

## Vancouver Tri Cities: NEW BUILDINGS

### Summary

Nearly 78,000 units of new housing were added to the Vancouver Tri-Cities sub-region. 3% of these were detached homes, .5% were townhouses, 28% were apartments and 2% were highrise units. Of the total number of new dwelling units, approximately 61% were in mixed use commercial type buildings, and 5% were in mixed use live-work buildings. Overall, 195,000 more potential residents could be accommodated by this densification, which would represent an increase of nearly 30% over the current population of the Vancouver Tri-Cities area.

### Two Strategies

Because of differences in topography and potential for job growth and densification between the North Shore and the City of Vancouver, somewhat different approaches towards building patterns have been taken in the different sub-regions of the Vancouver Tri-Cities quadrant. As guided by the GVRD Livable Region Strategic Plan and local OCPs, most growth in this quadrant takes place within the City of Vancouver.



**Building Strategy:** In the Vancouver Tri-Cities area, the established urban grid and transit system provided the superstructure for new housing development which is predominantly a commercial/residential mix. Pink represents new mixed use commercial, purple represents industrial/business and orange represents higher density residential.

## A Design for 4 Million

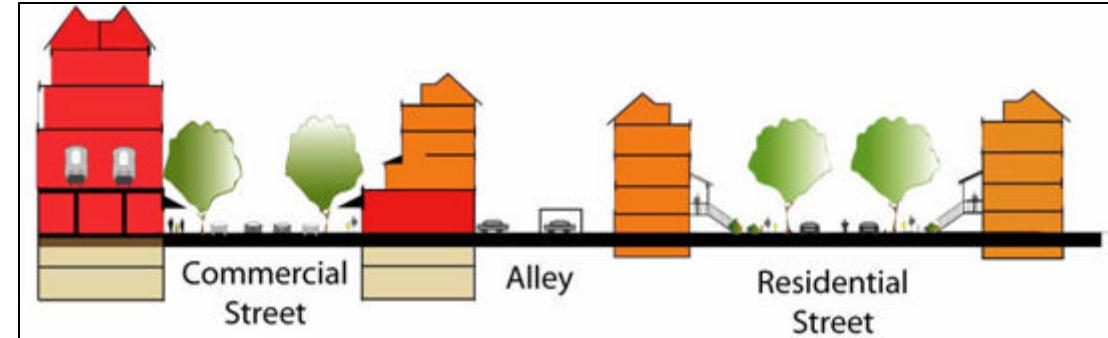
### Vancouver Tri-Cities: NEW BUILDINGS

#### Vancouver: The Streetcar City Revived

The main strategy for densification within the City of Vancouver in the Tri-Cities plan was to turn single storey commercial along all main transit corridors into four-storey mixed use commercial-residential buildings. In certain places, in order to accommodate projected population growth, the bold move of turning single family residential into four-storey mixed use commercial-residential was made. Industrial spaces have been preserved in the Vancouver Tri-Cities plan more live-work spaces have been added. In industrial/business areas, an effort has been made to bring the focus toward the street and have residential units facing either green corridors or the street. Strictly industrial spaces are generally buffered with mixed commercial-residential buildings.

#### North and West Vancouver: Transit Hub Clustering

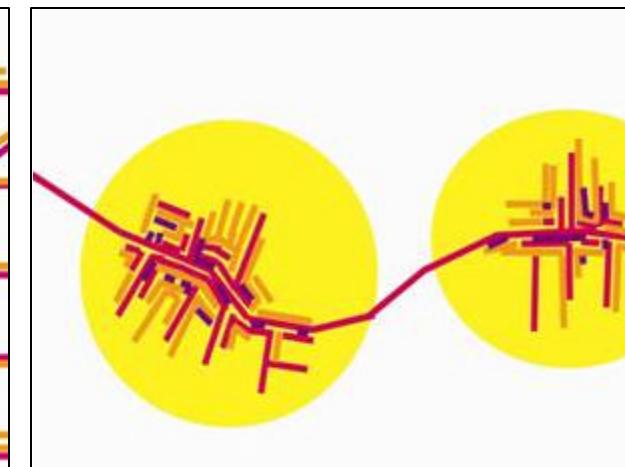
On the North Shore, significantly less population growth is projected by the GVRD. The Vancouver Tri-Cities plan for this area centres new growth around two existing transit hubs – Park Royal shopping centre in West Vancouver and the Sea Bus terminal in North Vancouver. Park Royal shopping centre is envisioned to develop into a smaller-scale version of Burnaby's Metrotown, and is shown as becoming a mix of commercial, residential and office space. In North Vancouver, most new residential, commercial and business development has been carried out near the Sea Bus terminal and around Lonsdale Avenue.



*Commercial buffering:* To fulfill housing demands, types of higher density housing such as townhomes and semi-detached multi-family units are proposed as a buffer between mixed-use commercial and single-family residential units.



*Vancouver: Linear Densification* Predominantly commercial/residential combinations are located along major transit routes creating linear amenity corridors.



*North Shore: Nodal Densification* Densification in North and West Vancouver is radial and centres around existing transit hubs.

## Vancouver Tri-Cities: GREEN INFRASTRUCTURE

### District scale overview

It should be noted that there are very different green infrastructure conditions within the Vancouver Tri-Cities quadrant. Green infrastructure in Vancouver and on the North Shore required two separate approaches. Generally, the Vancouver Tri-Cities approach to green infrastructure systems is both preventative and restorative. However, approaches taken in North and West Vancouver are mainly preventative while approaches in Vancouver are mainly restorative and rehabilitative.



*Green Infrastructure Strategy:* Two different strategies have been employed in the Vancouver Tri-Cities area. The goal for the North Shore is to preserve current green systems, whereas the goal for the City of Vancouver is to recover lost systems of green infrastructure and incorporate them into the urban fabric.

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# Vancouver Tri-Cities: GREEN INFRASTRUCTURE

### North and West Vancouver

Green infrastructure approaches on the North Shore are mainly preventative. The North Shore is at the fringe of the Lower Mainland and nudges up against wilderness in a way that very few other places in the GVRD do. We felt it was important to delineate the wilderness edge and prevent development from encroaching upon it. Because of the proximity of wilderness, unique topography and the relative youth of development on the North Shore, a fairly rich system of green infrastructure currently exists and supports a wide variety of wildlife that is rarely found in other parts of the GVRD, such as salmon, coyotes, black bears, various raptors, and songbirds. The goal of the Vancouver Tri-Cities approach was to preserve these systems.

### Vancouver

In Vancouver, on the other hand, the landscape has been so urbanized that it would be all but impossible to rehabilitate most watercourses and natural green infrastructure. Thus, we have created rectilinear 'green streets' in an attempt to mimic lost streams to infiltrate storm water and serve as urban wildlife corridors.

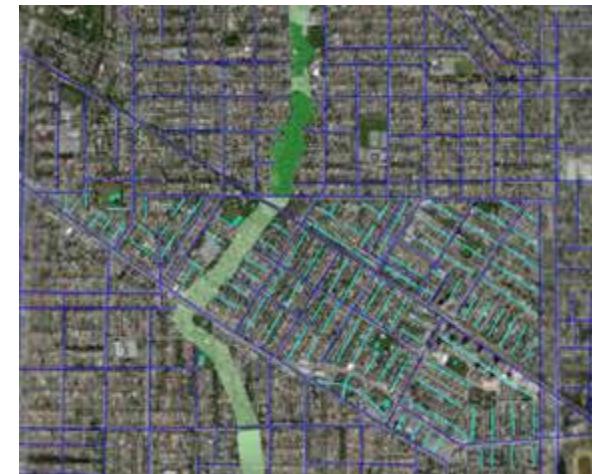
#### *Green Infrastructure Preservation:*

Existing green systems on the North Shore are to be preserved and enhanced.



#### *Permeable Streets and Lanes:*

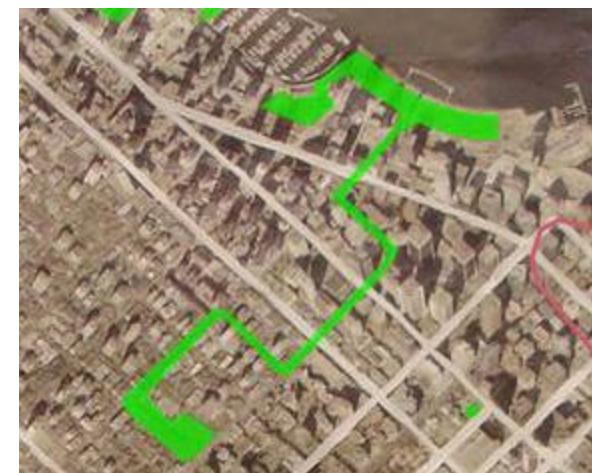
Streets and back-lanes will be retrofitted to infiltrate stormwater, reducing overland flow by 90%.



#### *Lost Stream Recovery:*

Lost estuaries were located and used as a starting point for above-ground drainage implementation.

Fall, 2005



#### *Green Street Systems:*

A rectilinear green street system mimics former natural streams systems.

Vancouver Tri-Cities: Lesya Fesiak, Elise Menard, Mo Rouhi, Xenia Semeniuk

## Vancouver Tri-Cities: JOBS CLOSE TO HOME

### District scale overview

By replacing single -family detached homes along major transit routes with mixed use commercial / residential units, we have exceeded the job target, at one job per dwelling unit, and with the general assumption that 100 square feet is required to spatially accommodate each job.

These jobs have been added in two sectors – commercial/retail and business/industrial, represented by pink and purple building blocks, respectively. The commercial jobs have been added mainly along corridors of new four-storey mixed commercial-residential development on streets that were formerly lined with single family homes. These buildings are intended to be flexible spaces in which retail sections can actually be used as industrial or even residential space until there is a demand for the retail space, or vice versa. It is intended that these spaces be flexible in order to be able to adapt to the changing needs of the population over time.



### Jobs Strategy:

The same pattern that was employed for housing development simultaneously provides work opportunities by substantiating transit corridors with commercial/residential use. Industrial/business employment centres tend to be clustered together and are represented by the red circles.

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# Vancouver Tri-Cities: JOBS CLOSE TO HOME

### Vancouver

In Vancouver, jobs are brought close to home in new commercial-residential corridors and in preserved industrial areas that incorporate housing in live-work spaces. Residential units in industrial areas are designed to face either the street or a nearby greenway. These work-live units are also used as a buffer between industrial and commercial-residential or strictly residential areas.

### North and West Vancouver

On the North Shore, industrial space along the waterfront is preserved and is mixed with commercial and residential building use. Jobs are also created through increasing commercial-residential buildings along Marine Drive between Lonsdale Avenue and Capilano Road.

Because a higher amount of population has been accommodated on the North Shore in the Tri-Cities plan than is called for by the GVRD's Liveable Region Strategic plan, we have aimed to create enough jobs on the North Shore so that the demand for employment associated with the additional population growth will be absorbed with the intent that no additional strain be placed on either the Lions Gate or Second Narrows bridges.

#### *Mixed-use Commercial/Residential:*

Job opportunities were created by transforming current single family residential areas into areas of mixed commercial/residential use.



#### *Work/Live Opportunities:*

Existing industrial areas were preserved and enhanced with the addition of live/work spaces which also line major transit routes and improve street character.



## Vancouver Tri-Cities: TRANSPORTATION

### Moving around the district

All new development within the sub-region is located within a five minute walk of transit services. The only new bus routes that were created in Vancouver are along 16<sup>th</sup> Avenue between Granville Street and UBC, and on South Dunbar to Deer Island. On the North Shore, the only new proposed routes are along Evelyn Drive behind Park Royal in West Vancouver and on 16<sup>th</sup> Street in North Vancouver.

All new development is also within a five minute walking distance of commercial services, which are often located along transit corridors.



*Substantiating the Transit Grid:*

The Vancouver Tri-Cities area, unlike other communities throughout the GVRD, already has a dense transit system in place, which needs only to be preserved and enhanced. A few extra routes have been added to complete routes and encourage pedestrian accessibility.

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# Vancouver Tri-Cities: TRANSPORTATION

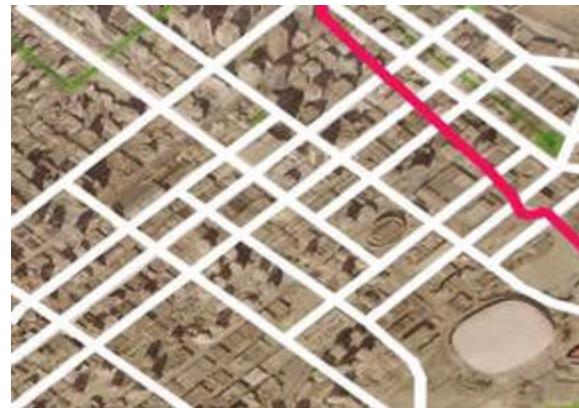
### Moving around the neighbourhoods

The existing grid of transportation corridors served as the backbone of our design for the Vancouver Tri-Cities quadrant. Few new bus routes actually had to be added to the existing system, although we do anticipate significant growth in transit use and thus propose more buses on existing routes, a new Skytrain stop in the False Creek Flats area and more frequent Sea Bus departures. A new water transit route could also be added between West Vancouver and downtown or Kitsilano.

Where possible, residential units have been integrated into commercial and industrial areas to allow people to have the option of living within walking distance of their work, thus eliminating the need to commute.

#### *Established Transit System:*

Vancouver's current transit grid provides the basis for future development. Most routes remain unchanged while service intensifies.



#### *New Skytrain Stations:*

A new Skytrain station has been added to the False Creek Flats, an area of proposed dense industrial/live-work development.

#### *Water Transit:*

The waterfront location of the Tri-Cities provides an excellent opportunity for increased water transit routes. For example, existing SeaBus facilities could accommodate a doubling of capacity with the addition of two new boats.



#### *Additional Bus Routes:*

In a few areas throughout the City of Vancouver, new bus routes were added to accommodate an increase in commercial and residential development.