



REPORT

Report Date: January 27, 2020
Contact: Neil Hrushowy
Contact No.: 604.829.9622
RTS No.: 13524
VanRIMS No.: 08-2000-20
Meeting Date: February 26, 2020
[Submit comments to Council](#)

TO: Standing Committee on City Finance and Services
FROM: General Manager of Planning, Urban Design and Sustainability
SUBJECT: One Year Trial Period – Duplexes in Most RS Zones

RECOMMENDATION

THAT the following report be received for information.

REPORT SUMMARY

This report is in response to Council's 2018 request for a report following a one-year trial to retain two-family dwellings (duplexes) as a permitted use in most RS zones. Eighty-six (86) duplex applications were received over the 2019 trial period, making up about 23% of all redevelopment applications in RS zones. This modest level of uptake is in line with what was anticipated given that the duplex option was intentionally introduced in a modest way offering the same floor area that is possible for a house (0.7 FSR). Duplexes are providing twice as many dwelling units as one-family dwellings, include both new lower-cost homeownership and secondary rental suites and offer better energy efficiency than new one-family dwellings, thereby advancing the City's Climate Emergency Response. Engagement over the past year indicates strong public support for duplexes as a housing choice in RS zones.

The introduction of duplex in RS zones has been a success and the changes made to the regulations in spring 2019 have addressed previously identified design concerns. No further changes are recommended and the current duplex regulations can remain in place. No Council action is required at this time.

COUNCIL AUTHORITY/PREVIOUS DECISIONS

- Housing Vancouver Strategy (2018 – 2027) and Three Year Action Plan (2018-2020)
- Making Room Housing Program: Overview and Quick Start Actions (June 2018)

- Amendments to the Zoning and Development By-law for Most RS Zones to Allow Two-Family Dwellings (Duplexes) to Increase Housing Choice (October 2018)
- Costs of Consultation, Time Constraints and Impacts of Pursuing By-law Amendments to Remove Two-family Dwellings (Duplex) from RS Zones – RTS 12867 December 5, 2018)
- Revised Design Regulations for Two-Family Dwellings (Duplexes) - RTS 13002
- Climate Emergency Response – RTS 13978 (April 2019)

CITY MANAGER'S/GENERAL MANAGER'S COMMENTS

The City Manager recommends that Council receive this report for information. No further action is required.

REPORT

Background/Context

Adding the 'right supply' of housing to meet the needs of people who live and work in Vancouver is a key objective of the *Housing Vancouver Strategy*. As an initial action of that strategy, Council approved duplexes in most RS zones at public hearing on September 2018 and the zoning change was enacted on October 30, 2018.

In December 2018, Council confirmed its support for duplexes in most RS zones on a trial basis to be further evaluated over the following year. In addition, Council passed a motion directing that during the trial period staff were to:

“...review the duplex zoning, including assessing take-up, duplex pricing, number of secondary suites and lock-offs included in duplexes, age/size/value of houses demolished to build a duplex, impact on renters and affordable rental units, neighbourhood response, regulatory adjustments, etc. and report back to Council in a year so that this information can inform discussions and decisions made for continuation of duplex within the City Plan”.

Some speakers at the public hearing in September 2018 noted concerns with the duplex design regulations and the sometimes poor design outcomes. Following a review, staff identified a series of concerns with the external design regulations for duplexes and recommended amendments to improve roof design and durability, limit the size of garages, limit above ground floor space, and introduce a discretionary clause in order to enable design flexibility and innovation, including Passive House designs. The duplex design regulation changes were approved by Council on April 2, 2019 and have effectively addressed the concerns and provided the desired design flexibility.

Strategic Analysis

Monitoring and Observations

In December 2018, Council requested that staff monitor for a year and report back on a range of factors including uptake, pricing, number of secondary suites and lock-offs included in duplexes, age/size/value of houses demolished to build a duplex, impact on renters and affordable rental units, neighbourhood response, and regulatory adjustments. This information has been provided

monthly to Council during the trial period and is summarized below (Appendix A for a comparison of duplex and one-family applications in RS). For the purposes of this report, the one-year trial period began January 1, 2019 and ended on December 31, 2019.

1. **Number of Duplex Applications:** Over the one year trial period in 2019 the City received 86 applications for duplexes representing about 23% of the total number of permit applications in RS zoned areas¹. New one-family dwellings continue to make up the majority of new permit applications in RS zones. The replacement of existing houses with new houses has been significant over recent years, with single-family floor area accounting for over half of all new residential floor area built in the city between 2014 and 2018 (Appendix B).
2. **Duplex Pricing:** Information about sale prices for duplexes in RS zones is not yet available, as few of these projects were completed and none were sold during the trial period. However, a half-duplex in an RT zone typically sells for two-thirds (66%) of the cost of a new one-family dwelling in similar locations. It is expected that this pattern will be similar for duplexes in RS zones, providing a lower-cost ownership option for households which may not have otherwise been able to purchase a home in low density neighbourhoods.
3. **Land Value:** The introduction of duplexes in RS zones has not resulted in an increase in land values. The BC Assessment Authority recently reported that assessed value for detached residential properties in Vancouver declined 11% between 2018 and 2019. This decline can be attributed to a range of factors including municipal, provincial, and federal policy and changes in the local and global economy.
4. **Demolitions and the Character Home Program:** Houses demolished to build duplexes are similar in age, size, and value to those demolished and replaced with new one-family dwellings. Generally, homes being demolished are small (~1,700 sq. ft.) compared to new homes (~3,500 sq. ft.). The character home incentives program was introduced in 2018 as a way to encourage the retention of character homes by providing additional units and density. The introduction of duplex as an option in RS zones has not had an impact on the program with similar number of applications received in both 2018 (23) and in 2019 (26).
5. **New Dwelling Units (Principal and Accessory):** There is no requirement in RS zones to include secondary suites in one-family dwellings or within duplexes on small lots.² However, duplexes on larger lots (>5,500 sq. ft.) are required to include at least one suite and can include 2 suites (one suite for each half duplex). For these reasons, new duplexes are producing about twice as many units as new one-family dwellings. On average, duplexes provide 3 dwelling units (two principle dwellings and 1 suite), whereas one-family dwellings provide about 1.5 units (50% of new houses include a secondary suite)³. Since roughly half of all existing houses have a secondary suite⁴, new one-family dwellings provide a 1-for-1 replacement of existing housing stock. Duplexes, on the

¹ In total 104 duplex applications have been received since the zoning change in Oct. 2018.

² The floor area for duplex on a small lot is 2800 sq.ft. and is insufficient floor area to include 2 suites. Many duplexes on small lots include a single small suite or lock-off unit.

³ This does not include laneway houses which require addition density not available for the construction of one-family dwellings or duplexes.

⁴ Source: BC Assessment. This is an estimate of permitted and unpermitted suites.

other hand, typically provide a 2-for-1 replacement, adding to the supply of both ownership and secondary rental housing.

- 6. Public Engagement:** Staff conducted further engagement on duplexes over the past year with both the public and the development community. Public engagement included a series pop-up events held across the city in the summer of 2019 which reached over 400 people. A Talk Vancouver survey completed by nearly 3,400 participants in 2019 indicated that 88% of respondents agreed or strongly agreed with allowing duplexes in single-family neighbourhoods.

Engagement with the development community included a workshop with small builders to learn about their experiences with duplexes and to get their feedback on proposed changes to the external design regulations (subsequently approved by Council in spring 2019). More recently, staff surveyed applicants to learn about their motivations for choosing to build a duplex. Most respondents were hired to do custom builds for clients and affordability was a primary motivation for many of these clients. The economics of duplex ownership are improved by the prospect of strata title for primary units, allowing owners to help finance their purchase with the sale of one half of the duplex, and the potential for revenue generation from accessory dwelling units for each half of the duplex. Other client motivations included flexibility for intergeneration living and the opportunity to downsize within their own neighbourhood. A full engagement summary is provided in Appendix C.

- 7. Neighbourhood Fit and Liveability:** The duplexes being built in RS are a good fit in low density neighbourhoods owing to the similarity of massing, scale, and density with new two-storey one-family dwellings. Lot size and shape influence the internal configuration options available to duplex designers, front-back duplexes are most common for standard lots while side-by-side designs are typical for larger lots, providing a street facing front door for each unit. Revisions to the design regulations for duplexes in early 2019 appear to have effectively addressed concerns raised by staff and the public, particularly with respect to roof integration. Site visits have confirmed that the duplexes and suites are well designed and liveable.

Other Considerations

- 1. Sustainability:** While sustainability was not identified as a key driver for the introduction of duplexes in RS zones, they do represent a small but important step in support of the City's Climate Emergency Response. Duplexes require less energy for heating and cooling than one-family dwellings as a result of the improved insulation afforded by a shared interior wall. Because average household size is the same for duplexes and one-family dwellings⁵ but unit size is smaller, the heating and cooling demand per occupant is also lower for duplexes. Changes to shift away from replacing existing one-family dwellings with new one-family dwellings and add more intensive and energy efficient housing choice along with changes to the Vancouver Building By-law regulations to improve efficiency and encourage lower carbon heating and cooling will need to be investigated and advanced to meet our carbon pollution reduction targets.
- 2. Strategic Objectives and Resources:** Monitoring over the past year indicates that duplexes are being built in modest numbers and having good outcomes in terms of

⁵ Source: Statistics Canada: Census 2016

housing choice, urban design and sustainability. The shift from one-family dwellings to duplex aligns with a number of key city objectives. The introduction of duplex has provided a valuable learning opportunity as we consider other housing choices.

In the December 2018 report exploring the costs and implications of the possible reversal of the duplex amendments, staff identified a series of issues including how that change would be confusing and would result in uncertainty for property owners and builders. An additional challenge in advancing bylaw amendments to remove duplex as a permitted use is that it would require the deployment of staff now involved in advancing the Vancouver Plan and would detract from the engagement efforts now underway.

Next Steps

No further changes are proposed to duplex regulations at this time, though staff will continue to monitor duplex applications for learning and insights. For equity and consistency across all RS zones, sometime over the next year staff will bring forward a report to extend duplex as a permitted use to the RS-3 and RS-3A zones.⁶

The Making Room staff team is focusing their efforts on creating new rental only zones to implement the new rental housing policies approved in November 2019, scoping a new planning program for the Expo Line and Kingsway areas and advancing complete communities work as part of the Vancouver Plan. Survey and focus group engagement is underway now as part of the initial phase of Vancouver Plan to learn what is most important to Vancouverites to guide the long term plan of the City. Further significant change to RS areas should await the completion of Phase 1 of the Vancouver Plan and a future report to Council summarizing engagement and recommending Guiding Principles.

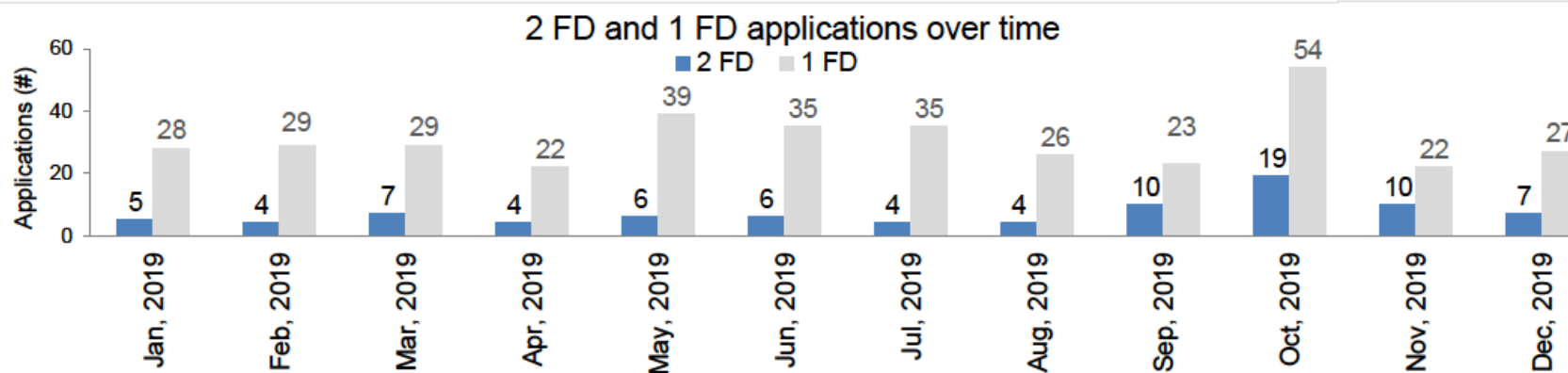
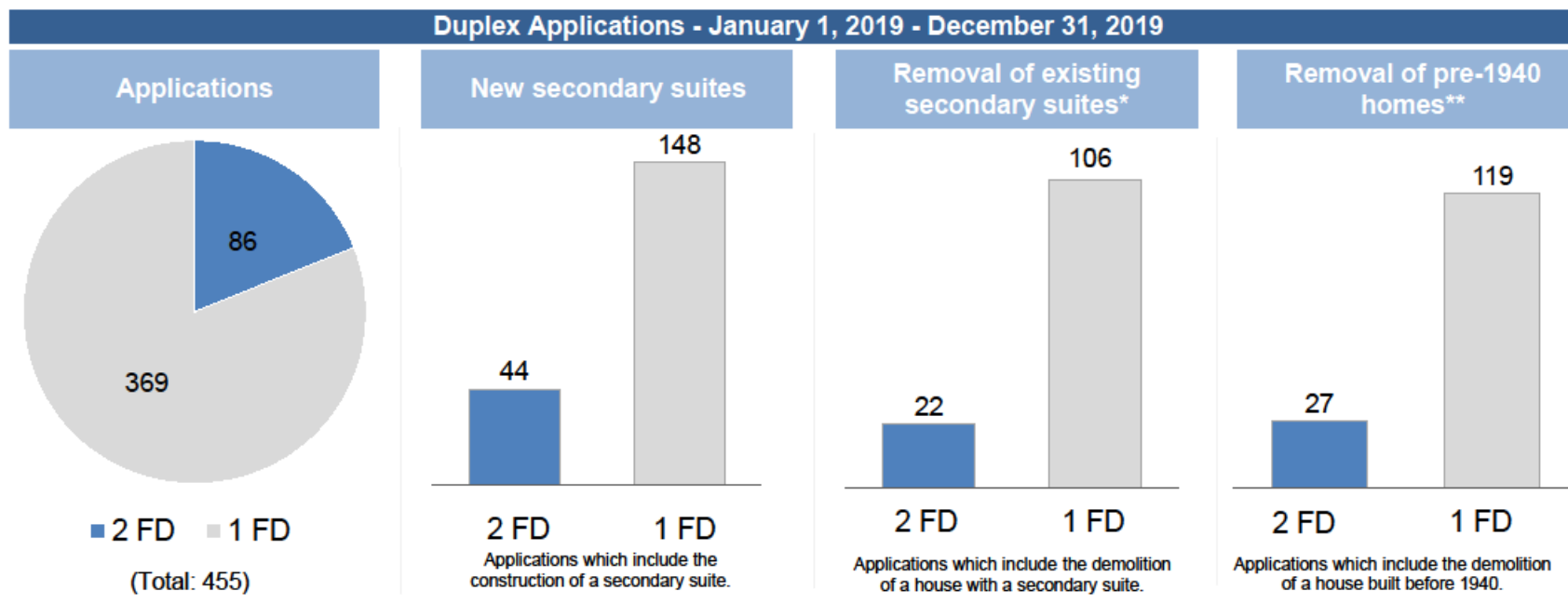
CONCLUSION

Duplexes have been allowed in most RS zones since September 2018 and just over 100 applications have been received to date. The duplex option provides a lower-cost home ownership opportunity in low density neighbourhoods and provides more total housing units than one-family dwellings within the same permitted floor area. Further, the duplex option is a small but important step towards addressing the climate emergency, providing a more sustainable, lower emission housing choice in low density neighbourhoods. The public and the development community have both expressed strong support for duplexes in RS zones.

* * * * *

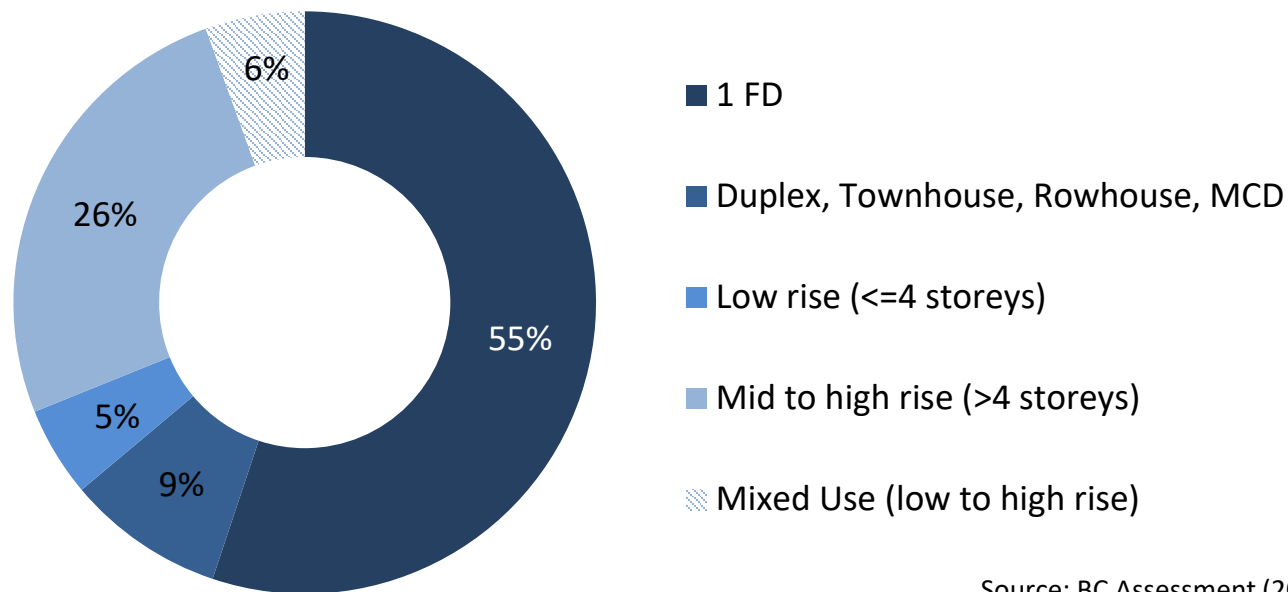
⁶ RS-3 and RS-3A zones were not included because of complexities with the floor area regulations.

Overview of One-Family Dwelling and Two-Family Dwelling (duplex) Applications in RS zones



* Source: BC Assessment. 'Suites' includes all known secondary units and many of these may not be permitted or occupied. The City is working to better understand the stock of legal secondary suites in RS zones.
 ** Homes built before 1940, particularly those in RS-3, RS-3A, and RS-5, often exhibit character merit. Not all pre-1940 homes are character homes.

City-Wide Built Residential Floor Area (sq.ft.) (2014-2018)



Source: BC Assessment (2019)

Public Engagement

Pop-Up Events

Staff held 14 pop-up engagement events over the summer months at various locations throughout the city to ask the public for feedback on duplexes and implications of deep basements in new homes. The date, location, and attendance for these events were as follows:

Date	Location	# of People Engaged
Tuesday July 9, 2019	Sunset Community Centre	4
Thursday July 11, 2019	33 Acres Brewing (sidewalk out front)	10
Saturday July 13, 2019	Dunbar Stong's Market	35
Thursday July 18, 2019	Collingwood Neighbourhood House	25
Saturday July 20, 2019	Seawall near Science World	20
Tuesday July 23, 2019	Jonathan Roger's Park	40
Wednesday July 24, 2019	Maple Grove Pool	20
Saturday July 27, 2019	T&T Norquay	28
Wednesday July 31, 2019	London Drugs – Hastings Sunrise	15
Thursday August 8, 2019	Creekside Park	1
Saturday August 10, 2019	Trout Lake Farmers Market	35
Monday August 19, 2019	Hillcrest Community Centre	120
Thursday August 22, 2019	Mount Pleasant Park	20
Saturday August 24, 2019	Champlain Independent Grocer	35
Total		407

Staff were available at the pop-up events to respond to questions, and display boards contained information about what can currently be built in single-family (RS) zones today as well as duplexes and issues with deep basements in new homes. The pop-up events were advertised on social media (Instagram, twitter, Facebook) and the Making Room webpage, and an email was sent to the Making Room mailing list to notify subscribers of the events.

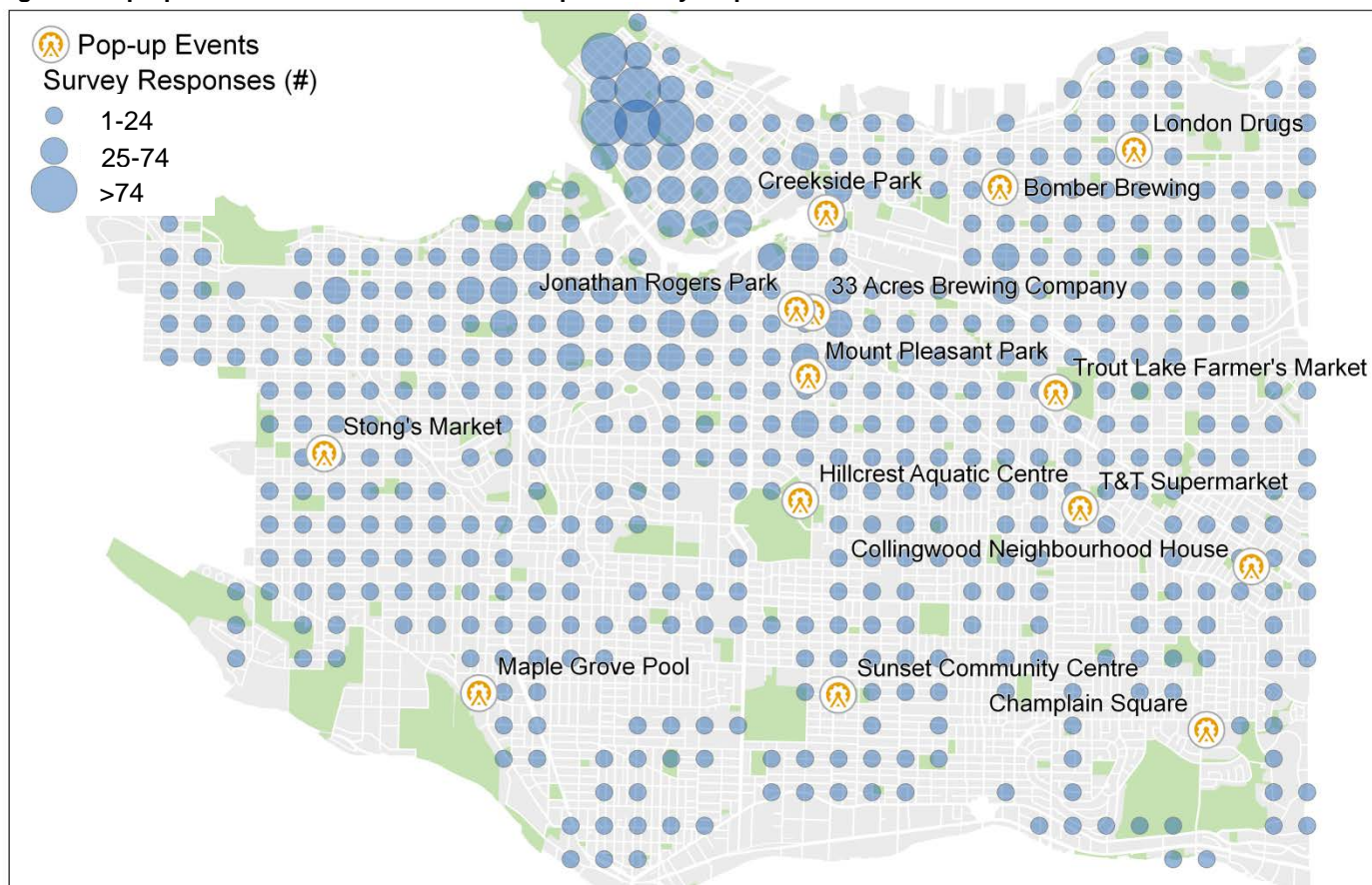
Talk Vancouver Survey

A Talk Vancouver survey on the duplex in RS option reached 3,382 respondents, comprising 1,281 renters, 1,877 owners, 98 co-op residents, and 126 residents with other forms of housing tenure. Responses were received from across the city (see Figure 1).

Duplexes were largely viewed favourably, with 88% of respondents agreeing or strongly agreeing with allowing duplexes in single-family neighbourhoods. Most respondents viewed duplexes as a workable and low-impact option for the densification of single-family neighbourhoods. Duplexes were viewed as a more environmentally friendly housing form than detached homes. It was emphasized

that increased density is environmentally responsible and sustainable. There was some unease about demolitions. Concerns were raised about infrastructure needs, green space, protection of character homes, and unobtrusive designs. While the majority of respondents expressed enthusiasm about the housing choice and home-owning opportunities duplexes provide, many respondents voiced a need for more varied and intensive housing densification, creation, and affordability strategies on the part of the City.

Figure 1 Pop-up locations and Talk Vancouver duplex survey response concentration



Builder Workshop and Survey

Staff hosted 34 builders/designers at a February 2019 workshop designed to better understand attendees' motivations and challenges related to the duplex in RS option. In addition, staff received 53 responses to a survey of duplex in RS applicants in November 2019.

Staff learned that the majority of applicants for duplex in RS are being hired by clients/owners (as opposed to building on-spec in anticipation of demand). According to applicants, many clients are choosing the duplex in RS option because it is more affordable, allowing them to partly finance their duplex by selling the other half. Other motivations include a desire for shared/intergenerational housing with individual ownership potential, that clients want to stay in their neighbourhood, and that clients don't need a whole house and don't want to be a landlord with tenants in a suite or laneway house.

If duplexes were not an outright option in RS, 42% of builders/designers surveyed would have proceeded with a one-family dwelling instead, 40% would not have proceeded with a one-family dwelling and 18% were sure if their projects would have proceeded or not. A few applicants described duplex projects that were eligible for heritage retention incentives. These applicants chose the duplex option because clients want new housing, character retention is too complicated, and duplexes are more affordable. The primary issues builders face with the duplex in RS option is limited floor space ratio (0.7 for duplex vs. 0.86 for one-family dwellings with laneway houses) and limited building depth (40% of lot depth), and roof design guidelines that limit height and prescribe architectural style (e.g., no flat roofs).