VANIER NORTH, ION Modeling Report

Modeling 25 years of renewal and intensification in *neighbourhood fabric*

What if your neighbourhood became ***delightfully walkable*** *and* ***complete***? What if your neighbourhood could dramatically intensify while at the same time become greener, more socially dynamic, without any more cars on your streets, with safe walking paths, and more front porches, balconies and terraces?

What would that be like? What would it look like? ION modeling is a simulation that provides the answers to these questions.

And the future looks good!

Definitions:

Neighbourhood Fabric = areas with homes and streets, not including busy traffic corridors, mainstreets or transit hubs

Delightfully Walkable and Complete Community = a neighbourhood where it's *easy, safe and enjoyable* to walk to most daily destinations and to reliable and efficient public transit.

Infill Housing = new residential buildings in existing built up areas

Dedicated Entrances = individual entrances for each dwelling unit in a multi unit building

Rosaline J. Hill Architect Inc.
www.rjhill.ca
613-853-2822

Walkable Ottawa
info@walkableottawa.ca
www.walkableottawa.ca

ION Preliminary Projections for Your Neighbourhood

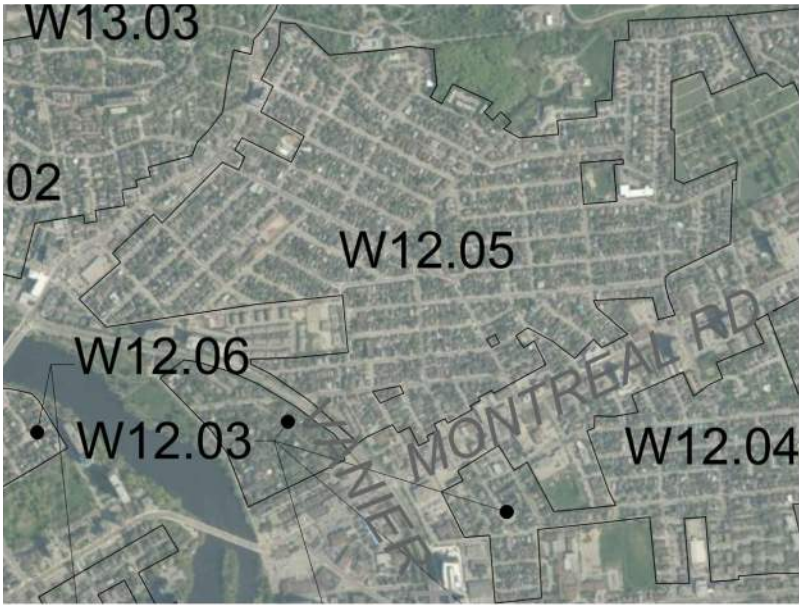
Your neighbourhood is well positioned to transition to become a *delightfully walkalbe and complete* community because of its proximity to the downtown core and the diversity of residents. Your neighbourhood would however require significant upgrades including sidewalks, street trees and parkettes.

If municipal regulations were changed as per the ION base model, in the next 25 years your neighbourhood fabric could house 1.6 times more people than are living there today. Buildings would be no taller than 3.5 storeys in height, with building widths, depths and front yards sized to visually fit in with the existing buildings. Most new infill buildings would each contain 6 to 8 dwelling units, some with dedicated entrances to each unit, and some with shared entrances and exits. New buildings would have front porches, patios, balconies, doors and windows to add interest and social dynamic to your street.

Most parking for new residents would be temporary or transitional, and phased out as your neighbourhood becomes delightfully walkable and complete. Roughly 75% of existing homes together with their driveways and parking will be unchanged. 25% of properties would be redeveloped.

At the same time your neighbourhood would necessarily transform into a *delightfully walkable and complete community*, because without this transition, the projected infill housing could not be profitably developed. This would include transitional (and then eventually permanent) sidewalks on one side of all streets, more street trees, bigger front lawns for trees in front of south facing buildings, more parks and more recreational facilities.

As a point of reference, after 25 years of intensification, your neighbourhood would not reach the population levels from 1950.



ION modeling uses mapped data that is sorted and numbered by ward and subset. These numbered areas contain similar development patterns for analysis. Vanier North is located in W12.05. (W12.03 is Kingsview Park)


Aging housing
Front yards often paved
Front porches without visual interest or people
Most homes for larger households
Streets unsafe to walk
Existing
Parking Lot for new residents
New walking path, plowed in the winter
New Street Trees
New homes multi-unit buildings
Short driveway
street parking for visitors one side only
10 Years
New homes in multi-unit buildings
75% of exist'g homes remain
Sidewalk (snow plowed)
Tree canopy
More porches & people
more gardens
Car triffic slowed and pavement shared w bikes
25 Years

VANIER NORTH, ION Modeling Report

Modeling 25 years of renewal and intensification in *neighbourhood fabric*

Unit sizes would decrease

The average size of new dwellings would meet market demand at 795sq.ft. (compared to national averages from 1950 and 2020)

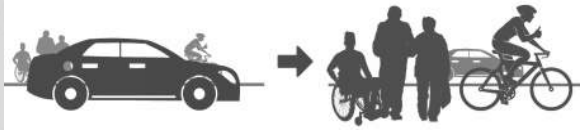
1950
1200sq.ft.
8 people

2020
2200sq.ft.
2.5 people

795sq.ft.
2.5 people

Active lifestyles would increase

Your neighbourhood would become *delightfully walkable and complete.* Almost 4000 residents could walk or bike and only need a car for occasional trips.



Some Infill would be like this…

- 3.5 Storey multi unit buildings sized to “fit in”
- No on-site parking, transitional parking nearby
- Small clusters of 2 or 3 stacked townhouses
- Rental ownership
- Dedicated entrances
- Shared front and rear yards
- front porches, patios, balconies, doors and windows to add interest and social dynamic to your street

Occasionally lots would be consolidated.

When neighbouring lots are combined for redevelopment, 3.5 storey **apartment buildings** would be constructed, with dwelling units on 4 floors, and shared entrances/exits and corridors. They would be designed with front courts, such that the visual massing of buildings and landscaping would complement the existing pattern along the street. All ground floor units would have porches, decks or patios.

Some Infill would be like this...

- 3.5 Storey multi unit buildings sized to “fit in”
- No on-site parking, transitional parking nearby
- Apartment style with shared entrances and exits
- Rental ownership
- Shared front and rear yards
- front porches, patios, balconies, doors and windows to add interest and social dynamic to your street

Rosaline J. Hill Architect Inc.
www.rjhill.ca
613-853-2822

Walkable Ottawa
info@walkableottawa.ca
www.walkableottawa.ca

VANIER NORTH, ION Modeling Report

Modeling 25 years of renewal and intensification in *neighbourhood fabric*

Emission would be reduced

If your neighbourhood becomes *delightfully walkable and complete*, residents may find they prefer walking or biking more often than not. That could save emissions equal to the emissions offset by a forest about 39 times the size of your neighbourhood.

Help turn-back-the-clock on rising housing costs

- Increase supply of homes to meet demand
- Lower land costs per dwelling (for multi units)
- Lower construction costs; wood frame multi unit buildings under 3.5 storeys are the most cost effective residential buildings to construct
- Maximize use of already serviced land
- Reduce size of new dwellings
- Reduce on-site parking (lower land costs per dwelling, increase housing supply)
- Save on construction, heating, cooling and maintenance costs with shared components: floors / walls / foundations / roofs
- Share amenity spaces and features
- Reduce lifestyle costs by reducing commuting times (lower childcare costs, more time at home)
- Reduce lifestyle costs by transitioning neighbourhoods to be fully walkable (fewer car payments, lower healthcare costs)
- Meet housing demand faster, with simple zoning and short approvals timelines
- Increase rental housing supply
- Increase diversity of housing supply
- Increase supply of housing suitable for older adults in neighbourhoods

Diversity and Social Dynamic on the Street

Today the housing in your neighbourhood fabric is mixed and aging with some redevelopment of new smaller units. Over 25 years your neighbourhood would maintain its diversity. Streets would become more visually engaging with more people spaces and more opportunities to appreciate your diversity; porches, terraces, patios. Aging buildings would be replaced with a mix of housing options. Infill housing would include small stacked townhouses and small apartment buildings, with a variety of bedroom counts. Some infill will be well suited to multi-gen households or aging adults. Half of new units would likely be small 3 bedroom units on two floors, each with a dedicated entrance. Others would be rental apartment units of varied sizes, with much more private outdoor space than is now common. All new units would be in multi unit buildings with a price point below recent infill.

Areas for tree roots and soft landscaping would remain

Infill housing would leave 45% of each development property's soft landscaped and available to growing tree roots, much more than today. Temporary parking would be permeable and landscaping would be reinstated once your neighbourhood is fully walkable. Tree planting along walking routes would be an essential upgrade for your neighbourhood.

Residents would be healthier

Walkable and treed neighbourhoods improve the health of *all* residents; reducing mortality from almost all health related causes (including cancer, heart disease and birth outcomes), reducing reported levels of stress and symptoms of mental illness.

Rosaline J. Hill Architect Inc.
www.rjhill.ca
613-853-2822

Walkable Ottawa
info@walkableottawa.ca
www.walkableottawa.ca

WHAT'S NEXT Delightfully Walkable and Complete?

The modeled outcomes shown in this report would only be possible if *all* the assumptions of the ION model were in place. One key assumption is that residents' will participate in local planning workshops, to leverage their knowledge of the community and build support for neighbourhood evolution.

A second key assumption is that the city will use this type of modeling to anticipate intensification and invest in municipal amenities to ensure your neighbourhood becomes walkable and complete in proportion to population growth. Without amenities to support a walkable neighbourhood, walkable infill housing is unlikely to be built at all.

Think about what upgrades will likely be necessary in your neighbourhood, and how best to achieve them in your neighbourhood. Every neighbourhood is unique so the answers are not the same for all. Take parks for example. One neighbourhood may need soccer fields because they love the game, another may need linear parks to help build pedestrian connections, and another may have plenty of parks but need specific park features such as benches. The sky is not the limit, however as your neighbourhood's population increases, so does it's tax base, allowing for more municipal spending. We have categorized potential upgrades and are preparing worksheets with 'menus' of upgrade solutions for use in workshop settings.

Walkable Ottawa's 'Menus' to Complete Community's Amenities

- Walking and Biking Paths
- Community Recreational Amenities
- Transitional Parking
- Transitional Features in future walkable shopping destinations
- Parks and Parkettes
- Small shops and offices
- Trees Trees Trees

WHAT'S NEXT Neighbourhood Level Planning?

With increasing populations and more pedestrians, small business owners would see the opportunity to open small shops a short walk from your homes. The modeled outcomes documented in this report assume that the city will zone some parts of your neighbourhood to allow small shops with office spaces above, and that the city will limit the size of all shops and their parking lots, in and around your neighbourhood, so that small businesses have a fighting chance to survive. So where should new little shops be located? Sometimes it's clear because there are existing mainstreets or streets with struggling small shops. Likely some new locations will need to be identified.

If you like the modeled outcomes of this report, let your Councillor know. Work together to gather information about your neighbourhood and map it using the legend below. In a workshop setting, review your map and identify your preferred locations for walkable shopping destinations and areas that would be ideal for new parks, parkettes or other upgrades.
(Keep in mind that land acquisition and development happens over time as lots are sold. We can't dictate the turnover of ownership so don't be too prescriptive. Choose areas, intersections or streets where you imagine shops or parks working well.)

Based on ION modeling, the locations you identified for new small shops and offices would evolve something like the images to the right. Some existing homes in these locations would be converted into shops. Transitional uses would pop up like flower markets stalls, or street vendors where appropriate. Some homes would be replaced with multi unit infill housing that is half a storey taller than infill elsewhere in your neighbourhood. Ground floors would be at the level of the sidewalk. And over time, shops and offices would move in, transitioning your neighbourhood into a *delightfully walkalbe and complete community*.

LEGEND	
Existing: **Parks, parkettes and benches** **Schools and daycares** **Shops (now or in the past)** **Key walking routes** **Key cycling routes** **Cultural / features of interest** **Religious / community bldgs** **Recreational facilities**	Proposed: Walkable shopping destinations (nodes or veins) Areas ideal for new parks, parkettes or benches

Rosaline J. Hill Architect Inc.
www.rjhill.ca
613-853-2822

Walkable Ottawa
info@walkableottawa.ca
www.walkableottawa.ca

Mapping Number	**W12.5**
[1] Area	0.29 sq.km.
[1] Number of buildings	491
[5] Number of dwellings per buildings	1.5
[1] Predominant existing zoning	R4UA
[1] Predominant existing zoned building ht max (in storeys)	3.5s
[1] Predominant existing building height (in storeys)	1-2.5s
[1]Typical lot width	33-40’
[1]Typical front setback	3m
[1] Typical front setback to street or sidewalk edge	4-7m
[1] Initial pattern of development	semi/mix
[1] Existing pattern of infill	tri/apt
[2] Percentage of area now *delightfully walkable and complete*	0%
[5] % of original lots developed before 1980 (nearest 10%)	95%
[2] % of area zoned to include transitional parking	100%
[1] % of area to be within walk of efficient transit in >25yrs	100%
[2] % of area to be assessed and upgraded to become *delightfully walkable and complete* in >25yrs	100%
[2] Proposed building height for infill housing (in storeys)	3.5s
[2] Proposed % dedicated entrances for infill housing required	25%
[3] Anticipated average number of dwellings per infill building on typical lot	7
[3] Anticipated typical smaller and larger unit sizes in infill	600 - 1200 sq.ft.
[3] Anticipated average size of new dwelling unit	855 sq.ft.
[2] New infill buildings in 25yrs	**117**
[4] New dwellings in 25yrs	**816**
[4] Number of existing units that will be retained and will be in *delightfully walkable and complete* areas	**749**
[4] Rate of population increase in this area	**1.6x**

[1] Data gathered from maps (GeoOttawa, walkscore.com, Google Maps, Future Transit Maps) or from Ottawa’s Zoning Bylaw.
[2] ION baseline modeling assumption, as noted in ION Preliminary Report dated September 2021.
[3] Results of analysis of future development patterns.
[4] Tabulation. [4] To be confirmed.