coquitlam	10,346 (1.5%)	4,443 (0.6%)	3,978 (0.6%)	18,767 (2.6%)
Port Moody	4,612 (0.7%)	3,841 (0.5%)	2,987 (0.4%)	11,440 (1.6%)
Richmond	26,483 (3.7%)	25,581 (3.6%)	15,212 (2.1%)	67,276 (9.5%)
Surrey	80,864 (11.4%)	21,796 (3.1%)	31,267 (4.4%)	133,927 (18.9%)
Vancouver	75,208 (10.6%)	86,261 (12.2%)	14,023 (2.0%)	175,492 (24.8%)
West Vancouver	11,368 (1.6%)	2,799 (0.4%)	901 (0.1%)	15,068 (2.1%)
White Rock	3,715 (0.5%)	4,033 (0.6%)	383 (0.1%)	8,131 (1.1%)
Grand Total	363,987 (51.4%)	230,436 (32.5%)	113,867 (16.1%)	708,290 (100.0%)

Figure 4: Percentage of total residential inventory by municipality and housing type, 2016.

Infill Housing – How It Can All Fit In

HOUSING FORMS

Infill housing comes in a variety of configurations, making it an ideal choice for blending into existing communities to achieve gentle densification. Defined as the use of pre-existing single-family zoned land within a built-up area, subdivisions (two-for-one development on larger lots), plus major renovation or reuse of existing homes including duplexes (side by side, front/back, or top and bottom), triplexes and quadplexes, secondary suites, including laneway homes and coach houses, are all recognized infill forms, including a new home built on an existing lot where the old structure is removed (one-for-one development).

Note: Townhomes and row homes are not considered a form of Infill Housing and excluded from this report.



Michael Geller Architect Developer, Hollyburn Mews, West Vancouver, three single-family lots rezoned into three duplexes plus coach houses: nine-for-three infill scenario.

The Benefits of Re-zoning Single Family Dwellings to Accommodate Infill Housing

The addition of Infill Housing, often referred to as the “missing middle” housing stock within low density suburbs is the most viable means of contributing to Metro Vancouver’s affordable housing supply through gentle densification.

In many cases, houses on large lots in existing neighbourhoods are out of reach for young families seeking ground-oriented, family-friendly housing by virtue of the very high value of land, in proportion to the overall property value. By dividing the land value into two, three or four households via subdivision, or redevelopment to duplex, triplex or quadplex forms, the proportion of land to total property value is reduced, making each individual unit more affordable for people at all income levels and needs. As well, the addition of one or more rental secondary suites or laneway/coach houses provides “mortgage helpers” for the original property owner.

Young growing families, residents looking to age in place, and first-time homebuyers all contribute to the economic base of a thriving complete community.

A ‘complete community’ requires a complete mix of housing stock to provide for the variety of demographic and housing needs. Neighbourhoods that embrace gentle densification vs ‘keeping the status quo’ will contribute to an increase in the municipality’s economic base from which local schools, businesses, amenities and services can thrive, all while preserving the integrity of the existing neighbourhoods.



My House Design Build Team, Vancouver: Multi-generational family living – stratified duplex with coach house: three-for-one.



“The addition of infill housing, often referred to as the “missing middle” housing stock within low density suburbs is the most viable means of contributing to Metro Vancouver’s housing supply.”

Growth of Single Family Housing with Suites: Challenges of Infill Housing

Looking at the Inventory Percentage by Property Type Chart (Figure 5), although a small increase can be seen in the use of Infill Housing (top two segments in the bar chart) across Metro Vancouver over the past five years, from 13.5 percent in 2012 to 15.5 percent in 2016, there has not been a large uptake of this housing form. The most common deterrents noted by builders for HAS includes 'lack of uniform policies, varying building permit fee schedules across Metro Vancouver, and resistance to neighbourhood change'. The end result is many builders and residents wanting Infill Housing adopt the 'path of least resistance' and build one-for-one replacement houses, rather than going through the often drawn-out rezoning process.



"Visit www.gvhba.org/HAS to view individual municipal percentages by property type."

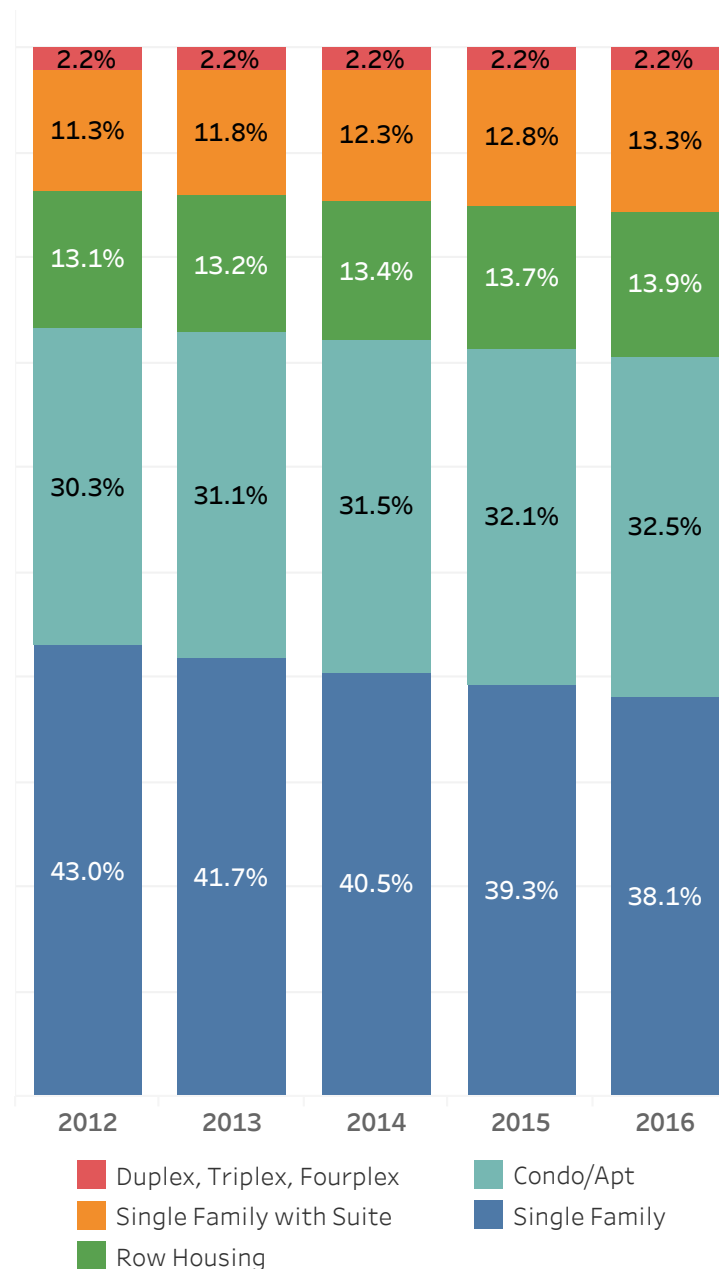


Figure 5: Change in housing inventory, by property type, 2012-2016.

The Approvals Process

As seen by the accompanying flowchart (Figure 6), the process to convert just one large single family house to additional infill housing is a long and detailed process.

The entire top portion of the diagram details the rezoning process. The time necessary to gather public and staff input, conduct a public hearing, and receive the appropriate number of council readings can be significant, particularly when one considers that this process will be necessary for EACH lot that is undergoing gentle densification.

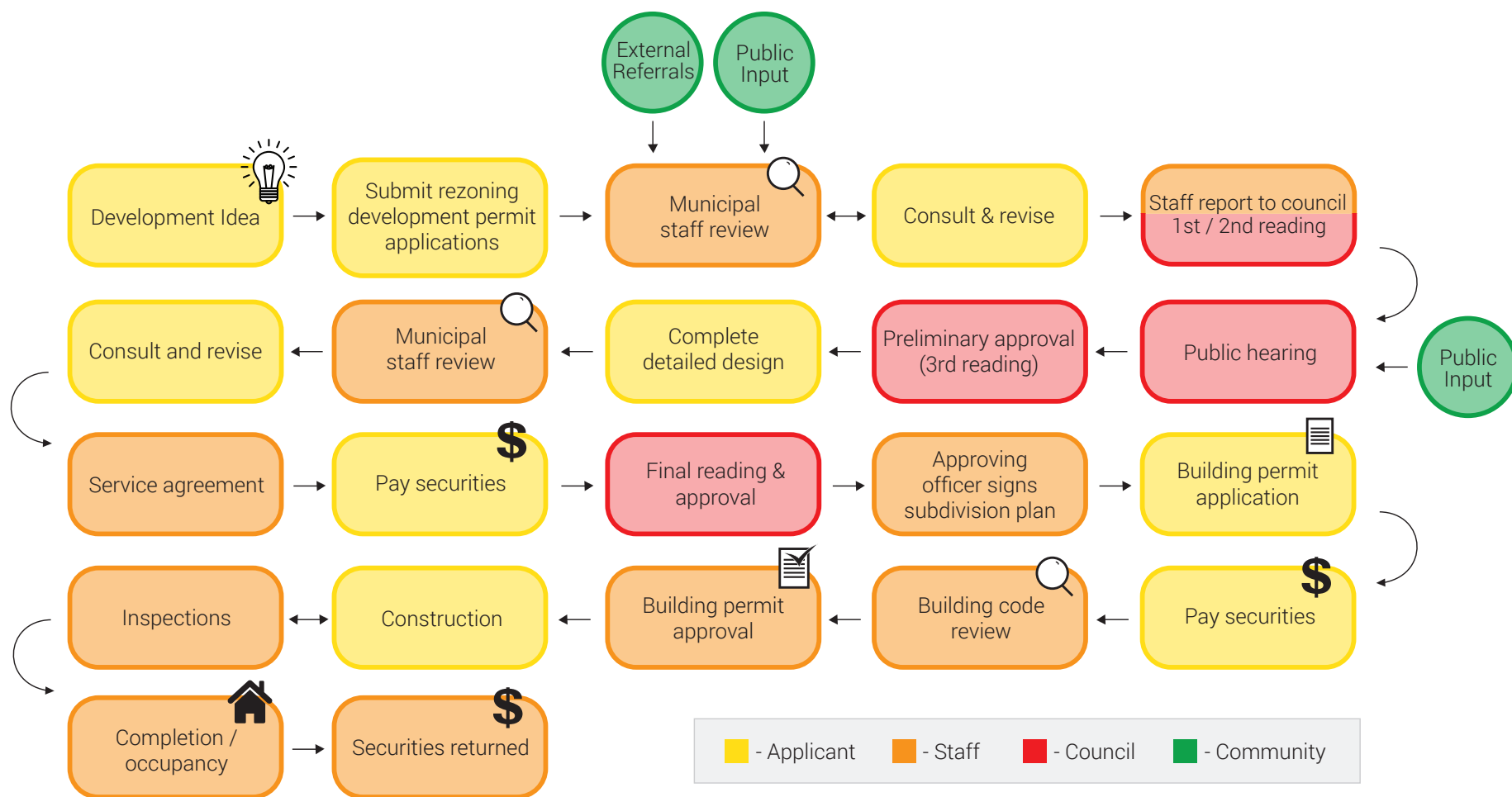


Figure 6: Infill housing development approval flowchart (representative).

Responses from many municipal departments are required during an application process, including planning/zoning, engineering (servicing, road/sidewalk alterations), landscape/tree retention, sustainability, and building (demolition, plan checking and inspections). It will be important for the various municipal departments to work together, and not in silos, to avoid duplication or conflicting guidelines and requirements, and to ensure that departmental policies are not working at cross purposes, or with unintended consequences.

✓ **Best Practices:** *Pre-zoning eliminates the need to go before council to re-zone each individual project, saving many months in approval time and costs. Single Point of Contact/File Coordinator helps to eliminate the 'silo effect'.*

APPLICANTS' BEST PRACTICES

Development idea stage: Explore a municipality's website; use the GIS mapping system to learn about the property (zoning, servicing, SROWs, easements, etc.); understand the rezoning process; identify all of the documents necessary to ensure smooth progress through the approvals process; if available, view sample forms; discuss any questions or uncertainties with municipal staff; gather all of your information and required documents prior to making application.

Prior to 1st/2nd reading: Listen to the community; if there is a history of opposition to change in the neighbourhood, canvass the street and invite residents with concerns to meet and discuss them; identify those who are in support of your proposal.

Concurrent processing: Take advantage of concurrent processing opportunities, ensuring the initial rezoning and development permit applications are well-researched and complete, in order to minimize the time and cost associated with revisions.

Consult and revise stages: Respond to application deficiencies and questions as quickly as possible, at each of these stages.



JDL Homes Inc., Vancouver: Four-for-one quadplex.

Municipal Costs and Fees

The Municipal Costs and Fees chart (Figure 7) presents the development and building permit fees reported by municipalities for the rezoning, subdivision, servicing, demolition, development permit and building permit associated with the construction of the first of two houses allowed under rezoning a single family lot (see Infill Housing Study Scenario specification in Appendix).

As can be seen by the accompanying bar graph, there is a wide variation amongst Metro Vancouver municipalities in the fees and charges required to approve the Infill Housing scenario, from a low of \$18,000 in Port Coquitlam to a high of \$53,000 in Surrey.

Some municipalities charge significant Inspection Fees (Coquitlam, Pitt Meadows), while others (Langley City, Delta, North Vancouver City) charge high fees for Engineering Servicing Agreements. The other area of wide variation is Development Cost Charges (DCCs), ranging from \$3,660 in Port Moody to \$26,629 in Langley Township. Even this figure will soon be eclipsed by approved, but not yet effective, new rates in Surrey and Richmond.

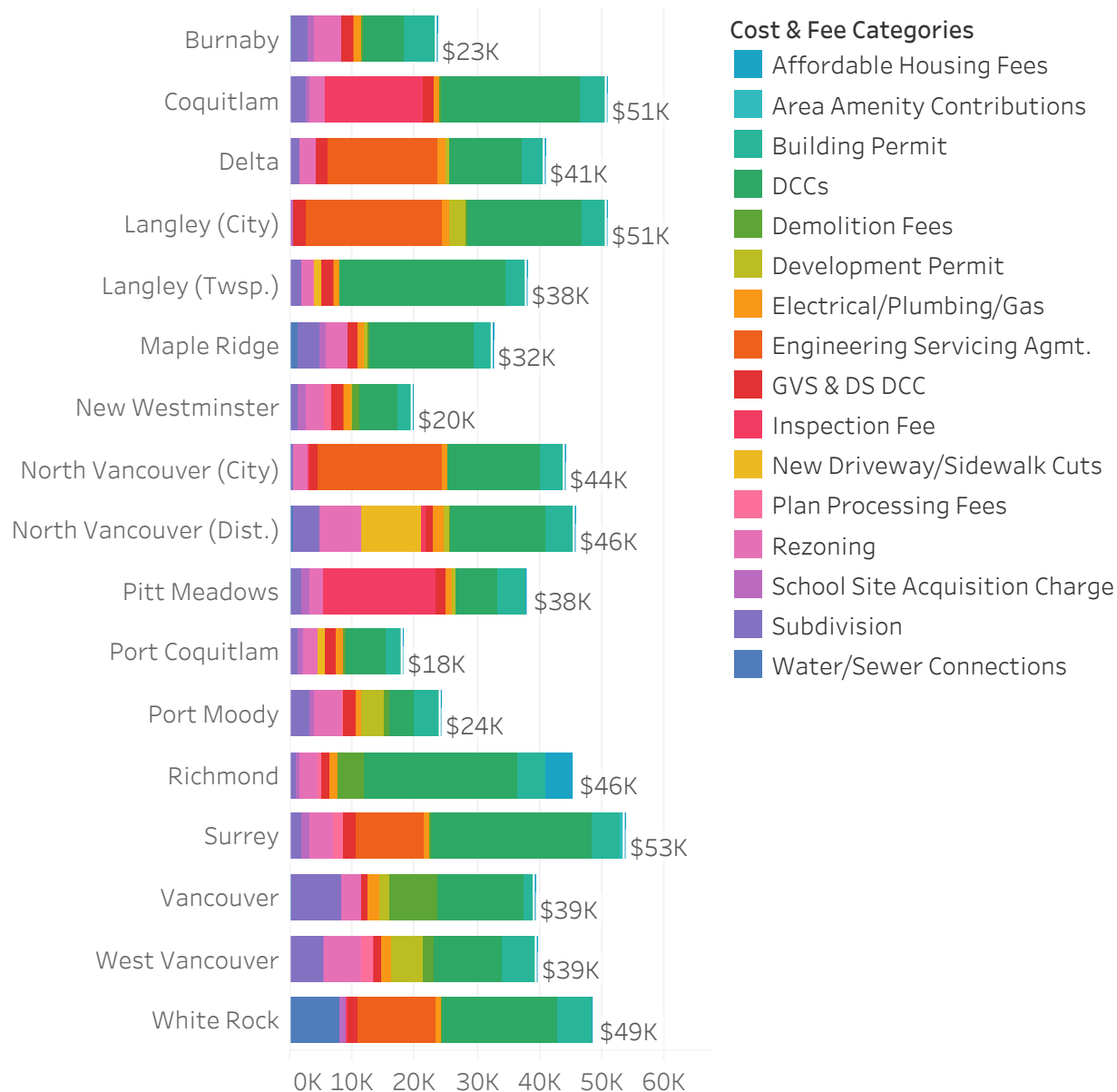


Figure 7: Municipal fees and charges for infill housing development approval.



"Visit www.gvhba.org/HAS to access individual cost and fee categories."

At the time of this report, several municipalities have undertaken Development Cost Charge (DCC) reviews, and are seeking provincial approval for significant increases. There is also a very large increase proposed for the Metro Vancouver Sewerage and Drainage DCC (266 percent for Infill Single Family), along with the new TransLink DCC, to fund part of the regional share of the Mayors' 10-Year Plan, expected to be in place by 2020. The Metro Vancouver DCC varies among the four sewerage districts; the details of the Translink DCC are still unknown at the time of publication.

It is important to note costly DCCs are avoided when undertaking a one-for-one rebuild as DCCs are only charged when a subdivision results in the creation of at least one additional lot.



“Costly DCCs are avoided when undertaking a one-for-one rebuild as DCCs are only charged when a subdivision results in the creation of at least one additional lot.”

Variations in Processing Time

As with approval fees, processing time can vary widely between municipalities. There is no discernable pattern that can predict the length of approval time considering variances in large vs. small municipalities, heavily urban vs. primarily suburban, geographic location, permit application volumes, etc.

As noted in the Approvals Process Flowchart (page 20), there are many separate processing steps required to approve an Infill Housing project.

Langley City reports the shortest approval time, with 3 months for rezoning, plus 2 months each for development permit and building permit, for a total of 7 months. White Rock has the longest, at 24 months total; but have recently implemented changes that should result in shorter turnaround time for building permits.

A clear finding of the report however is that the combination of a heavy regulatory schedule, high permit volumes, high staff turnover and a significant systems change (new process software) can create a 'perfect storm' of circumstances resulting in extraordinarily long delays in permit approval. This is the situation in the City of Vancouver, which has undertaken a process review to examine changes to their systems to improve processing times.

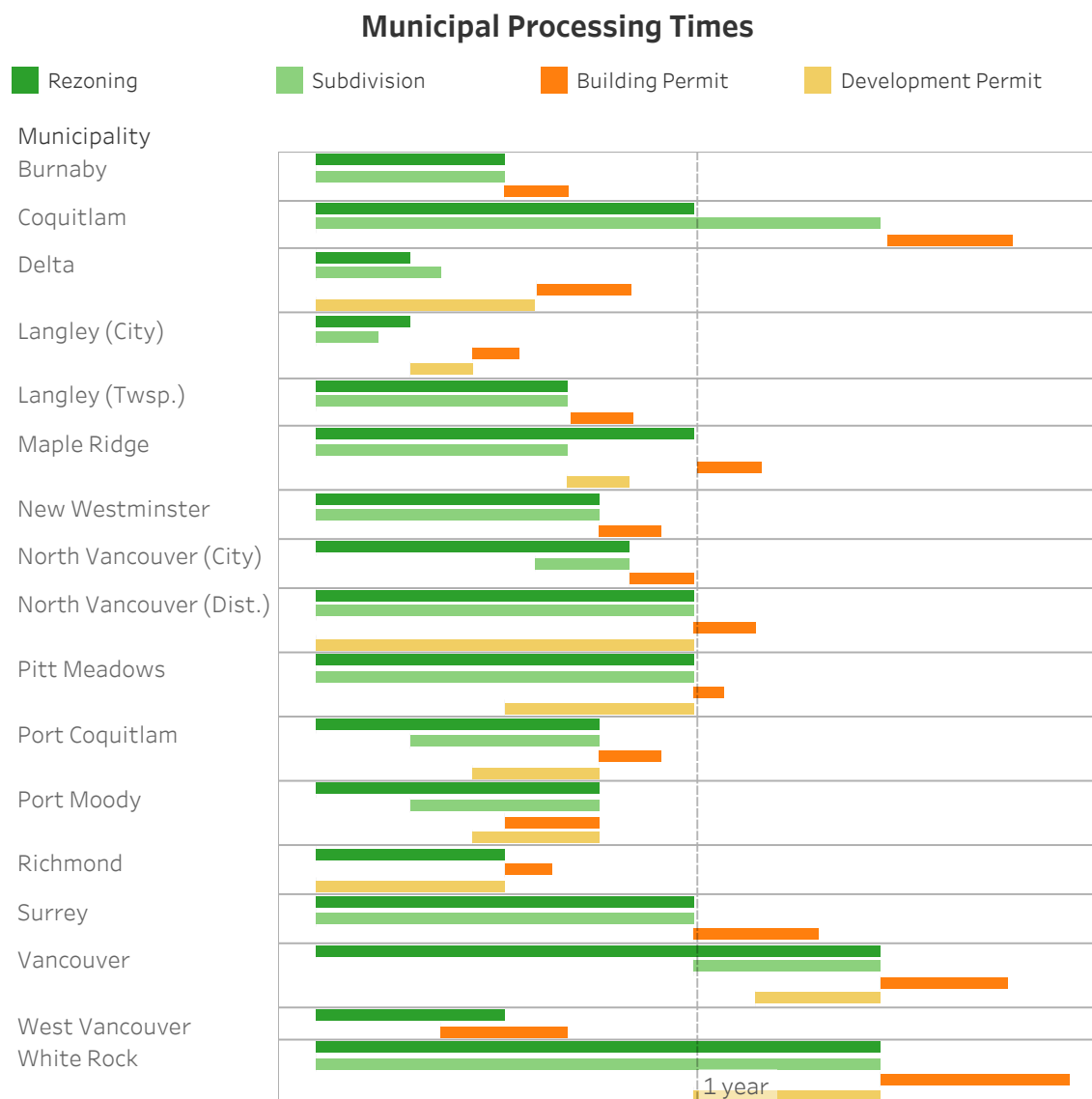


Figure 8: Estimated approval time for infill housing approval.

Many municipalities have embraced the Best Practice of concurrent processing for rezoning, development permit and building permit processes. This can save many weeks or months, in comparison to a sequential processing, however there is some risk borne by the applicant, as changes required during the rezoning process, either by staff or council will require revisions to drawings and specifications in the development permit and/or building permit applications, adding time and cost to the process.

The concept of “time is money” is best illustrated by examining the impact of long delays in the housing approval process. Builders can often face labour scheduling challenges or cash flow shortages, or may find that their clients will abandon the project in frustration where approval process for Infill Housing involves longer-than-expected delays. The inability to properly plan in the face of unanticipated delays continues to be a major challenge for builders of infill housing.

Perhaps the most applicable Infill Housing Best Practice relevant to all municipalities is the pre-zoning of land to eliminate the lengthy rezoning process, and reduction of fees. By identifying areas where such development can take place, and gathering neighbourhood consensus at the Official Community Plan stage, vs on a project by project basis, housing units can be added by the much quicker development permit (DP)/building permit (BP) process, in many cases decreasing time by up to 18 months (depending on the impact of concurrent processing). Put into context, a ‘typical’ 2-level, 2500 sq. ft. home takes 16-18 weeks to build.



“Many municipalities have embraced the best practice of concurrent processing for rezoning, development permit and building permit processes.”

Why Does It Take So Long?

RESISTANCE TO CHANGE FROM LONG-TIME RESIDENTS

In many cases, municipalities have a 'vision' for their established neighbourhoods, created through consultations with long-time residents. The concept of neighbourhood change, whether it be in the form of density, lot size, building height or massing, or even house design, can be difficult for existing residents to grasp or municipalities to implement.

Example: in the late-1980s, residents of Richmond's mature, large-lot neighbourhoods felt that subdivision applications were negatively impacting neighbourhood character. As a result the city passed the Single Family Lot Size Policy #702 in 1990 restricting subdivisions on an area-by-area basis. As property values increased, property sales frequently resulted in demolitions and one-for-one replacements of the pre-existing 1,800 – 2,200 square foot houses with large 5,000 square foot "mini-mansions". Attempting to build affordable ground-oriented 'gentle densification' in such an environment is almost impossible.



Best Practice Solution: Pre-zoning

APPLICATION VARIATIONS

Variations in experience of applicants and quality of applications impact the current municipal permit application system of a first-come, first-served basis. Inexperienced builders unfamiliar with the required documents take an inordinate amount of staff time due to identification and correction of deficiencies, the requirement to submit missing documents, and poor quality of drawings or schedules, placing a "clog in the pipeline" that negatively impact all applications, good and bad.



Best Practice Solutions: Risk-based Permitting and Inspection Policy, and Gatekeeper



A one-for-one replacement in Richmond's Seafair neighbourhood is typical of an area protected under the Single Family Lot Size Policy.



Smallworks Studios / Laneway Housing Inc.

EXCESSIVE/OVERLAPPING POLICIES/ BYLAWS/REGULATIONS

Unfortunately, many municipal departments operate in “silos”; setting their own regulations and guidelines, and rarely communicating with other departments that impact the approvals process. Working in isolation, departments can create rules that duplicate, or worse, conflict with regulations in other departments. Resolving such conflicts and identifying which policy has primacy is often a source of delays and frustration for both applicants and municipal staff.



Best Practice Solution: *Single Point of Contact / File Coordinator*

MUNICIPAL STAFF CAPACITY

Senior staff of municipal departments is often in a challenging position with regards to staffing. If they hire enough people to ensure that the department can handle volume peaks, they are left with idle staff, or forced into layoffs (often constrained by negotiated labour agreements) when permit volumes decline. On the other hand, staffing levels based on long-term average permit volumes will result in overwork conditions during boom times.



Best Practice Solution: *Flexible staffing capacity*

CONVERSION TO ON-LINE SYSTEMS

Many municipalities are updating their permit tracking systems to include new software. While ultimately providing greater efficiencies for staff and an improved user interface for applicants, there are often growing pains and learning curves to deal with.



Best Practice Solutions: *E-Permit Online System and User-Friendly Geographic Information System Mapping Software – showing completed examples, noting commonly made mistakes to avoid.*

Looking Ahead

MUNICIPAL ADVANCEMENTS

In early-March 2017, the City of Vancouver's Character Home Zoning Review identified the need to provide a wider variety of housing options in the single family residential (RS) zones beyond the principal residence, one secondary suite and one laneway house. The inclusion of more duplex, triplex and quadplex units in pre-zoned areas, eliminating the need for rezoning is being considered as a pathway to meet many of the city's larger policy objectives.

Other municipalities, such as North Vancouver City and Port Coquitlam (allowing Coach Homes on SF zoned lots), Pitt Meadows (Housing Infill Policy Review), Maple Ridge (encouraging Garden Suites in SF zones), Port Moody (secondary suites, narrow lots), North Vancouver District (Capilano Small Lot Infill), Richmond (Arterial Roads Policy and upcoming review of Lot Size Policy) and New Westminster (Infill Housing Guidelines in new Official Community Plan) have recently passed new policies, or are actively reviewing potential new plans to create more Infill Housing opportunities.

Public advocacy groups, such as *Abundant Housing Vancouver* have arisen in support of new policies to allow more affordable housing options to be developed in the RS zones. These groups will provide the political capital for elected officials to direct their staff to seek new policies to better utilize the SF zoned stock.



JDL Homes Inc., Vancouver: Four-for-one quadplex.



“Public advocacy groups are arising and will provide the political capital to seek new policies.”

G2G/HAS IMPACTS

- As part of the 2017 Budget Speech, BC Minister of Finance Mike de Jong discussed “help(ing) ensure cities and municipalities have the capacity, incentives and performance targets needed to expedite the processing, approvals and permitting” of development applications.
- The City of Vancouver has undertaken an extensive review of their Permit and Development Process, and in early March 2017, provided a series of recommendations to Council, many of which incorporate Best Practices identified in previous Getting to Groundbreaking reports.
- Surrey has implemented an accelerated permit approval process, whereby experienced applicants submit more detailed information at the application stage.
- In Vancouver, the relatively simple move of conducting Landscape Review at the beginning of the approval process (vs. mid-stream) has reduced the time required for this item from 14-16 weeks to 2 weeks (or, in some cases, as little as 2 hours).
- Vancouver Sun quotes De Jong support to fast-track builders.

“A better solution would be to fast-track developers with proven records, argues the Greater Vancouver Homebuilders’ Association. De Jong expressed support for that idea as well.”

- Rob Shaw, Reporter, Vancouver Sun

<http://vancouversun.com/news/politics/rob-shaw-finance-minister-wants-reasonable-deadline-for-municipal-housing-approvals>

- 2015 Maple Ridge Council staff report discussed the work plan of the Development Services Department and highlighted the G2G Report, specifically mentioning the Best Practices List, stating: “A first priority for the Liaison Committee would be to work through these best practices and discuss where both the City and development community are doing a good job and where improvements can be made.”



Reid Developments Ltd., Vancouver: Secondary suite: two-for-one.

What's Next?

The G2G/HAS series of reports examines a major residential structural form on an annual basis.

Having looked at townhouses (2014), low-rise wood-framed apartments (2016) and infill single detached forms (2017), the next report will circle back and focus on townhouses.

The second report relating to a particular housing form will look for changes in practices, and determine if Best Practices have been adopted, whether or not the approvals process has improved, and examine new issues in the relationship between local governments and the development industry.



Ikonik Homes.

Appendix

BUILDERS' SURVEY

- The Builders' Survey was conducted by Mustel Group from June - December 2016.
- A total of 55 builders responded, resulting in 100 responses on municipal approval processes.
- More than half of respondents (56%) have over 10 years of building experience, almost one-third (31%) have over 20 years' experience, with an average of 15 years for all respondents.
- Five municipalities (Vancouver, Burnaby, Surrey, Richmond and Coquitlam) represent almost two-thirds (64%) of all responses.
- Several municipalities are represented by sample sizes of three or fewer responses (North Vancouver City, White Rock, Delta, Pitt Meadows, Port Moody and New Westminster).
- While the original intent of this project was to survey builders on their experience with subdivision of large lot single detached zoned land, the response trended much more towards the non-subdivided, one-for-one replacement development (81% of all respondents).
- Virtually all municipalities were able to complete processing of Building Permits within 30 weeks, except for Vancouver, where respondents reported that over a third of permits required more than 30 weeks.
- The most frequently mentioned reasons for information resubmission during the building permit stage was "Unclear communication of submission requirements", followed by "Change in submission requirements during the application period".
- Issues that take the longest to resolve are: "Permit processing time", and "Review of detailed development plans".
- Frequently mentioned elements that cause unnecessary delays include: "Slow response from staff", "Circulation time between departments", and "Staff capacity issues".
- Among those municipalities that received more than 4 responses, Burnaby received highest satisfaction scores, with highest values for "Informative and constructive comments from staff" (3.8/5.0), "Transparent and predictable fees and charges" (3.7), and "Problem-solving attitude amongst staff" (3.7).
- Surrey received highest score (3.9) for "Availability of complete, accurate and current info on application requirements".
- Lowest scores were for Vancouver, especially in topics: "Predictable and reliable timeline for approvals" (1.5), and "Consistent interpretation of policy between departments" (1.8).
- For those municipalities with insufficient responses, Langley Township, White Rock, Pitt Meadows and Port Moody received generally high levels of satisfaction.
- Many respondents have identified Best Practices employed by municipalities, such as: "Screening process to deny poor/incomplete applications into the approval stream" (Vancouver, Burnaby, Richmond, North Vancouver City); "Online access to complete/current application requirements checklist" (Vancouver, Burnaby, Delta).
- For the most part, the survey found that few municipalities have implemented policies to incentivize more density in single family zoned areas. The few identified include Laneway and Coach Houses (Vancouver), Additional density to encourage secondary suites as affordable housing (Vancouver, Richmond, Burnaby).
- Many survey respondents report that many municipalities have put barriers in place to the development of infill single detached housing such as; difficult regulations related to demolition/waste wood re-use and recycling (Vancouver); Policies related to house massing (Vancouver, Burnaby, Richmond, Surrey, West Vancouver, North Van District).
- On average, North Vancouver District (19) and Maple Ridge (15) required the most inspections to complete the construction project.
- The most frequent suggestion to improve the permit approval process is "Hire more staff" (Burnaby, Coquitlam, North Van District, North Van City, Richmond, Surrey, Vancouver, White Rock); also mentioned frequently was "Better interdepartmental communications" (Burnaby, Maple Ridge, North Van City, Richmond, Vancouver);
- Builders also provided many positive comments regarding the staff's attitude towards builders: "Reasonable, straight forward and easy to deal with" (Burnaby, Langley Township, White Rock, Richmond); "Overall good" (Surrey, Richmond, Langley Township, Burnaby).
- Unfortunately, Vancouver received many of the worst comments, such as: "By far the worst for approval", "Most difficult city for approvals", "Over complicated rules", "Takes longer to get the permit than to build the house".

REFERENCE NOTES

Figure 1: Net housing growth and housing demand estimates, 2014-16

Source: Annual Housing Growth: Metro Vancouver Regional Growth Strategy, Dwelling Unit Projections

Housing Completions, Demolitions: Metro Vancouver Housing Data Book.

The blue bars represent the three-year average net housing completions (total completions less demolitions). Three years of data employed in order to smooth out distortions caused by completions of large projects; more representative of the level of housing growth. The yellow line represents the annual dwelling unit growth required in each municipality in order to meet its Regional Growth Strategy target for the 2006 – 2021 period.

Figure 2: Residentially zoned land by housing type, 2016

Land Use data from Metro Van Open Data (<http://www.metrovancouver.org/data>).

Last Updated: Thursday, December 8, 2016

Description from website:

Metro Vancouver's 2011 Generalized Land Use map was compiled using a consistent interpretation of all available information. Every effort was made to depict land use activities accurately and consistently across all of the region's municipalities. Land use classifications were assigned at the municipal cadastre geography wherein each cadastre lot was assigned one single land use classification. Exceptions to this rule occurred in instances where cadastre lots clearly have more than one discrete land use activity which did not fit into one single classification thus requiring the cadastre lot to be split to accommodate multiple land use polygons (e.g. school property – where buildings were classified as 'institutional' and playing fields as 'recreational').

Landcor grouped the Metro Van residential land use types in into the following categories for the 17 municipalities in the study area.

Metro Van Residential Land Use Category	Landcor Residential Group
Residential – Rural	Rural & Mobile Home Park
Residential – Mobile Home Park	Rural & Mobile Home Park
Residential – Single Detached & Duplex	Single Detached and Duplex
Residential – Townhouse	Multifamily
Residential – Low-rise Apartment	Multifamily
Residential – High-rise Apartment	Multifamily
Mixed Residential Commercial – Low-rise Apartment	Multifamily
Mixed Residential Commercial – High-rise Apartment	Multifamily

The area of each Landcor Residential Group was calculated, in square kilometers and as a percentage of the total residential area, for each municipality as well as for the entire study area.

Figure 3: Municipal allocation of residentially zoned land by land use designation, 2017

Data from BC Assessment, 2017 Assessment Roll.

The pie charts on the map are representative the number and type of residential properties in each of the municipalities in the study area. The relative size of the pie chart is a representation of the total number of residential properties in the municipality and the relative proportion of each property type is represented as a wedge.

The three Landcor Property Type groups (Detached, Attached, and Condo/Apt) used in this figure are groupings of BC Assessment's Actual Use Types, as shown in the following table.

BC Assessment Actual Use Description	Landcor Property Type
Duplex (/SUO Front)	Attached
Duplex Single Unit Ownership (Back)	Attached
Duplex Single Unit Ownership (Side)	Attached
Duplex Single Unit Ownership (Top)	Attached
Duplex Up & Down (/SUO Bottom)	Attached
Fourplex	Attached
Row Housing (Single Unit Ownership)	Attached
SFD With Basement Suite	Detached
Single Family Dwelling	Detached
Strata-Lot Residence (Condominium)	Condo/Apartment
Triplex	Attached

Figure 4: Percentage of total residential inventory by municipality and housing type, 2016

Data from BC Assessment, 2017 Assessment Roll.

This is a tabular view of the same data represented in the 2016 Property Totals by Type figure. It shows the 2017 Roll Year property counts by property type by municipality (as of July 1, 2016 when the assessment inventory is compiled). The percentages in this table are the relative percentage of each property type within the scope of the study area, rather than the percentage of each property type by municipality as is shown in the pie chart map called 2016 Property Totals by Type.

Figure 5: Change in housing inventory, by property type, 2012-17

Data from BC Assessment, 2013, 2014, 2015, 2016, and 2017 Assessment Rolls.

A bar chart showing the percentage of total residential inventory counts by property class by year. The five Landcor Property Type groups used in this figure are groupings of BC Assessment's Actual Use Types, as shown in the following table.

BC Assessment Actual Use Description	Landcor Property Type Group
Duplex (/SUO Front)	Duplex, Triplex, Fourplex
Duplex Single Unit Ownership (Back)	Duplex, Triplex, Fourplex
Duplex Single Unit Ownership (Side)	Duplex, Triplex, Fourplex
Duplex Single Unit Ownership (Top)	Duplex, Triplex, Fourplex
Duplex Up & Down (/SUO Bottom)	Duplex, Triplex, Fourplex
Fourplex	Duplex, Triplex, Fourplex
Row Housing (Single Unit Ownership)	Row Housing
SFD With Basement Suite	Single Family with Suite
Single Family Dwelling	Single Family
Strata-Lot Residence (Condominium)	Condo/Apt
Triplex	Duplex, Triplex, Fourplex

Inventory by Actual Use Type

Data from BC Assessment, 2017 Assessment Rolls.

A pie chart showing the percentage and count of total residential inventory counts by property class by municipality for the Roll Year 2017. Landcor Property Type Groups are the same as those in the previous figure, Inventory Percentage by Property Type.

Figure 6: Infill housing development approval flowchart (representative)

From Getting To Groundbreaking, modified for infill housing form with contribution from George Fujii, City of Coquitlam.

Figure 7: Municipal fees and charges for infill housing development approval

Data from GVHBA research, 2016/2017.

Municipal costs and fees collected from municipal websites and staff by GVHBA during the project. The specific costs and details were aggregated into the following categories. The costs and fees are an estimate of the sum of multiple items that are highly variable across the municipalities in the study area.

Measure Names
Affordable Housing Fees
Area Amenity Contributions
Building Permit
DCCs
Demolition Fees
Development Permit
Electrical/Plumbing/Gas
Engineering Servicing Agreement
GVS & DS DCC
Inspection Fee
New Driveway/Sidewalk Cuts
Plan Processing Fees
Rezoning
School Site Acquisition Charge
Subdivision
Water/Sewer Connections

Figure 8: Estimated approval time for infill housing approval

The Municipal Processing Times were also collected by GVHBA by way of interviews and publicly-available information on municipal web sites.

INFILL HOUSING STUDY SCENARIO

Processing times and fees calculated for the HAS Infill 2017 report are as noted below.

House Construction Details:

Finished Area: 2,200 sq. ft

Electrical Service: 200 amps

Plumbing Permit: 12 new fixtures for 1x2pc bath., 2x3pc baths., 1x4pc bath

Construction Cost: \$200.00 per sq ft

Total Construction cost: \$440,000

Other assumptions/details:

1 new subdivided lot for SFD with secondary suite

Minor Rezoning required

1 public hearing required

Assumed outright approval for Development Permit, no reviews or referral to Design Panel

Assumed no increase to maximum FSR

No "fast track" or early consultation, review, or submission of plans, due to small scale

One new connection each for water, sewer, storm, <30m

One new driveway/sidewalk cut

No resubmissions

Demolition of one 2,000 sq ft SFD

No Heritage aspects; Post-1941 home demolished

No tree removal or replacement

Refundable Deposits are not included in sums (assumed 100% refund)

1 inspection of each type required/specified, no reinspections

1 new home has secondary suite; inspected within 60 day period of notification

Electrical Inspection takes 1 hour

No Pre-Application Engineering Review

Acknowledgements

The HAS team

Greater Vancouver Home Builders' Association: Mark Sakai, Dawn Sondergaard, Vanessa Smith

Landcor Data Corporation

UBC School of Community and Regional Planning Grad Student: Jordan Brown

Mustel Group: Matthew Shepherd

Thanks to: George Fujii, Bob Ransford, Jake Fry, Nathan Hildebrand, Ron Rapp, and Darren Cranston

HAS Logo Inspiration: Eileen Lin

