



**POLICY REPORT
DEVELOPMENT AND BUILDING**

Report Date: June 5, 2018
Contact: Chris Robertson
Contact No.: 604.873.7684
RTS No.: 10317
VanRIMS No.: 08-2000-20
Meeting Date: June 19, 2018

TO: Vancouver City Council

FROM: General Manager of Planning, Urban Design and Sustainability and General Manager of Development, Building and Licensing

SUBJECT: Amendments to the Zoning and Development By-law and Building By-law - Accessible Path of Travel Policy Review

RECOMMENDATION

- A. THAT the General Manager of Planning, Urban Design and Sustainability be instructed to make application to amend the Zoning and Development By-law as follows:
- (i) In Section 10:
 - a. require a minimum of 20% of all dwelling units in new townhouse, stacked townhouse and rowhouse developments, on sites with a frontage of 27.4 m or greater in any district including a CD-1 (Comprehensive Development) District, to provide an accessible path of travel from the street to an entrance;
 - b. permit the Director of Planning to relax the minimum 20% requirement in A (i) a., or the height requirement in the appropriate district schedule, where compliance would result in unnecessary hardship; and
 - c. for one-family dwellings and two-family dwellings, with or without a secondary suite, on sites with a frontage of 10.06 m or less, permit a floor area exclusion of 0.5% to regain the amount of usable space available prior to the introduction of the adaptability provisions in the 2014 Building By-law.

- (ii) In Section 11.24:
 - a. require new laneway houses with at least 40 sq. m of habitable floor area on the ground floor and on a site with a frontage of 15.3 m or greater, to provide an accessible path of travel from an on-site parking space or the street, where feasible, to an entrance; and
 - b. permit the Director of Planning to relax the requirement for an accessible path of travel in A (ii) a. where due to conditions peculiar to the site or to the proposed development, compliance would result in unnecessary hardship.
- (iii) In Section 3.2.1(g), enable the Director of Planning to relax requirements for yards, setbacks, site coverage, permeability, building depth and side door entrance to enable ramps, lifts, at-grade entries or other enhanced accessibility features for townhouse, stacked townhouse or rowhouse units not in combination with an apartment building.

FURTHER THAT the application be referred to Public Hearing;

AND FURTHER THAT the Director of Legal Services be instructed to prepare the necessary by-laws generally in accordance with Appendix A for consideration at the Public Hearing.

- B. THAT Council seek to amend the Building By-law, generally in accordance with Appendix B, to update adaptable housing requirements to align with the proposed amendments to the Zoning and Development By-law;

FURTHER THAT the application be referred to Public Hearing;

AND FURTHER THAT the Director of Legal Services be instructed to prepare the necessary by-laws generally in accordance with Appendix B for consideration at the Public Hearing.

- C. THAT subject to approval of Recommendations A and B, Council direct staff to amend the Enhanced Accessibility Guidelines and all other relevant Guidelines with design considerations for townhouse, stacked townhouse and rowhouse units and laneway houses to align with approved policy changes.
- D. THAT subject to approval of Recommendations A and B, Council direct staff to monitor the development of visitable/adaptable dwelling units in coordination with the development of a potential City-wide Accessibility Strategy and report back on further recommended improvements as necessary.
- E. THAT Recommendations C and D also be referred to Public Hearing.
- F. THAT Recommendations A through E be adopted on the following conditions:
 - (i) THAT the passage of the above resolutions creates no legal rights for any person, or obligation on the part of the City and any expenditure of funds

or incurring of costs is at the risk of the person making the expenditure or incurring the cost;

- (ii) THAT any approval that may be granted following the public hearing shall not obligate the City to enact any rezoning by-laws; and
- (iii) THAT the City and all its officials, including the Approving Officer, shall not in any way be limited or directed in the exercise of their authority or discretion, regardless of when they are called upon to exercise such authority or discretion.

REPORT SUMMARY

This report proposes policy changes, including amendments to the Zoning and Development By-law and the 2014 Vancouver Building By-law (VBBL), to improve the accessibility, adaptability and visitability of low-density housing across the city in response to Council's directions to:

- review the feasibility of mandating an exterior accessible path of travel to new low-density housing forms in the city; and
- explore opportunities for regaining the amount of usable space available prior to the introduction of the adaptability provisions in the 2014 VBBL in one- and two-family dwellings on sites with a frontage of 10.06 m or less.

Staff have completed a comprehensive study of low-density housing types, taking into consideration the impact of VBBL adaptable housing regulations on livability and building form, best practices on accessible/visitable housing, and the potential building design and construction cost implications related to the provision of an accessible path. Ongoing consultation with the Persons with Disabilities Advisory Committee, the Seniors' Advisory Committee, external disability and seniors' advocacy organizations and the building/development community was undertaken to gain feedback and input on policy directions.

As outlined in this report, proposed policy changes including amendments to the Zoning and Development By-law and corresponding changes to the VBBL are recommended as a starting point to increase the number of visitable/adaptable low-density residential units across the city. These units, along with the majority of new housing starts in the city already designed to be visitable/accessible (i.e. apartment units), will help to provide housing options for persons with disabilities, seniors, individuals with temporary or permanent mobility issues and young families.

The proposed amendments are aligned with the City's "Housing Vancouver" strategic directions to introduce more housing options in low-density neighbourhoods throughout the city. In the future, more accessible apartment buildings will be constructed along arterials and within walking distance to public transportation, while the make-up of single-family neighbourhoods will consist of a greater variety of higher density ground-oriented housing forms, including townhouse/rowhouse developments, three/four-plexes, laneway houses and various forms of infill housing.

The proposed amendments to the Zoning and Development By-law, VBBL and anticipated guideline updates propose the following changes:

- Townhouse/rowhouse developments with a frontage of 27.4 m or greater:
 - Require an accessible path of travel for a minimum of 20% of dwelling units; and
 - Waive most VBBL adaptability requirements on the upper storey for 80% of dwelling units.
- Townhouse/rowhouse developments with a frontage of less than 27.4 m:
 - Waive most VBBL adaptability requirements on the upper storeys of dwelling units.
- Townhouse/rowhouse units combined with an apartment building:
 - Update relevant design guidelines to align with the VBBL adaptability requirements, including an accessible path of travel.
- One-family and two-family dwellings on sites with a frontage of 10.06 m. or less:
 - Include a floor area exclusion to regain the amount of usable space available prior to the introduction of the adaptability provisions in the 2014 VBBL.
- Laneway houses (LWHs) - One-storey and 1.5-storey LWHs with at least 40 sq. m. of habitable floor area on the ground floor and on sites with a frontage of 15.3 m or more:
 - Require an accessible path of travel from an on-site parking space or the street, where feasible, to an entrance.
 - One-storey units will be visitable with an adaptable interior, while 1.5-storey units will be visitable on the ground floor with most VBBL adaptability requirements waived on the second level.
- Apartment buildings:
 - Amend VBBL requirements to mandate an accessible path of travel from street to interior lobby and an elevator for buildings four storeys or greater with a shared corridor (current requirement is six storeys or greater).

Enhanced accessibility/adaptability provisions in the VBBL presently exceed those of other Canadian municipalities, and should Council support the proposed recommendations, Vancouver will be one of the first Canadian municipalities to adopt an accessibility policy that mandates an accessible path of travel for low-density, ground-oriented dwelling units such as townhouses. Dwelling units where an accessible path of travel is not practical will regain some useable living space either through waiving most VBBL adaptability requirements on the upper levels for townhouse/rowhouse units, or providing a floor area exclusion for the floor area lost to VBBL adaptability requirements in one-family and two-family dwellings on sites with a frontage of 10.06 m. or less.

The proposed amendments to the Zoning and Development By-law and the VBBL are intended as a starting point in increasing the stock of low-density housing that is visitable. Should Council support the recommended policy changes, staff will monitor development and building applications for new low-density housing meeting visitability and adaptability requirements. Monitoring of the number of visitable low-density units achieved, along with any further policy improvements will be coordinated with the development of a potential city-wide Accessibility Strategy.

COUNCIL AUTHORITY/PREVIOUS DECISIONS

Council Policy related to the building requirements for persons with disabilities is established in Section 3.8 of the 2014 Vancouver Building By-law (VBBL).

In May 2002, Council approved amendments to the VBBL aimed at improving access to all residential units, common areas and washrooms in all newly constructed apartment buildings with more than three units, an elevator and a shared public corridor (excluding most townhouse units).

In June 2013, staff presented to Mayor and Council an Age-Friendly Action Plan to help make Vancouver a more safe, inclusive, and engaging city for all seniors. The actions included a review of bylaws to improve accessibility in housing to allow seniors to age in place.

In September 2013, Council approved amendments to the Vancouver Building By-law which included the addition of adaptability requirements for all low-density housing forms, including one- and two-family houses, laneway houses, secondary suites, townhouses, stacked townhouses and freehold rowhouses. At this time, Council also directed the Director of Planning and Chief Building Official to report back on the feasibility of mandating an accessible path of travel from the street to at least one exterior entrance of all one- and two-family houses, laneway houses, secondary suites, townhouses and stacked townhouse type units.

In December 2017, Council passed a Motion directing staff to explore opportunities to provide flexibility in meeting adaptability needs to maintain the amount of usable space prior to the introduction of the accessibility provisions in the 2014 VBBL for one- and two-family houses.

In May 2018, Council passed a Motion directing staff to report back with a summary of current policies and initiatives across City departments and potential options for implementing of accessibility throughout the city. As well, Council directed staff to report back on recommendations for developing an Accessibility Strategy.

CITY MANAGER'S/GENERAL MANAGER'S COMMENTS

The General Manager of Planning, Urban Design and Sustainability and the General Manager of Development, Building and Licensing concur with the recommendations in this report.

REPORT

Background/Context

1. Visitable, Adaptable and Accessible Dwelling Units

The dwelling unit terms below are referenced throughout the report and defined as follows:

Visitable Dwelling Unit: means a unit with features that allow people with disabilities to visit with ease. Key features include:

- accessible exterior path of travel from the street (or where not feasible to a parking space) to an exterior widened doorway with a no-step entrance;
- accessible interior route (widened doorways and corridors);
- adaptable two-piece bathroom (washbasin; toilet) on the main floor; and
- living space with wheelchair-turning radius for visiting (minimum 120 sq. ft.).

Adaptable Dwelling Unit: means a unit with design and construction features that can be modified at minimal cost to suit the changing needs of residents over time. Features include all visitable features listed above, plus the following:

- reinforcement in bathroom walls for hand rails;

- plumbing to allow adjustments to the height of kitchen counters;
- roughed-in drain for shower with no threshold to enable wheelchair access; and
- may include stacked closets for future elevator or “chair lift-ready” stair design.

Accessible Dwelling Unit: means a unit fitted with all the necessary enhanced accessibility features that would enable wheelchair users and persons with disabilities and mobility restrictions to live with ease.

2. Policy and Regulatory Context

2014 Vancouver Building By-law (VBBL) Adaptability Requirements - The VBBL requires enhanced accessibility and adaptability features for all forms of housing in the City. While adaptability requirements for multi-family apartment buildings (typically with \geq six floors) with elevators and common corridors, have been mandated for many years, requirements for low-density housing forms were first included in the last round of VBBL amendments in 2014. The current adaptability provisions for new low-density dwelling units include wider corridors, stairs and door jambs, and a three-piece washroom (washbasin, toilet and shower), which can be modified at minimal cost to allow seniors or persons with disabilities to live comfortably as their mobility needs change.

Although the VBBL mandates an exterior accessible path of travel for all multi-family apartment buildings with an elevator and shared corridor, no similar requirement exists for low-density housing. Without a mandated accessible path of travel to low-density housing forms, the VBBL interior adaptability requirements, in many cases, do not achieve the intended goal of accommodating persons with disabilities. Therefore, in September 2013, Council requested that the Director of Planning and Chief Building Official report back on the feasibility of mandating an accessible path of travel from the street to at least one exterior entrance of all one- and two-family houses, laneway houses, secondary suites, townhouses and stacked townhouse units.

Zoning and Development By-law – The City has two regulatory tools in the Zoning and Development By-law to enable the voluntary construction/renovation of enhanced accessibility features, such as ramps or lifts, in low-density housing types and to incentivize ground-level housing options. These regulations are as follows:

- Section 3.2.1(g) - Allows the Director of Planning to relax regulations for setbacks, site coverage, building depth and door location to enable the provision of an accessible path of travel via a ramp or lift, for one- and two-family dwellings, with or without secondary suites, and laneway houses. This provision enables applicants to overcome the challenge of stairs.
- Section 10.25 Laneway Houses - Incentivizes one-storey laneway houses which are more suitable for visitable/adaptable design.

The City also has Enhanced Accessibility Guidelines to assist applicants in designing and incorporating ramps, vertical lifts, at-grade entries or other means of access into new or existing one- and two-family dwellings (with or without secondary suites).

On the other hand, the Zoning and Development By-law and related Design Guidelines contain the following key policies and directions that make the provision of an accessible path of travel to low-density housing types challenging:

- Above-grade floor space ratio limits in RS District Schedules for one- and two-family houses and laneway houses that shift livable floor space into the basement.

- Living Accommodation Below Grade (Section 10.15): Limiting the depth of habitable basements to create livable secondary rental suites raises the main floor elevation higher above grade.
- Character Retention Zones: Incentivize retention of pre-1940 character homes, most of which have raised main floors.
- Design Guidelines: Most townhouse design guidelines require or recommend a raised front porch condition to enhance privacy for individual units.
- Parking provided within Dwelling Unit: Laneway houses, infill housing and small house/duplex developments with at-grade parking typically provide most or all livable space on the second storey.

Housing Vancouver Strategy - In November 2017, Council approved a Housing Vancouver Strategy with a 10-year focus on:

1. Building more affordable housing;
2. Addressing and limiting the over-inflated cost of land that is driving up housing prices;
3. Ensuring the right types of homes are built which residents need and can afford;
4. Protecting and renewing existing affordable rental housing across Vancouver;
5. Providing housing and support for Vancouver's most vulnerable residents; and
6. Streamlining City processes for faster housing development.

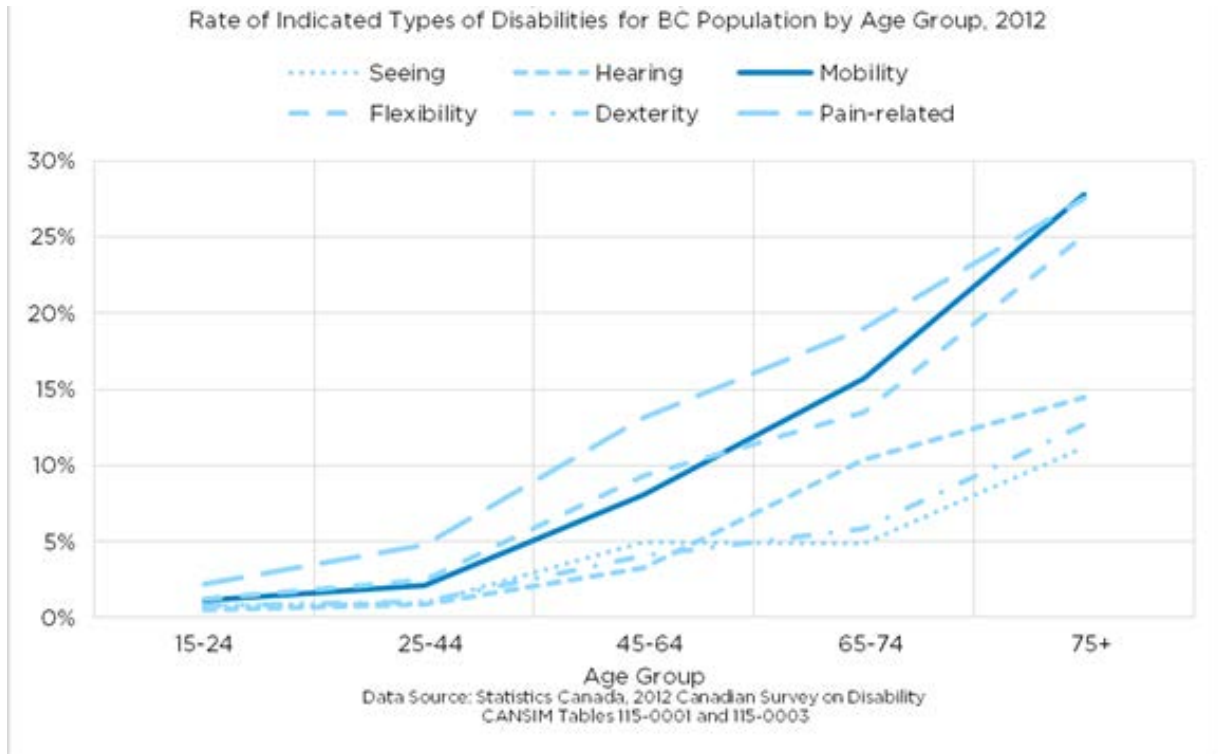
A top priority of the Housing Vancouver Strategy is to transform single-family neighbourhoods by increasing the supply, affordability and variety of housing options for families. This is to be accomplished through new community planning programs and a comprehensive review of City policies and potential zoning changes to build new types of housing on single lots. Regulatory changes and further incentives for a variety of new residential developments will be introduced resulting in higher-density housing forms such as laneway houses, strata-titled infill houses, rowhouses, townhouses and stacked townhouses. With a strong focus on densifying Vancouver's residential neighbourhoods, a greater number of one- and two-family dwellings on a single site will be replaced with multi-family housing options which presents an opportunity to increase the stock of visitable/adaptable units.

Strategic Analysis

1. Defining the Need - Vancouver Demographics

As shown in Figure 1 the prevalence of sensory and physical disabilities increases with age. As the baby boomer generation ages, there is and will continue to be a corresponding increase in the population with mobility and accessible housing needs.

Figure 1: Prevalence of Sensory and Physical Disabilities in BC



2. Existing and New Housing Stock in Vancouver

As indicated in Figure 2, accessible apartment units in buildings six storeys or greater represent approximately 30 % of the existing housing stock. As well, as shown in Figure 3, the vast majority of new housing starts are visitable/adaptable apartment units. It is anticipated that this trend will continue as the city's Vancouver Housing Strategy is implemented in the years to come.

Although low-density housing units represent the minority of the housing stock overall, staff have proposed mandating an accessible path of travel for 20 % of all townhouses (with a frontage of 90 ft. or greater) and for laneway houses (with a frontage of 50 ft. or greater and 40 sq. m of floor space on the ground floor) as a starting point to enable accessible/visitable low-density housing options. As well, various relaxations are available for enabling voluntary accessibility designs.

Figure 2: Existing Dwelling Units by Building Type (2016 Census)¹

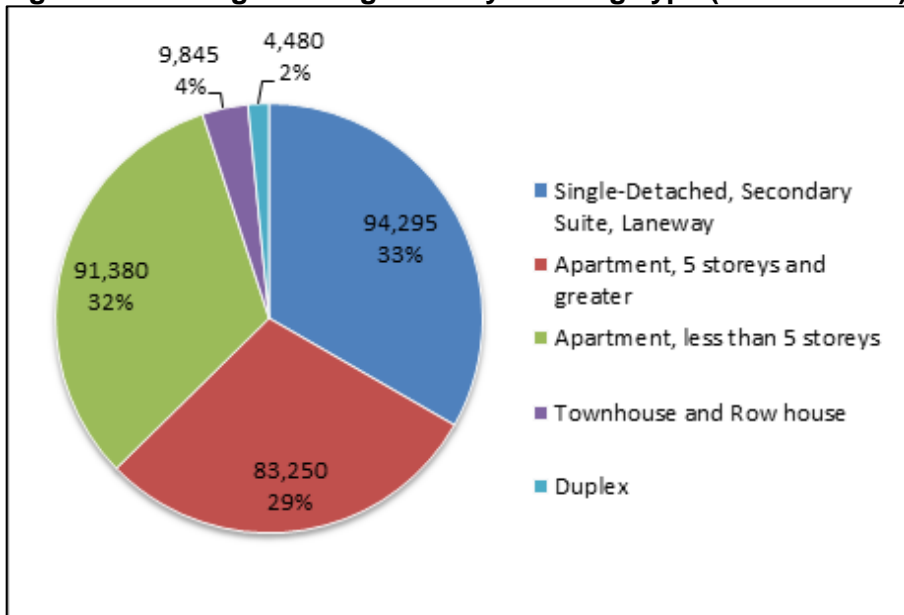
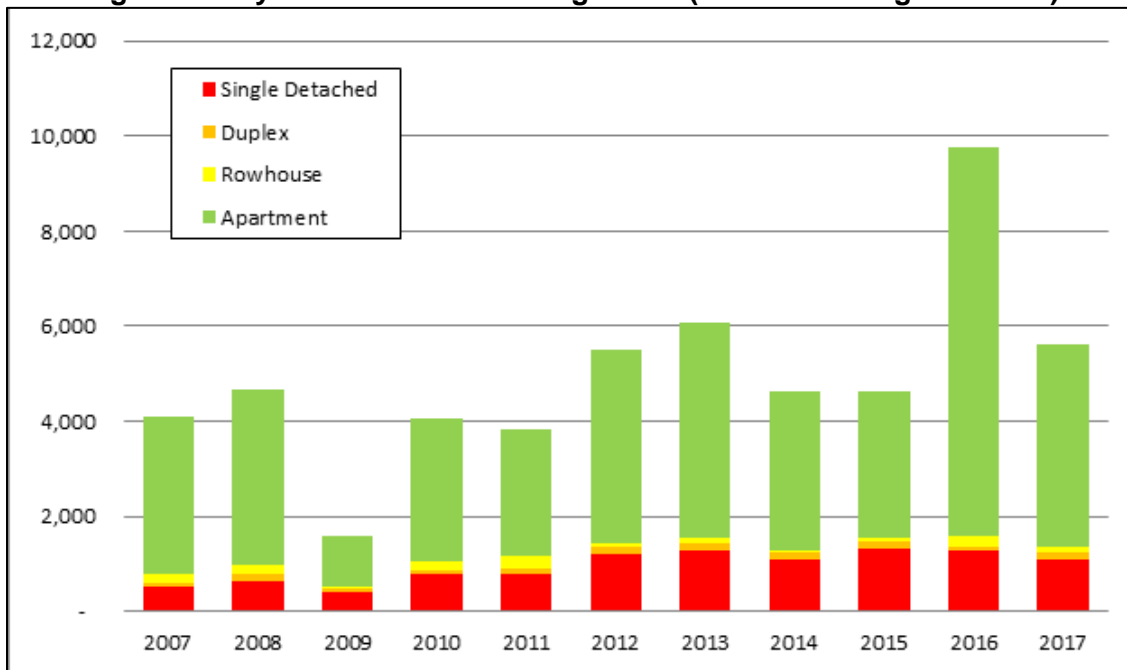


Figure 3: City of Vancouver Housing Starts (CMHC Housing Statistics)



3. Low-Density Housing Accessibility Analysis

In response to Council’s directive, staff conducted a design review of low-density housing forms to ascertain the challenges and opportunities in providing an accessible path of travel. Findings are summarized in Table 1 below.

¹ VBBL requires an elevator for buildings 18 m and higher (typically six storeys and higher), however, the vast majority of new apartment buildings include an elevator and accessible path.

Table 1: Low Density Housing Analysis

Low-Density Housing Type	Considerations for providing Accessible Path of Travel
One-Family Dwelling	<ul style="list-style-type: none"> • Main floor typically raised 3 ft. to 4 ft. above grade to accommodate a livable basement (i.e. secondary suite) which can be up to 6 ft. below grade. • Stairs may be present at an exterior entry door to address flood plain requirements or water ingress concerns. • Side yard may have stairs along an exterior path of travel to accommodate grade changes and provide access to a secondary suite, rear yard and parking and/or fire access to a laneway house.
Two-Family Dwelling (typical front-back layout)	<ul style="list-style-type: none"> • Main floor typically raised 3 ft. to 4 ft. above grade to accommodate a livable basement (i.e. secondary suite) which can be up to 5 ft. below grade. • Stairs may be present at an exterior entry door to address flood plain requirements or water ingress concerns. • Side yard may have stairs to accommodate grade changes and provide access to the rear unit, a secondary suite and/or the rear yard and parking.
One-storey laneway house	<ul style="list-style-type: none"> • Highly adaptable with all living space at or near grade. • Side and rear yard setbacks maximize back yard space and provide a landscape buffer from the lane and neighbouring sites.
1.5-storey laneway house	<ul style="list-style-type: none"> • Less livable interior space at-grade due to required setbacks. • Footprint may be shared with interior parking space • Constrained interior floor area, particularly on the second level, due to 2014 VBBL adaptability requirements.
Townhouse/Rowhouse	<ul style="list-style-type: none"> • Less livable interior space due to narrow units (often 12 ft. wide) and having to meet VBBL adaptability requirements. • Main level is typically 4 ft. to 6 ft. above grade and either situated above a livable basement at 3 ft. to 5 ft. below grade or above an underground parkade.
Stacked Townhouse	<ul style="list-style-type: none"> • Lower unit is typically up to 3 ft. below grade due to envelope and VBBL adaptability requirements. • Lower, one-storey units are more adaptable with all living space at or near grade. • Stairs required for upper units which are typically 4 ft. to 6 ft. above grade.

4. Best Practices Review – Accessible/Visitable Housing

As the City of Vancouver is subject to its own Provincial legislation, “The Vancouver Charter”, existing accessibility/adaptability provisions in the 2014 VBBL already exceed those of other regional municipalities which are unable to impose by-laws exceeding the Provincial Building Code. In Vancouver, 5% of all units in City-secured social housing developments are required to be wheelchair accessible and all new multi-family dwellings with a common corridor and elevator must meet enhanced accessibility requirements, including an exterior accessible path.

Adaptability provisions for low-density housing apply only to the interior of units. The voluntary provision of an accessible path of travel to one- and two-family dwellings, with or without a secondary suite, and laneway homes may be enabled through relaxations to zoning regulations. Enhanced Accessibility Guidelines also exist to assist owners with the design of ramps, lifts and at-grade entries to access their homes. Other BC municipalities such as the District of Saanich, Prince George and Sechelt also rely on voluntary guidelines to encourage more adaptable/accessible housing options.

In Canada, mandatory regulations to achieve visitable, adaptable or fully accessible dwelling units generally apply to multi-family apartment buildings with a common corridor and elevator, while similar policies to enable visitable, adaptable or fully accessible low-density forms of housing tend to be voluntary. Most housing developments where visitability and/or accessibility requirements have been successfully applied are funded through government subsidy or located on government-owned lands.

Appendix C provides a general summary on accessible/visitable housing best practices in the United States, United Kingdom and other select international locations.

5. Accessible Path of Travel Policy Review - Proposed Policy Recommendations

The proposed policy recommendations are summarized for each housing type in Table 2 to Table 5 below. Further clarification and detail on the policy recommendations is provided in Appendix D.

A. Townhouses (not in combination with an apartment building)

Figure 4: Example of Rowhouses with street level units²



Table 2: Townhouses (not in combination with an apartment building)

² Source: The Province - Cowie Rowhouses, Vancouver

Applicability	Policy Recommendations		Rationale
Sites with a minimum 27.4 m (90 ft.) frontage	1.(a) Minimum 20% of units to meet following requirements:		To achieve visitability in a minimum of 20% of units on larger sites while increasing living space in units less suitable for adaptability. Minimum 90 ft. frontage for policy trigger to maintain affordability on smaller sites. Potential relaxation of visitability requirement and/or maximum height for sloped sites or other site peculiarities. Waiving most VBBL adaptability requirements on upper levels to increase usable living space within narrow multi-level units. A financial analysis of the minimum 20% visitable unit requirement found that there would be minimal financial impacts to developers/builders.
	One-storey Garden Units: <ul style="list-style-type: none"> • VBBL adaptability requirements, plus: • accessible path of travel & no-step entry; and • kitchen wheelchair-turning radius. 	Multi-level Units (ground floor): <ul style="list-style-type: none"> • VBBL adaptability requirements with only 2-piece adaptable washroom; and • accessible path of travel & no-step entry. Note – most VBBL adaptability requirements waived on upper levels ¹	
	1.(b) Permit relaxation for minimum requirement in 1.(a), or the height requirement in the appropriate district schedule to the extent necessary to allow the minimum requirement to be met, or both, where due to site or development specific conditions, compliance would result in unnecessary hardship.		
	2. Remaining 80% of units without an accessible path of travel to meet following requirements:		
Sites with frontage less than 27.4 m (90 ft.)	Units ≤ 5 ft. above grade (ground floor): VBBL adaptability requirements with only 2-piece adaptable washroom Note – most VBBL adaptability requirements waived on upper levels ¹	Units > 5 ft. above grade: Most VBBL adaptability requirements waived ¹	
	All development sites	Relaxations and Guideline changes to enable voluntary accessibility provisions: <ul style="list-style-type: none"> • Include townhouse and rowhouse developments in Sec. 3.2.1(g) of Z&D B/L to enable voluntary provision of ramps, lifts, at-grade entries or other means to access individual units. • Include townhouse and rowhouse developments in the “Enhanced Accessibility Guidelines”. 	

¹ With the exception of height requirements for outlets, switches & controls, kitchen hardware not requiring a tight grasp and backing in tub walls

B. Townhouses combined with an Apartment Building

Figure 5: Example of townhouses combined with an apartment building³



Table 3: Townhouses combined with an Apartment Building

Policy Recommendations	Rationale
<ul style="list-style-type: none">• All units to meet same VBBL enhanced accessibility and adaptability requirements applicable to apartment building.• Relevant design guidelines to be amended to align with VBBL adaptability and enhanced accessibility provisions.	<p>All townhouse units combined with a multi-family apartment building should have an accessible path of travel and a visitable/adaptable interior as they are required to meet the same VBBL enhanced accessibility requirements applicable to the multi-family building. Aligning relevant design guidelines with VBBL requirements will ensure consistency between rezoning, development permit and building permit stages.</p>

³ Source: Tianco Group, Vancouver & Montreal

C. One- and Two-Family Dwellings with or without Secondary Suites

Figure 6: Example of a ramped accessible path into a single-family house⁴



Table 4: One- and Two-Family Dwellings with or without Secondary Suites

Policy Recommendations	Rationale
<ul style="list-style-type: none"> • Accessible path of travel not mandated. • Continue to support voluntary measures to achieve visitability/ accessibility. 	<p>Accessible path of travel not mandated in order to maintain incentives for the provision of affordable and livable rental basement suites.</p> <p>Provision of accessible path of travel is challenging in new one- and two-family dwellings due to site constraints such as retaining walls, trees and grade changes, and competing demands on side yards, including fire access to rear laneway houses (LWHs), secondary suites, parking and back yards.</p> <p>Section 3.2.1(g) of Zoning and Development By-law allows applicants to request relaxations to existing regulations to enable ramps, lifts, at-grade entries or other enhanced accessibility features.</p>
<p>Provide 0.5% floor area exclusion to offset floor area lost in meeting VBBL adaptability requirements.</p>	<p>To improve the livability of small one- and two-family dwellings (i.e. on sites with frontage of 10.06 m. (33 ft.) or less while continuing to ensure VBBL adaptability requirements are met, a floor area exclusion of 0.5% is proposed to offset the floor area lost in meeting the VBBL adaptability requirements.</p>
<p>Improve “Enhanced Accessibility Guidelines” by clarifying approaches to accommodate enhanced accessibility features for two-family dwellings.</p>	<p>To provide guidance on how to voluntarily incorporate an accessible path of travel for two-family dwellings.</p>

⁴ Source: Levcobuilders.com

D. Laneway Houses

Figure 7: Example of a one-storey laneway house⁵



⁵ Source: Smallworks

Table 5: Laneway Houses (LWHs)

Applicability	Policy Recommendations		Rationale
<p>Units with ≥ 40 sq. m of habitable floor area and on sites with frontage ≥ 15.3 m (50 ft.)</p>	<p>1.(a) LWHs to meet following requirements:</p> <p>One-Storey Unit:</p> <ul style="list-style-type: none"> • VBBL adaptability requirements, plus: • Accessible path of travel (including no-step entry) from on-site parking space and the street, where feasible; • kitchen wheelchair-turning radius; • interior path of travel to door; • 3-piece adaptable washroom; and • visiting area with wheelchair-turning radius. 	<p>1.5-Storey Unit (Ground-floor):</p> <ul style="list-style-type: none"> • VBBL adaptability requirements with only 2-piece adaptable washroom; and • Accessible path of travel (including no-step entry) from on-site parking space and the street, where feasible. <p>Note – most VBBL adaptability requirements waived on upper level¹</p>	<p>LWH designs maximize livable space in a small footprint resulting in limited usable living space. Meeting VBBL adaptability requirements in a LWH uses additional floor space which impacts the livability of the unit.</p> <p>Testing concluded that for sites with frontage ≥ 15.3 m (50 ft.), an accessible path of travel can be provided to one-storey and 1.5-storey LWHs from on-site parking space and the street (where feasible) without impacting back and side yard setbacks.</p> <p>Accessible path of travel required for LWHs only when the habitable floor area on the ground floor is ≥ 40 sq. m as this is the trigger in the VBBL for a 2-piece washroom on the accessible level.</p>
<p>Units with ≥ 40 sq. m of habitable floor area and on sites with frontage < 15.3 m (50 ft.)</p>	<p>LWHs to meet following requirements:</p> <p>One-Storey Unit:</p> <ul style="list-style-type: none"> • VBBL adaptability requirements 	<p>1.5-Storey Unit (Ground-floor):</p> <ul style="list-style-type: none"> • VBBL adaptability requirements with only 2-piece adaptable washroom <p>Note – most VBBL adaptability requirements waived on upper level¹</p>	<p>It is not possible to accommodate an accessible path of travel to LWHs on sites with frontage < 15.3 m (50 ft.) while still achieving the allowed floor area and meeting yard setbacks and other requirements. This outcome would negatively impact livability.</p> <p>VBBL adaptability requirements for the one-storey LWH and ground-floor of 1.5 storey LWH would make it possible to assist a disabled person through the widened entrance door thereby enabling visitability.</p> <p>To improve the livability of new 1.5-storey LWHs, it is recommended that most VBBL requirements be waived on the upper level¹ to increase usable living space, resulting in a greater number of smaller and affordable rental LWH units across the city for families.</p>

¹ With the exception of height requirements for outlets, switches & controls, kitchen hardware not requiring a tight grasp and backing in tub walls.

E. Multi-Family (Apartment) Buildings with Common Corridor

Figure 8: Rendering/Example of a four-storey apartment building⁶



Table 6: Multi-Family (Apartment) Buildings with Common Corridor

Applicability	Policy Recommendation	Rationale
Multi-Family (Apartment) Buildings 4 storeys or higher with common corridor	Following requirements to be met: <ul style="list-style-type: none"> • elevator; and • an accessible path of travel from street to interior lobby. 	To ensure multi-family buildings 4 storeys or higher with a common corridor have an elevator and accessible path of travel from the street to an interior lobby. Current VBBL requirements for an accessible path of travel are triggered for buildings 6 storeys or higher (including an elevator and an accessible path of travel from street to call-number panel, typically located outside of the building’s front entrance).

6. Public Consultation for the Accessible Path of Travel Policy Review

As part of the Accessible Path of Travel Policy Review, staff have undertaken the following consultation:

- April 2016 - Preliminary meeting with members of the Persons with Disabilities Advisory Committee (PDAC) and Seniors’ Advisory Committee (SAC);
- June 2016 - Stakeholder Workshop with PDAC, SAC, external reps of disability and seniors advocacy organizations, designers (i.e. architects) and builders/developers;
- December 2017 - Open House to present draft policy recommendations;

⁶ Source: Mike Stewart

- April 2018 - Consultation with PDAC/SAC and external reps of disability and seniors advocacy organizations to present and gather feedback on revised draft policy recommendations; and
- April 2018 - Consultation with designers (i.e. architects) and builders/developers to present and gather feedback on revised draft policy recommendations.

Feedback from the Persons with Disabilities Advisory Committee, the Seniors' Advisory Committee and external Disability and Senior Advocacy Organizations

Feedback received from the Persons with Disabilities Advisory Committee, the Seniors' Advisory Committee and external Disability and Senior Advocacy Organizations included the following commentary:

- Accessible housing is a human right and benefits everyone, including families with children, seniors and persons with temporary injuries or long-term disabilities.
- As voluntary tools are ineffective, an accessible path of travel needs to be mandated for all new low-density housing types in the city so that disabled persons can live or visit with ease. If most accessible policies remain voluntary, the development industry will not adapt its practises. Mandatory policy tools were seen as essential to propel the development industry forward toward 100% accessible building practices.
- More research on housing accessibility policies in other jurisdictions was requested.
- Although an accessible path of travel to one-storey garden suites and one-storey laneway homes was seen as essential, there was some support for relaxing the VBBL adaptability requirements for the upper levels of townhouse and rowhouse developments and 1.5-storey laneway houses.
- The proposed policy recommendations are positive in that the City is moving forward with improved housing accessibility; however, the recommendations were not seen as sufficient. Although there was support for the proposed changes to apartment buildings, there was significant concern that the proposed 20% requirement for an accessible path of travel for townhouse/rowhouse units did not go far enough. Feedback was given that an accessible path of travel should be mandatory for 100% of the units in townhouse/rowhouse developments with relaxations available on a case-by-case basis.
- Comments received indicated that one-storey laneway houses should have a mandated accessible path.
- Questions were raised regarding the increasing need for accessible housing with an aging population. Data analysis was requested demonstrating how the housing stock in Vancouver addresses (or doesn't) the need for accessible housing.
- Concern was expressed that the proposed recommendations will add only a small number of low-density units with an accessible path of travel to the overall housing stock every year. If the provision of an accessible path of travel remains voluntary, most dwelling units constructed in the future with an adaptable interior will not be accessible from the outside and will not satisfy the demands of an aging population.

Feedback from Development Industry Representatives including Designers, Builders and Developers:

Feedback from the development industry included the following commentary:

- Concern was expressed that mandating accessibility in smaller housing units could compromise financial viability.
- Achieving a balance between the VBBL adaptability requirements for laneway houses, secondary suites, rowhouse and townhouse units and one- and two-family houses is

challenging as the floor area required to meet these requirements reduces usable living space.

- Requirements for enhanced accessible or adaptable features should continue to focus on larger multi-family apartment buildings with an elevator and common corridor.
- Some incentives should also be provided for accommodating VBBL adaptability requirements or enhanced accessibility features in low-density housing forms.
- Support for the proposed recommendations focus on multi-family housing rather than one- and two-family homes. Support was expressed for waiving the 2014 VBBL adaptability requirements on the upper level of laneway homes and townhouse and rowhouse units and for offering a relaxation in cases where an accessible path of travel cannot be met.
- Support was expressed for providing a floor space exclusion for adaptability requirements in one- and two-family dwellings.
- Concern that the city needs to acknowledge that the above-grade FSR regulations and raised entries in RS zones penalize at-grade accessible houses. Floor area can only be maximized when a basement is provided and the main floor is raised 6 ft. above grade.
- Overly restrictive height limits for laneway houses force construction below grade making no-step entrances extremely challenging.
- A floor area exclusion for elevators should be provided in one and two family houses to access the second floor.

Response to feedback:

Following the December 2017 Open House, staff considered all feedback received, and undertook additional research and policy work as follows:

- Additional best practices research on accessible/visitable housing as detailed in Appendix C;
- Further investigation into how the VBBL adaptability requirements fit into typical building designs and site conditions and how they align with larger COV housing priorities (i.e. Housing Vancouver);
- Form of development study for rowhouses and townhouses - feasibility of increasing per cent of visitable units (impacts to exterior and interior design); and
- Quantity Surveyor study for rowhouses/townhouses reviewing costs impacts of accessibility features.

Following input received from consultation meetings held in April 2018, staff further reviewed the feasibility of requiring an accessible path of travel for laneway houses. Following this evaluation, staff were able to confirm a feasible approach and revised the policy recommendations to mandate an accessible path of travel from the street or an on-site parking space for laneway houses with at least 40 sq. m of habitable floor area on the ground floor and located on sites with a frontage of (15.3 m) 50 ft. or greater.

As well, feedback received in response to policy recommendations for laneway houses raised concern about additional regulatory requirements and suggested that accessibility provisions should be voluntary.

Financial Implications

The proposed changes are not anticipated to result in material cost increase for development or material financial implications for the City of Vancouver.

CONCLUSION

Staff recommend approval of the proposed policy changes outlined in this report including amendments to the Zoning and Development By-law and the 2014 Building By-law, as a starting point to increase the number of visitable/accessible low-density residential units across the city. These housing units, along with the majority of new housing starts that are already constructed to be visitable/accessible (i.e. apartment units) and adaptable over time, provide housing options for persons with disabilities, seniors, individuals with temporary or permanent mobility issues and young families.

Accessibility provisions in the VBBL presently exceed those of other Canadian municipalities, and should Council adopt the proposed recommendations, Vancouver would be one of the first Canadian municipalities to adopt an accessibility policy that mandates an accessible path of travel for townhouses and rowhouses. The proposed amendments to the Zoning and Development By-law and VBBL recommended for approval are intended to be a starting point in increasing the stock of low-density housing that is accessible. Staff will monitor development and building applications for new low-density housing meeting visitability/adaptability requirements. Monitoring of the number of visitable low-density units achieved, along with any further policy improvements will be coordinated with the development of a potential city-wide Accessibility Strategy, which will focus on accessibility initiatives for housing, transportation, public realm and park board lands.

* * * * *

**A By-law to amend
Zoning and Development By-law No. 3575
regarding Accessible Paths of Travel and Floor Area Exclusions
for Adaptable Housing Requirements**

Note: A By-law will be prepared generally in accordance with the provisions listed below, subject to change and refinement prior to posting.

THE COUNCIL OF THE CITY OF VANCOUVER, in public meeting, enacts as follows:

1. This by-law amends the indicated provisions of By-law No. 3575.
2. In Section 3.2 "**Relaxation**", Council strikes out 3.2.1(g) and substitutes it with the following:

“(g) despite anything to the contrary in this By-law, if:

- (i) the construction or alteration of, or addition to, a one-family dwelling, two-family dwelling, one-family dwelling with secondary suite, two-family dwelling with secondary suite, laneway house, freehold rowhouse, or dwelling unit in a multiple dwelling that is in a townhouse or stacked townhouse form, is to include enhanced accessibility to and from the dwelling, by way of ramps, lifts, or other like means, for persons who find conventional accesses impossible or difficult because they have a loss or reduction of functional ability or activity, and
- (ii) the Director of Planning first considers all applicable guidelines and policies adopted by Council,”

3. In Section 10 "**General Regulations**", Council adds new sections 10.42 and 10.43 as follows:

“10.42 Accessible Path of Travel for Freehold Rowhouses and Multiple Dwellings that are in a Townhouse or Stacked Townhouse Form

- 10.42.1 A minimum of 20% of all dwelling units on sites with a frontage greater than 27.4 m that are comprised only of freehold rowhouses, or multiple dwellings that are in a townhouse or stacked townhouse form, in any district, including a CD-1 (Comprehensive Development) District, must include an accessible path of travel from the street to an entrance.
- 10.42.2 The Director of Planning may relax the minimum requirement set out in section 10.42.1, or the requirements in the appropriate district schedule regarding height to the extent necessary to allow the minimum requirement to be met, or both, where, due to conditions peculiar to the site or to the proposed development, or special circumstances related to the use of the site, literal enforcement would result in unnecessary hardship, provided that the Director first considers all applicable guidelines and policies adopted by Council.

10.43 Floor Area Exclusions for Adaptable Housing Requirements in One-Family and Two-Family Dwellings

For one-family dwellings with or without a secondary suite, or two-family dwellings with or without a secondary suite, on sites with a frontage of 10.06 m or less, computation of floor space ratio must exclude 0.5% of the total permitted floor area to offset the floor area used to meet the adaptable housing requirements set out in the Vancouver Building By-law.”

4. In Section 11.24 “**Laneway House**”, Council adds a new section 11.24.28 as follows:

“11.24.28 On sites with a frontage of 15.3 m or more, laneway houses with at least 40 m² of habitable floor area on the ground floor must provide an accessible path of travel from either the street or an on-site parking space to an entrance, except that the Director of Planning may relax this requirement where, due to conditions peculiar to the site or to the proposed development, or special circumstances related to the use of the site, literal enforcement would result in unnecessary hardship, provided that the Director first considers all applicable guidelines and policies adopted by Council.”

**A By-law to amend
Building By-law No. 10908
Regarding Adaptable Housing Requirements**

Note: A By-law will be prepared generally in accordance with the provisions listed below, subject to change and refinement prior to posting.

THE COUNCIL OF THE CITY OF VANCOUVER, in public meeting, enacts as follows:

1. This by-law amends the indicated provisions of the Building By-law.
2. In Article 3.8.2.27., Council:
 - a) strikes out the title “**Apartment and Condominium Buildings**” and substitutes “**Apartment and Condominium Buildings, Townhouses, and 1 and 2 Family Dwellings**”;
 - b) strikes out Sentence (1) and substitutes the following:

“**1**) Apartment and condominium buildings need not comply with Sentence 3.8.2.3.(1), except that access shall be provided

 - a) from the street to the main entrance conforming to Article 3.8.3.5. and the elevator lobby without the use of a mechanical lift, unless provided with acceptable protection from inclement weather,
 - b) from a private parking area to an entrance conforming to Article 3.8.3.5. and the elevator lobby without the use of a mechanical lift, unless provided with acceptable protection from inclement weather,
 - c) where an elevator is provided, from the main entrance in Clause (a), or from the entrance in Clause (b), to an elevator conforming to Sentence 3.5.2.1.(3), and
 - d) to *dwelling units* by means of an elevator and a *public corridor* in a *building* of 4 *storeys* or greater where access is not provided to those *dwelling units* at the adjacent ground level.”;
 - c) strikes out Sentence (4) and substitutes the following:

“**4**) Despite the provisions of Sentence (1), a building which contains three or more dwelling units served by an elevator and a public corridor or exterior passageway, shall be equipped with the following (see Appendix A.)

 - a) interior and exterior stairs and ramps that are accessible to the public, with a colour contrast or distinctive pattern, visible from both directions of travel, demarcating the leading edge of treads, and
 - b) door opening hardware within dwelling units and common amenity areas which may be operated
 - i) without tight grasping or twisting of the wrist, and
 - ii) by application, of a force of not more than 38 N for exterior doors or 22 N for interior doors, at the handle, push plate or latch-releasing device, except where the Chief Building Official determines that a greater force is necessary to ensure proper building function,

- c) kitchen sinks and washbasins within dwelling units and common amenity spaces with faucets activated by levers or by devices that do not require tight grasping or twisting of the wrist,
- d) wall assemblies reinforced adjacent to the toilet and bathtub to accommodate the future installation of grab bars.”; and

d) strikes out Sentence (6) and substitutes the following:

“**6)** A townhouse and *1 or 2 family dwelling* shall be provided with a path of travel in accordance with Article 3.8.3.2.(2).”.

3. Council strikes out Article 3.8.3.2. and substitutes the following:

“3.8.3.2. Paths of Travel

- 1)** Walks to at least one main entrance and all ancillary areas that are required to be accessible shall
 - a) be provided by means of a continuous plane not interrupted by steps or abrupt changes in level,
 - b) have a permanent, firm and slip-resistant surface,
 - c) have an uninterrupted width of not less than 1 500 mm, and a gradient not more than 1 in 20,
 - d) have a curb not less than 75 mm high where, in the absence of walls, railings, or other barriers on either or both sides of the walk, the vertical drop from the walk is more than 75 mm,
 - e) not have gratings with openings that will permit the passage of a sphere more than 13 mm in diameter and have all elongated openings oriented approximately perpendicular to the direction of travel,
 - f) where the path of travel is level and even with adjacent walking surfaces, have a texture, not less than 1 500 mm in width, that differs from the texture of the surrounding walking surfaces,
 - g) be free from obstructions for the full width of the walk to a height of not less than 1 980 mm, except that handrails are permitted to project not more than 100 mm from either or both sides into the clear area, and
 - h) be designed as a ramp where the gradient of the walk is more than 1 in 20.

- 2)** Path of travel from the street or where feasible from the lane in conformance with Sentence (1) will be provided to entrance doors of:
 - a) dwelling units in townhouses with frontage more than 27.5 m,
 - b) dwelling units in townhouses combined with apartment buildings, and
 - c) laneway houses on sites with frontage more than 15.2 m.”

4. Council strikes out Articles 3.8.5.1. and 3.8.5.2. and replaces them with the following:

“3.8.5.1. Application

- 1)** Except as permitted by Sentence (2), this Subsection applies to the design and *construction* of
 - a) *one and two-family dwellings*, with or without *secondary suites* as per Table 3.8.5.1.A,

- b) *laneway houses* with a total floor area of accessible level more than 40 m² as per Table 3.8.5.1.B,
c) *row housing*, townhouses and stacked townhouses as per Table 3.8.5.1.C, Table 3.8.5.1.D, and Table 3.8.5.1.E, and
d) multi-family residential *buildings* except as otherwise permitted by tables 3.8.5.1.C through 3.8.5.1.E.

Table 3.8.5.1.A
Adaptability Requirements for 1 & 2 Family Dwellings,
with or without Secondary Suites
Forming part of Sentence 3.8.5.1.(1)

Articles	1 & 2 Family Dwellings
3.8.5.2	Applicable ¹
3.8.5.3	Applicable
3.8.5.4	Applicable ²
3.8.5.5	Applicable
3.8.5.6	Applicable
3.8.5.7	Applicable
3.8.5.8	Applicable

⁽¹⁾ Accessible exterior path of travel as per Sentence 3.8.3.2.(2)

⁽²⁾ A bathtub or shower as per T-3.8.5.6. is not required in dwelling units with a total floor area of accessible level greater than 40m².

Table 3.8.5.1.B
Laneway Houses
Forming part of Sentence 3.8.5.1.(1)

Articles	On sites with frontage less than 15.2 m		On sites with frontage 15.2 m or greater	
	1 Storey	2 Storeys	1 Storey	2 Storeys
3.8.5.2	Applicable ⁽¹⁾	Applicable ⁽¹⁾	Applicable	Applicable
3.8.5.3	Applicable	Applicable, ground floor only ⁽²⁾	Applicable	Applicable, ground floor only ⁽²⁾
3.8.5.4	Applicable ⁽³⁾	Applicable ⁽³⁾	Applicable	Applicable
3.8.5.5	Applicable ⁽⁴⁾	Applicable ⁽⁵⁾	Applicable ⁽⁴⁾	Applicable ⁽⁵⁾
3.8.5.6	Not applicable	Applicable	Not applicable	Applicable
3.8.5.7	Applicable	Applicable	Applicable	Applicable, ground floor only
3.8.5.8	Applicable	Applicable	Applicable	Applicable

⁽¹⁾ Accessible exterior path of travel as per Sentence 3.8.3.2.(2) is not applicable.

⁽²⁾ Minimum width of stair as per Sentence 3.8.5.3.(5) is not applicable.

⁽³⁾ Minimum clear space in front of the sink and stove as per Sentence 3.8.5.4.(3) is not applicable.

⁽⁴⁾ Notwithstanding the requirements of 3.8.5.6., a washbasin, toilet, and bathtub or shower shall be provided.

⁽⁵⁾ Notwithstanding the requirements of 3.8.5.6., a bathtub or shower as per T-3.8.5.6. is not required in dwelling units with a total floor area great than 50 m².

Table 3.8.5.1.C
Adaptability Requirements for Townhouses
with Frontage Less than 27.5 m

Forming part of Sentence 3.8.5.1.(1)

Articles	Main floor 1.5 m or more above adjacent ground level	Main floor less than 1.5 m above adjacent ground level and visitable ground floor
3.8.5.2	Not applicable	Applicable ⁽¹⁾
3.8.5.3	Not applicable	Applicable, ground floor only ⁽²⁾
3.8.5.4	Applicable ⁽³⁾	Applicable ⁽³⁾
3.8.5.5	Not applicable	Applicable ⁽⁴⁾
3.8.5.6	Not applicable	Applicable ⁽⁴⁾
3.8.5.7	Applicable	Applicable
3.8.5.8	Not applicable	Applicable, ground floor only

⁽¹⁾ Accessible exterior path of travel as per Sentence 3.8.3.2.(2) is not applicable.

⁽²⁾ Minimum width of stair as per Sentence 3.8.5.3.(5) is not applicable.

⁽³⁾ Minimum clear space in front of the sink and stove as per Sentence 3.8.5.4.(3) is not applicable.

⁽⁴⁾ Notwithstanding the requirements of 3.8.5.6., a bathtub or shower as per T-3.8.5.6. is not required in dwelling units with a total floor area great than 50 m².

Table 3.8.5.1.D
Adaptability Requirements for Townhouses
with Frontage of 27.5 m or Greater

Forming part of Sentence 3.8.5.1.(1)

Articles	Visitable and adaptable units (as per development permit)		Standard units	
	Visitable/adaptable one-storey garden flats	Multi-level with visitable ground floor	Main floor more than 1.5 m above adjacent ground level	Main floor less than 1.5 m above adjacent ground level and visitable ground floor
3.8.5.2	Applicable	Applicable	Not applicable	Applicable ⁽¹⁾
3.8.5.3	Applicable	Applicable ⁽²⁾	Not applicable	Applicable ⁽²⁾
3.8.5.4	Applicable	Applicable, ground floor only ⁽³⁾	Applicable, ground floor only ⁽³⁾	Applicable, ground floor only ⁽³⁾
3.8.5.5	Applicable ⁽⁴⁾	Applicable ⁽⁵⁾	Not applicable	Applicable ⁽⁵⁾
3.8.5.6	Applicable ⁽⁴⁾	Applicable ⁽⁵⁾	Not applicable	Applicable ⁽⁵⁾
3.8.5.7	Applicable	Applicable	Applicable	Applicable
3.8.5.8	Applicable	Applicable, ground floor only	Not applicable	Applicable, ground floor only

⁽¹⁾ Accessible exterior path of travel as per Sentence 3.8.3.2.(2) is not applicable.

⁽²⁾ Minimum width of stair as per Sentence 3.8.5.3.(5) is not applicable.

- ⁽³⁾ Minimum clear space in front of the sink and stove as per Sentence 3.8.5.4.(3) is not applicable.
⁽⁴⁾ Notwithstanding the requirements of 3.8.5.6., a washbasin, toilet, and bathtub or shower shall be provided.
⁽⁵⁾ Notwithstanding the requirements of 3.8.5.6., a bathtub or shower as per T-3.8.5.6. is not required in dwelling units with a total floor area great than 50 m².

Table 3.8.5.1.E
Adaptability Requirements for Townhouses Combined with Apartment Buildings
for Visitable and Adaptable Units
 Forming part of Sentence 3.8.5.1.(1)

Articles	Visitable and adaptable units (as per development permit)
3.8.5.2	Applicable
3.8.5.3	Applicable
3.8.5.4	Applicable, ground floor only ⁽¹⁾
3.8.5.5	Applicable
3.8.5.6	As per Table 3.8.5.6
3.8.5.7	Applicable
3.8.5.8	Applicable

⁽¹⁾ Minimum clear space in front of the sink and stove as per Sentence 3.8.5.4.(3) is not applicable.

2) This Subsection does not apply to single room accommodation.

3) This Subsection does not apply to existing buildings except for spaces created by

- an addition,
- the reconstruction of an existing space, and
- the conversion of an existing space into a secondary suite or lock-off unit.

3.8.5.2. Entrance Doors to Dwelling Units

1) All dwelling units shall have at least one entrance door with a clear width not less than 865 mm wide, equipped with

- two peepholes, one located at 1067 mm above the floor and the other located at 1524 mm above the floor, or a glass sidelight or intercom security type system (see Appendix A),
- a beveled threshold not more than 13 mm above the floor level, except for entrance doors serving balconies and basements, and
- door opening hardware that does not require a tight grasp or twisting action of the wrist, and can be opened with a force of not more than 38 N.

2) *Dwelling units* with an accessible exterior path of travel from the street, or lane where acceptable to the *Chief Building Official*, shall provide a no-step entrance into the unit.”

5. Council strikes out Article 3.8.5.4. and substitutes the following:

“3.8.5.4. Kitchens in Dwelling Units

- 1) Kitchen sinks in dwelling units, shall use lever-type faucets or hardware that does not require a tight grasp or twisting action of the wrist.
- 2) All waste pipes running from under-sink “P” traps to drain stacks shall be offset and installed no higher than 305 mm above the finished floor.
- 3) Except as permitted by Article 3.8.5.1., kitchens shall have a minimum clear floor space 750 mm by 1200 mm of in front of the sink and stove.”

6. Council strikes out Article 3.8.5.7. and substitutes the following:

“3.8.5.7. Outlets, Switches and Controls

- 1) **Regularly used** electrical, telephone, cable and data outlets in a *dwelling unit* shall be located between 450 mm and 1 200 mm above the finished floor, except where, in the opinion of the *Chief Building Official*, a different height is necessary to accommodate appliances or equipment.
- 2) Controls for the operation of building services or safety devices, electrical switches, thermostats and intercoms in a *dwelling unit* shall be located no more than 1 200 mm above the finished floor, except where, in the opinion of the *Chief Building Official*, a different height is necessary for safety reasons.”

Accessible/Visitable Housing – International Best Practices

USA

Basic accessibility/adaptability features are mandated for multi-level apartment buildings with elevators and shared corridors, while low-density housing forms are generally exempt from these requirements. Jurisdictions that mandate visitability or adaptability requirements for one-family dwellings are typically able to apply these requirements only for developments that receive government subsidies. In the very few municipalities where mandatory visitability requirements are applied more broadly, typical one-family and two-family house designs either do not have a basement due to substantial additional cost, and in some cases soil and rock conditions, (e.g. bungalows in Arizona/Texas/southern California) or have a non-livable basement used as storage space or inadequate living space with insufficient, or in some cases, no natural light (e.g. Bolingbrook, Illinois). A bungalow without a basement is more amenable to visitability requirements, including an accessible path of travel, than the typical one-family and two-family new-builds in Vancouver. Vancouver's regulations and guidelines for one-family and two-family dwellings incentivize/encourage the inclusion of livable basements (which often contain secondary suites) and laneway houses. This typical housing design requires stairs down to the basement suite and up to the main level, making the provision of an accessible path of travel challenging.

England, Northern Ireland and Wales

In England, Northern Ireland and Wales, "The Building Regulations 2010 – Access to and Use of Buildings (Approved Document M)" provides authority for accessible housing. This document contains the following three categories/levels of accessibility for new dwellings:

1. Requirement M4(1): Category 1 – Visitable dwellings: Reasonable provision should be made for most people, including wheelchair users, to:
 - a. approach and enter the dwelling; and
 - b. to access habitable rooms and washroom facilities on the entrance level.The approach route should be:
 - Safe and convenient for everyone, including older and disabled people and some wheelchair users. It should adopt the shallowest gradient that can reasonably be achieved and be step-free where possible.
 - Level, gently sloping, or, where necessary, ramped. On steeply sloping plots, a stepped approach can be used.
 - Normally the above provisions will apply to the principal private entrance, but where this is not possible, access to a suitable alternative entrance would be reasonable.
2. Optional Requirement M4(2): Category 2 – Accessible and adaptable dwellings:
 - (1) Reasonable provision must be made for most people, including wheelchair users, to:
 - a. approach and enter the dwelling; and
 - b. to access habitable rooms and washroom facilities, irrespective of which level these facilities are located on.
 - (2) The provision made must be sufficient to:

- a. meet the needs of occupants with differing needs, including some older or disabled people, including some wheelchair users; and
- b. to incorporate features allowing adaptation of the dwelling to meet the changing needs of occupants over time.

The approach route should be:

- safe and convenient, adopt the shallowest gradient that can reasonably be achieved and be step-free, irrespective of the storey on which the dwelling is located.
- Where it is not reasonable to achieve a step-free approach route to the principal entrance, a step-free approach route should be provided to a suitable alternative entrance;
- Level, gently sloping or, where necessary, ramped.

3. Optional Requirement M4(3): Category 3 – Wheelchair user dwellings:

(1) Reasonable provision must be made for people to:

- a. approach and enter the dwelling; and
- b. to access habitable rooms and washroom facilities.

(2) The provision must be sufficient to:

- a. allow simple adaptation of the dwelling to meet the needs of occupants who use wheelchairs; or
- b. meet the needs of occupants who use wheelchairs.

This requirement is divided into two categories: “wheelchair accessible” (home readily useable by a wheelchair user at the point of completion) and “wheelchair adaptable” (home that can be easily adapted to meet the needs of a household including wheelchair users). In London, local plan policies for wheelchair accessible homes are applied only to new dwellings where the local authority is responsible for allocating or nominating a person to live in that dwelling (typically social housing and affordable rental units). Market units can only be required to meet the standards for wheelchair adaptable homes.

As Requirements M4(2) and M4(3) are optional, they apply only where a condition that one or more dwellings should meet the relevant optional requirement is imposed on new development as part of the process of granting planning permission. Where no condition is imposed, dwellings only need to meet requirements in category M4(1).

Category M4(1) of the Building Regulations 2010 document tends to be subjective because of the use of the terms “reasonable” and “should”. This leads to variable and inconsistent interpretation, application and enforcement among the many local authorities and building control officers resulting in a large range of “design solutions” in response to the regulation and inconsistency in the provision of an accessible path of travel.

Research also found that in 2015 in the boroughs of London proper, less than 12% of residential new builds consisted of low-density housing, and of this less than 7% included detached and semi-detached homes⁷. Outside of London, the percentage of low density residential new builds was closer to 30%. However, historically, very few detached houses have basements and basements are not routinely constructed in new-builds. This makes the provision of an accessible path of travel less challenging on sites where topography permits.

⁷ <https://www.statslife.org.uk/economics-and-business/2360-too-many-flats-not-enough-houses-the-geography-of-london-s-new-housing>

Scotland

The requirement for unassisted means of access to non-residential buildings has been present in Scotland's Building Standards System for over 30 years and was expanded to include dwellings in 1999. The Building Standards System incorporates a performance-based approach with high-level mandatory building standards and guidance is provided in a Technical Handbook which provides alternative methods of compliance. Accessible routes to dwelling units are regulated as follows:

Section 4.1.3 Accessible Routes

There should be an accessible route to the accessible entrance of a single dwelling from: a road, and any car parking within the curtilage of the dwelling. Gradient of accessible route – as steeper gradients are more difficult to negotiate, level or gently sloping routes should be used where possible, in preference to ramps. An accessible route should be:

- level (with gradient of not more than 1 in 50; or
- gently sloping (with a gradient of more than 1 in 50 and not more than 1 in 20; or
- ramped, with a gradient of more than 1 in 20 and not more than 1 in 12.

There may be stepped access to a route serving a single house where it is not reasonably practicable to construct an accessible route, such as on a steeply sloping site.

Scotland's Building Standards are enforced by thirty-two local regulating authorities, resulting in inconsistent and subjective interpretation and application.

Finally, very few dwellings in Scotland have historically had any form of basement and basements are not routinely constructed in new-builds.

Norway/Sweden/Denmark/Australia

Norway, Sweden, Denmark and Australia have some mandatory visitability regulations which generally apply to multi-family apartment buildings and have inconsistent compliance.

Accessible Path of Travel Policy Review - Proposed Policy Recommendations

Townhouses/Rowhouses and Stacked Townhouses (not in combination with an apartment building)

A. On Sites with a Frontage of 27.4 m (90 ft.) or greater:

- (i) Require a minimum of 20% of all dwelling units to provide an accessible path of travel from the street to an exterior door. Allow for relaxation provisions for minimum unit requirement or maximum height, or both, in cases resulting in unnecessary hardship due to specific site conditions.

Dwelling units included within the 20% minimum would be required to meet the following:

- For one-storey garden units, Vancouver Building By-law (VBBL) adaptability requirements, plus:
 - accessible path of travel from street to an entrance;
 - no-step entry at accessible entrance; and
 - suitable kitchen wheelchair-turning radius.
- For multi-level units, VBBL adaptability requirements applicable on the ground level only, including a two-piece washroom (toilet + sink) with wheelchair turning radius, regardless of unit size, plus:
 - accessible path of travel from street to an entrance; and
 - no-step entry at accessible entrance.

Note: most VBBL adaptability requirements waived on upper levels (with the exception of height requirements for outlets, switches and controls, kitchen hardware not requiring a tight grasp and backing in tub walls).

AND

Permit the Director of Planning to relax the minimum 20% visitable unit requirement, or the height requirement in the appropriate district schedule to the extent necessary to allow the minimum requirement to be met, or both, where due to conditions peculiar to the site or to the proposed development, compliance would result in unnecessary hardship.

- (ii) Remaining 80% of dwelling units without a mandated accessible path of travel would be required to meet the following:

- For units \leq 5 ft. above grade, VBBL adaptability requirements applicable on the ground level only, including a two-piece washroom (toilet + sink) with wheelchair - turning radius on ground floor, regardless of unit size.

Note: most VBBL adaptability requirements waived on upper levels (with the exception of height requirements for outlets, switches and controls, kitchen hardware not requiring a tight grasp and backing in tub walls).

- For units > 5 ft. above grade, most VBBL adaptability requirements waived (with the exception of height requirements for outlets, switches and controls, kitchen hardware not requiring a tight grasp and backing in tub walls).

B. On Sites with Frontage of less than 27.4 m (90 ft.):

All dwelling units would be required to meet the following:

- For units ≤ 5 ft. above grade, VBBL adaptability requirements applicable on the ground level only, including a two-piece washroom (toilet + sink) with wheelchair-turning radius on ground floor, regardless of unit size.

Note: most VBBL adaptability requirements waived on upper levels (with the exception of height requirements for outlets, switches and controls, kitchen hardware not requiring a tight grasp and backing in tub walls).

- For units > 5 ft. above grade, most VBBL adaptability requirements waived (with the exception of height requirements for outlets, switches and controls, kitchen hardware not requiring a tight grasp and backing in tub walls).

C. Relaxations and Guideline changes to enable Voluntary Accessibility Provisions:

- In Section 3.2.1(g) of the Zoning and Development By-law, include townhouse/rowhouse and stacked townhouse developments (not in combination with an apartment building) in order to enable the voluntary provision of ramps, lifts, at-grade entries or other possible means to access individual units.
- Add townhouse/rowhouse and stacked townhouse developments to the “Enhanced Accessibility Guidelines”.

Rationale for Policy Recommendations: The proposed policy recommendations are intended to achieve visitability in a minimum of 20% of units within townhouse/rowhouse developments on sites with a frontage of 27.4 m (90 ft.) or greater, and enable other units which are less suitable for adaptability to regain usable living space. The minimum 27.4 m (90 ft.) site frontage, consisting of a three-lot assembly of 33 ft. lots (minus a small buffer), is recommended as the trigger point for the 20% visitable unit requirement to ensure that the feasibility and affordability of townhouse/rowhouse developments on smaller sites is not compromised. A waiver for most of the VBBL adaptability requirements on the upper levels is also recommended of those units where the provision of an accessible path of travel is not practical. This is proposed in order to improve livability by regaining living space used to meet 2014 VBBL adaptability requirements.

An architectural consultant was retained to test the feasibility of providing an accessible path of travel from the street to a minimum of 20% of units in townhouse/rowhouse and stacked townhouse developments on sites with a frontage of 27.4 m (90 ft.) or greater. The study concluded that this requirement could reasonably be achieved on level lots in all district schedules where townhouse and rowhouse units are permitted. It may be more difficult to achieve the minimum 20% visitable requirement on steeply sloped sites however, so the required percentage of units or the maximum height permitted in the relevant district schedule, or both, may need to be relaxed.

Staff note that the required accessible path of travel does not extend to underground parking as this would necessitate the provision of an elevator to the courtyard level. The prohibitive cost of such an elevator would have a negative impact on the feasibility and affordability of the townhouse/rowhouse development.

A 2015 Canada Mortgage and Housing Corporation study on costs of accessible housing in several urban centres including Vancouver (<https://www.cmhc-schl.gc.ca/en/inpr/bude/acho/upload/cost-of-accessibility-en.pdf>) demonstrates that the cost of incorporating a range of accessibility features into most housing units is minimal. An internal financial analysis by City of Vancouver staff of the minimum 20% visitable unit requirement also found that there would be minimal financial impacts to developers/builders. The cost implications are summarized in the table below:

Townhouse Accessibility Requirements Cost Analysis

Type of Dwelling Unit	Non-Stacked 3-Level Townhouse/Rowhouse Development
Visitable Unit with: -no-step entry for accessible path of travel -reduce washroom from 3-piece to 2-piece on ground-level ¹ - most VBBL requirements waived on upper level ³	\$590 savings/unit
Standard Unit with: -most VBBL requirements waived on upper levels ³	\$990 savings/unit
	Stacked Townhouse Development
Visitable Unit with: -no-step entry for accessible path of travel -suitable kitchen wheelchair-turning radius	\$750 cost/unit
Standard Unit with: -standard front door entry - most VBBL requirements waived on upper levels ³	\$990 savings/unit

¹ 2-piece washroom – sink, toilet and no threshold for wheelchair access

² 3-piece washroom – sink, toilet, shower (could be roughed in) and no threshold for wheelchair access

³ With the exception of height requirements for outlets, switches & controls, kitchen hardware not requiring a tight grasp and backing in tub walls.

Townhouses combined with an Apartment Building

VBBL enhanced accessibility requirements, including an accessible path of travel from the street, are triggered when a multi-family apartment building contains both an elevator and a

common corridor. New townhouse/rowhouse units combined with a multi-family apartment building are subject to the same VBBL enhanced accessibility requirements so each unit should also have an exterior accessible path of travel along with a visitable/adaptable interior. Currently certain design guideline directions recommending a raised porch do not align with the VBBL accessible path of travel requirements. Staff are proposing to review and update relevant design guidelines in order to align these with VBBL requirements.

Rationale for Policy Recommendation: Townhouses combined with an apartment building provide ground-oriented visitable/accessible units in amenity rich transit-oriented areas like Cambie Corridor and Downtown South. This type of housing provides an adaptable and visitable/accessible housing option for those with greater mobility needs. Updates to relevant design guidelines are proposed in order to align various city requirements to continue deliver of this type of housing.

One- and Two-Family Dwellings with or without Secondary Suites

A. Continue to support voluntary measures to achieve visitability/accessibility

Implementation of the City's Housing Vancouver Strategy will increase the number of higher-density ground-oriented housing options in existing single-family neighbourhoods. These anticipated changes will result in fewer one and two-family homes in the future. In order to maintain incentives for the provision of livable and affordable rental basement units within this stock of housing, an accessible path of travel will not be mandated for new one- and two-family dwellings. However, policies will continue to support applicants to incorporate ramps, lifts, at-grade entries or other enhanced accessibility features for new or existing one- and two-family dwellings, with or without secondary suites, on a voluntary basis (Section 3.2.1(g) of the Zoning and Development By-law). This provision permits the Director of Planning to relax regulations for yards, setbacks, site coverage, permeability, building depth and side door entrance to accommodate enhanced accessibility features.

Rationale for Policy Recommendation: Livable basement suites in one- and two-family dwellings are encouraged in the Zoning and Development By-law as they increase the number of more affordable rental housing options in low-density neighbourhoods. These basements are enabled through above-grade floor space ratio limits in RS District Schedules that push floor space into the basement and limit the size of the home. As limits on the depth of floor space in Section 10.15 of the by-law typically raise the elevation of the main floor 3 ft. to 4 ft. above grade, stairs to the raised main floor and the lowered basement rental suite impede the provision of an accessible path of travel.

Regulating an accessible path of travel is also challenging in new one- and two-family homes because of site constraints such as retaining walls, trees and grade changes, and competing demands on side yards including fire access to the rear laneway house, as well as access to a secondary suite, parking and/or the backyard.

The provision of ramps or lifts enabling an accessible path of travel to one and two family homes will not be mandated but will continue to be permitted and supported through Section 3.2.1(g) of the Zoning and Development By-law. Applicants are able to request a relaxation for

yards, setbacks, site coverage and building depth under this section to enable the construction of a ramp, mechanical lift or other enhanced accessibility feature.

B. Provide a floor area exclusion to offset floor area used to meet adaptability requirements

Provide a floor space ratio exclusion of 0.5% for one-family dwellings and two-family dwellings, with or without a secondary suite, on sites with a frontage of 10.06 m (33 ft.) or less to regain the amount of usable space available prior to the introduction of the adaptability provisions in the 2014 VBBL.

Rationale for Policy Recommendation: On December 12, 2017, Council passed a Motion regarding preserving livable/usable space in one and two-family dwellings. The Motion recognizes that the city of Vancouver is committed to ensuring accessibility for its aging population and persons with disabilities. However, the development/building community is concerned that the usable dimensions of some rooms in one and two-family dwellings on small lots (ie. on sites with frontage of 10.06 m (33 ft.) or less), are negatively impacted due to having to meet the 2014 VBBL adaptability requirements. To address this concern while ensuring that adaptability provisions are met, staff recommend that a floor area exclusion of 0.5% be provided for new one- and two-family homes to offset the floor area used in meeting the 2014 VBBL adaptability requirements. Applying this percentage in the computation of floor space ratio will improve the livability of units by regaining this lost usable floor area.

C. Improve the Enhanced Accessibility Guidelines

Update the "Enhanced Accessibility Guidelines" to clarify approaches to accommodate enhanced accessibility features for two-family dwellings.

Laneway Houses

A. On sites with a frontage of 15.3 m (50 ft.) or greater, laneway houses with at least 40 sq. m of habitable floor area on the ground floor

Each laneway house would be required to meet the following:

- For one-storey unit, VBBL adaptability requirements, plus:
 - An accessible path of travel from an on-site parking space and the street, where feasible, to an entrance;
 - No-step entry at accessible entrance;
 - Suitable kitchen wheelchair-turning radius; and
 - Suitable internal visiting/circulation space (interior path of travel to exterior door, washroom and within living/visiting area).
- For 1.5-storey unit, VBBL adaptability requirements applicable on the ground level only, including a two-piece washroom (toilet + sink) with wheelchair-turning radius, plus:
 - An accessible path of travel from an on-site parking space and the street, where feasible, to an entrance; and
 - No-step entry at accessible entrance.

Note: most VBBL adaptability requirements waived on upper level (with the exception of height requirements for outlets, switches and controls, kitchen hardware not requiring a tight grasp and backing in tub wall).

AND

Permit the Director of Planning to relax the requirement for an accessible path of travel in cases where due to conditions peculiar to the site or to the proposed development, compliance would result in unnecessary hardship.

Rationale for Policy Recommendation: Although one-storey laneway houses are incentivized through relaxed setbacks and expedited processing, over 90% of the city's laneway houses are 1.5 storey units. All laneway houses are designed to maximize livable space within a small footprint resulting in limited living space. However, 1.5-storey units in particular have limited headroom on the upper level and internal stairs with one or more turns and a sloped ceiling. Required side and rear yard setbacks maximize backyard space and provide a landscape buffer from adjacent neighbours and the lane. In light of the constrained floor area and tight setbacks, meeting the VBBL adaptability requirements in 1.5-storey laneway homes has been very challenging and has compromised the livability of the interior living space.

After testing the feasibility of providing an accessible path of travel to one-storey and 1.5-storey laneway homes, staff have concluded that on sites with a frontage of 15.3 m (50 ft.) or greater, an accessible path of travel can be provided from an on-site parking space to an entrance for both a one-storey laneway house and a 1.5-storey laneway house. The accessible path could be provided without impacting existing regulations for back yard and side yard setbacks thereby ensuring that there is no impact on the proposed floor space or livability of the unit.

The requirement to provide a washroom on the ground-level of the laneway house is tied directly to the floor area of the accessible level. The VBBL requires that a two-piece bathroom be provided only if the ground-level floor area of the unit is at least 40 sq. m. For this reason, staff also recommend that an accessible path of travel be mandated for laneway houses on sites with a frontage of 15.3 m (50 ft.) or greater only when the unit has at least 40 sq. m of habitable floor area on the ground floor. This would align the accessible path of travel requirement with the two-piece bathroom requirement thus enabling these units to be visitable/accessible.

Finally, it is recommended that to further improve the livability of new 1.5-storey laneway houses, the VBBL requirements be waived on the upper level (with the exception of requirements for outlets, switches and controls and kitchen hardware) to increase usable living space.

B. On sites with a frontage less than 15.3 m (50 ft.)

Each laneway house would be required to meet the following:

- For one-storey unit, all VBBL adaptability requirements; and

- For 1.5-storey unit with at least 40 sq. m of habitable floor area on the ground floor, VBBL adaptability requirements applicable on the ground level only, including a two-piece washroom (toilet + sink) with wheelchair-turning radius.
Note: most VBBL adaptability requirements waived on the upper level (with the exception of height requirements for outlets, switches and controls, kitchen hardware not requiring a tight grasp and backing in tub wall).

Rationale: Staff have confirmed that it would not be possible to accommodate an accessible path of travel to laneway homes on sites with a frontage of less than 15.3 m (50 ft.) and still meet the yard setbacks and other requirements imposed in the Zoning and Development By-law and the VBBL. An accessible path of travel would impact the ability to meet the permitted floor area, as dictated by required setbacks, and negatively impact the unit's livability. Although an accessible path of travel is not feasible on sites of this size, the interior VBBL adaptability requirements for the one-storey laneway house and for the ground-floor of the 1.5 storey laneway house would make it possible to assist a disabled person through the widened entrance door into and out of the unit thereby enabling the individual to visit on the ground floor. However, to improve the livability of new 1.5 storey laneway houses, it is recommended that most VBBL requirements be waived on the upper level to increase the usable living space of the unit. Increasing the usable living space for these units would improve the livability of this ground-oriented rental housing option across the city.

C. Add one-storey laneway house and 1.5 storey laneway house to the “Enhanced Accessibility Guidelines”.

Multi-Family (Apartment) Buildings with a Common Corridor

- A. Require an elevator in all new multi-family (apartment) buildings with four or more storeys and a common corridor; and
- B. Require an accessible path of travel from the street to the elevator in the interior lobby.

Rationale: The VBBL requires new multi-family (apartment) buildings with six or more storeys, a common corridor and an elevator to have an accessible path of travel from the street to the call number panel (often located outside of the front entrance to the building). In some cases, a step or steps may exist between the call panel and the entrance of the building. Although outside of the scope of Council's 2013 directive, the VBBL is proposed to be amended to require an elevator in all new multi-family buildings of four or more storeys with a common corridor, as well as the extension of an accessible path of travel from the street to the elevator in the building's front lobby.

Multi-family apartment buildings are the largest and fastest-growing housing stock in the City of Vancouver and are the best suited to visitability and adaptability. The proposed amendments to the VBBL will ensure that virtually all new apartment buildings are entirely visitable.