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To: ["Direct to Mayor and Council - DL"](#)

Date: 6/29/2022 1:41:43 PM

Subject: [Corrected - Update: Advancing Making Home Motion \(Multiplexes\) and RS Simplification - RTS 15010](#)

Attachments: [PDS - Update Advancing Making Home Motion \(Multiplexes\) and RS Simplification - RTS15010 \(2022-06-28\).pdf](#)

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Dear Mayor and Council,

Attached is the corrected memo on Advancing the Making Home Motion (Multiplexes) and RS Simplification (RTS 15010). This replaces the memo sent on June 24.

The memo includes the following key aspects of technical work and other considerations that will shape a proposal to be shared with the public in late fall 2022:

- Consultant work underway to explore different building design options, challenges and solutions for electrical service, GHG pollution and storm water implications, and financial performance.
- Questions on multiplex were included in the spring Van Plan survey and staff have held three engagement events with small builders/designers
- Work completed so far is shaping potential building design options (scale/height), how multiplex will be regulated, and where multiplex should be considered within RS areas
- Staff have explored different levels of RS simplification ranging from low to high. In light of significant change that will come with multiplex, staff are taking an ambitious approach to maximize alignment, improve efficiencies and make it easier to get a permit

Should you have any questions, please contact Theresa O'Donnell ([Theresa.o'donnell@vancouver.ca](mailto:Theresa.o'donnell@vancouver.ca))

Best,  
Paul

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The City of Vancouver acknowledges that it is situated on the unceded traditional territories of the xʷməθkʷəy̓əm (Musqueam), Skwxwú7mesh (Squamish), and səlilwətał (Tsleil-Waututh) Nations.

## MEMORANDUM

June 28, 2022

TO: Mayor and Council

CC: Paul Mochrie, City Manager  
Karen Levitt, Deputy City Manager  
Armin Amrolia, Deputy City Manager  
Katrina Leckovic, City Clerk  
Lynda Graves, Administration Services Manager, City Manager's Office  
Maria Pontikis, Director, Civic Engagement and Communications  
Anita Zaenker, Chief of Staff, Mayor's Office  
Neil Monckton, Chief of Staff, Mayor's Office  
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Patrice Impey, General Managers, Finance, Risk & Supply Chain Management /CFO  
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Dan Garrison, Assistant Director, Housing Policy and Regulation  
Chris Robertson, Assistant Director, City-wide and Regional Planning  
Neil Hrushowy, Assistant Director, Community Planning  
Doug Smith, Assistant Director, Sustainability

FROM: Theresa O'Donnell  
General Manager, Planning, Urban Design and Sustainability

SUBJECT: Update: Advancing Making Home Motion (Multiplexes) and RS Simplification

RTS #: 15010

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Staff provided a memo to Council on April 5, 2022 outlining the work program to create a new option for RS zones (multiplex) in order to advance the "Making Home: Housing for All of Us" motion passed in January 2022. That memo also highlighted the need to simplify the RS regulations to improve the efficiency of permitting. This memo provides an update on the multiplex work program along with the corresponding work to simplify the RS regulations.

### MULTIPLEX

A multiplex is a small townhouse project on a single lot. The technical work to advance a new multiplex option includes exploring a range of considerations to answer the following questions:

- WHAT – What is a multiplex and what regulations apply? Specifically, how big can a project be, how many units are feasible, what are appropriate heights and FSR?
- WHERE – Should multiplexes be allowed everywhere in RS zones? Should locations be limited to RS zoned areas to respond to specific considerations?
- HOW - How will new regulations be introduced and how will permits be processed? Should outright or conditional processes be adopted? Can permit reviews be streamlined?

The technical investigations underway that will inform a future multiplex proposal include:

### **Consultant Work**

**Building Design Concepts** - A range of design objectives have been established for new multiplexes, derived from existing and emergent City policy and the January 2022 Making Home Council motion. The objectives include a focus on family-sized units (avg. of 1,000 sq. ft.), providing natural light to all bedrooms and including at least one accessible or visitable unit. Consultants have been retained to create design concepts for further testing against performance objectives.

**Electrical Demand** - Transformers are costly, take up valuable space on a lot and impact tree retention, new landscaping, parking and utility services. New single detached houses and duplexes (including 2 suites) routinely require 400 amp connections. Staff are working with BC Hydro to understand the existing electrical supply and transformation capacity in RS areas and explore challenges and solutions to increased demand from new larger buildings.

**Greenhouse Gas (GHG) Emissions** - Basements require significant amounts of concrete which produces GHG pollution. A consultant has been retained to estimate the difference in GHG pollution from construction between one and two building design options and between options with a partial basement or all floor area fully above grade.

**Storm Water and Sewer Capacity** – The City’s sewer system was designed for single detached homes generally built in the 1950s (and earlier) when homes were smaller. New houses are larger and have larger building footprints that collect more rainwater which is directed into the sewer system. The sewer system may be challenged by the increased load from larger buildings, and more load could lead to localized flooding. Limiting the size of multiplexes so that buildings are only slightly larger than a new single detached house with a laneway house (current baseline of 0.86 FSR) could mitigate the risk to the sewer system. A consultant has been retained to estimate the difference in storm water volume between a new single detached house and a new multiplex and determine what measures could be used to limit risk to the system, so that multiplexes could be constructed without sewer upgrades.

**Financial Testing** - The size of the buildings and the number of units permitted impacts the financial viability of multiplex as an option against other options in RS zones. A consultant has been retained to evaluate the financial viability of multiplex at 1.0 FSR to provide an incentive while balancing utility capacity/cost considerations. The analysis will also explore whether secured rental or affordable home ownership (AHO) units are viable in multiplexes.

## **Future Consultant Work**

- Construction Costing - Estimate the total cost to construct a new multiplex and cost implications of one vs two building designs or above vs below grade designs.
- Tree Impacts - Compare the long-term impact on tree canopy of focusing on retention efforts (as per the current Tree By-law) vs a tree planting approach which would require new tree planting with new construction.
- Density Bonus Charge - Determine what fee can be charged for new multiplex buildings to help fund the needs of growth or contribute to affordable housing elsewhere.

## **Internal Evaluations**

- Explore the 20 considerations and topics identified in the Making Home Council motion.
- Exploring a range of considerations that may influence where multiplexes should be allowed in RS (i.e. Future Growth through Vancouver Plan, SRP, retail opportunities, Tree Canopy, equity of opportunity etc.).
- Explore what impact limiting the pilot within RS areas would have on how permits are processed and how RS regulations could be simplified.

## **Engagement to Date**

Through engagement on Vancouver Plan many residents of Vancouver have indicated a desire for more housing choice, including missing middle housing. In spring 2022, two questions were included in the Vancouver Plan survey to explore early thoughts on the importance of on-site parking and whether multiplexes should be built partially below grade or fully above grade. Respondents expressed mixed thoughts on these topics. Staff will more fully engage with residents on the multiplex proposal in late fall.

Staff have held three engagement events with industry to explore the future of RS zones for multiplex, to understand the financial implications of single lot projects and to explore design considerations and trade-offs. Key response from engagement with industry so far indicates support for multiplex with flexible and simple regulations along with ways to reduce permitting process costs and timelines. Further engagement with small home builders and designers will be held in late fall when options are further developed and tested.

## **Proposal Update**

More technical work is required to fully evaluate options and advance a proposal for multiplex. The work completed so far is trending towards a concept that includes the following features:

### **WHAT: Building Designs**

- FSR of 1.0 (with possibility of more FSR on limited lots for AHO/rental)
- Height of 3 storeys
- At least 3 units on a small lot, more on larger lots

- Testing 4 possible design options including partial basement and all above grade and one or two buildings.
- Focus on 2 and 3 bedroom units for families (avg. size of 1,000 sq.ft)
- Reduced parking requirement (min. one vehicle parking space per site)
- Formalize bike parking within the building or in shared bike garage
- Possible conditional requirements to include:
  - On-site water retention or detention (prescriptive)
  - New tree planting depending on lot size
  - Space for a Pad Mounted Transformer (PMT) for hydro service
  - Density bonus fee for floor area above 0.7 FSR

#### HOW: Multiplex regulations and process

- Layer regulations into RS zones where the option is permitted (RS-1 and RS-5 constitute 95% of all RS-zoned lots)
- Simple process and simple buildings (Part 9 of the VBBL)
- If possible, limit review to DBL only (anticipate limited conditions/requirements, no design guidelines, planning review or notification)

#### WHERE: Eligible areas within RS

- Simplest approach is to allow in all or most RS areas (RS-1 and RS-5 are the largest zones, which constitute 95% of all RS-zoned lots)
- Limiting the opportunity for multiplexes to some areas within RS zones will require maps and/or new zones ,which adds complexity and requires more processing and training
- Continue to evaluate whether there is substantial risk to allowing multiplexes everywhere or strong cases for excluding limited, well defined areas
- If multiplex is allowed in most RS areas, rather than in restricted areas, a pilot would feature on-going monitoring and reporting back to Council after first 100 applications are received or one year from introduction (whichever comes first). Regulations allowing multiplexes in most RS areas could include requirements that would limit the opportunity (e.g. site size or high initial density bonus fees).

## RS SIMPLIFICATION

The current RS regulations have taken decades to build up and are very complex. Over the years, the RS zones have been amended extensively and new RS districts have been introduced to address changing community needs and area-specific priorities, resulting in multiple low density RS districts with regulatory variations between them. While this has enabled unique neighbourhoods and compatible development, it has led to the creation of numerous district schedules with complex requirements. This is challenging for applicants and has implications for staffing resources and processing times.

Currently, there are nine RS districts (zones) which allow single detached houses, duplexes, laneway houses, and character home retention projects (including multiple strata units and or strata infill). The regulations for duplexes, laneway houses, and character home retention

incentives are all the same across the RS districts<sup>1</sup>, while the regulations for new single detached houses include slight differences between most RS zones.

Further, application of the regulations in the RS district schedules are guided by a number of guidelines and administrative bulletins which clarify the intent of the regulations, assist with design guidance, and explain how a regulation is applied and discretionary decisions under the regulation are made. The increasing number and complexity of RS schedules and regulations and related land use guidelines and bulletins contribute to the complexity of the permitting process and impact the expediency of permit issuance.

One of the successful permitting improvement initiatives undertaken through the Development Application and Permitting Modernization Task Force is a reduced scope of review of low density residential permits with a staff focus on only the most critical regulations and not evaluating projects for compliance with design guidelines. This pilot has demonstrated significant processing time reductions with minimal complaints.

Broadly, the goals of the RS Simplification work will build on this efficiency and increase clarity for users through standardizing, simplifying, and eliminating unnecessary regulatory complexity. In pursuit of this, staff have explored different levels of simplification ranging from low to high simplification including:

- Conducting a general clean up to standardize regulations across RS district schedules
- Removing design guidelines
- Collapsing zones into a smaller set or a single RS district schedule
- Exploring a new approach to FSR maximums, including allowances for a new single detached houses at grade at 0.6 FSR, or reducing overall FSR for a single detached houses as per the Making Home Council motion, in order to encourage laneway houses, duplexes and multiplexes instead of replacing existing houses with new larger houses

In light of the significant change that will come with the introduction of new multiplexes in RS district schedules and the simplified processing approach that is desired for the new multiplex option, staff are taking an ambitious approach to simplifying RS regulations to maximize alignment to make it easier to get a permit and alleviate processing time

The changes in RS regulations also need to be informed by the changes in performance objectives for multiplex that are underway, shifting from an emphasis on fit and scale with existing detached homes, towards prioritizing livability, sustainability, accessibility, trees (retention and new planting), ground water infiltration, and other new priorities.

The Making Home Council motion specifically directed staff to explore reducing the FSR for a new single detached house from 0.7 FSR to 0.6 FSR. Other cities such as Portland, Oregon have taken this step as part of new programs to incentivize other housing options – duplex and multiplex – over the replacement of existing single detached houses with new houses. Staff are reviewing the issues and impacts of reducing the FSR for new single detached homes and evaluating opportunities to encourage smaller homes (e.g. offering more above grade floor area for a smaller house and a larger laneway house with no change to total FSR on the lot).

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<sup>1</sup> Duplex is allowed in all RS districts except for RS-3/3A which does not allow duplex due to more complex FSR regulations

## NEXT STEPS

To advance work on multiplexes and simplification of RS regulations staff will:

- Continue with technical work and options evaluation over the summer and fall
- Advance details of the multiplex proposal (size, shape, process and pilot)
- Determine whether affordable home ownership or rental is feasible at this scale
- Determine proposed density bonus fee charges associated with new plex option
- Confirm where multiplex will be proposed to be allowed within RS zones
- Continue to work with DBL on how multiplexes will be processed
- Advance work on simplifying RS regulations
- Further align multiplex work and RS simplification work
- Share multiplex proposal and RS simplification with industry and the public in late 2022
- Revise and bring forward recommendations for zoning changes to allow multiplexes and simplify RS regulations generally in spring 2023 (late Q2)

Please do not hesitate to contact me directly if you have any questions or concerns.

Thank you,



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