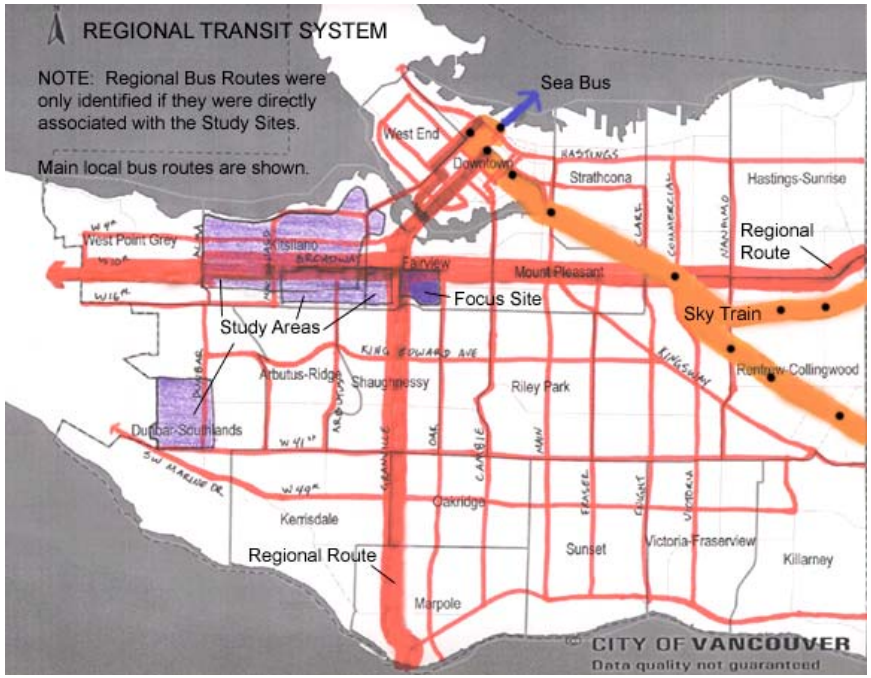
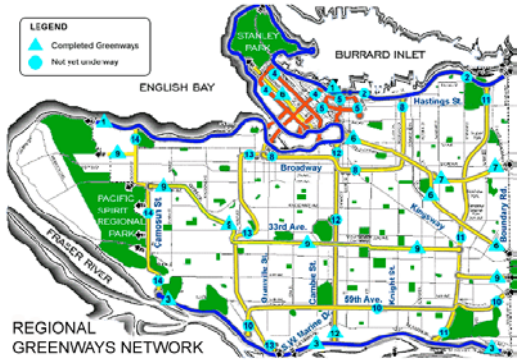
PART TWO – ISSUE BASED CHARRETTE

A TRANSPORTATION – VANCOUVER REGION



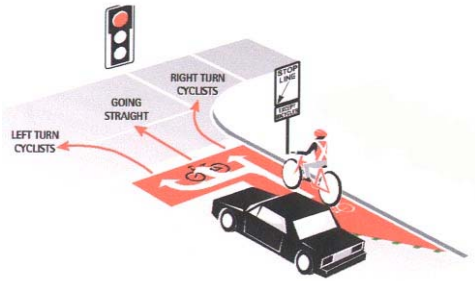
Regional map showing the locations of the 4 study areas and their relationship to the main transit routes including Bus, SkyTrain and SeaBus.



Existing and proposed Greenway routes.

Existing bike routes.

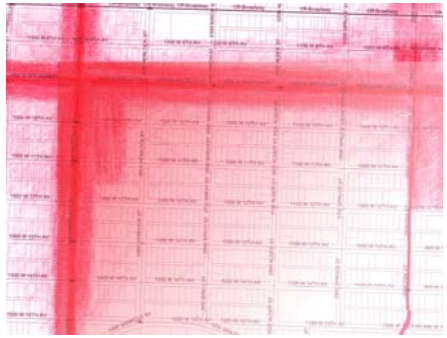
In order to increase walkability and decrease VKT, regional greenways and bike routes are critical. These routes are used to connect green spaces and districts. An example of such a connection is the pedestrian / bike bridge that crosses 6th to Charleson Park. This provides an integral link to False Creek and the Seawall.



Example of a typical bike box / advanced stop line to increase cyclist safety and enjoyment.

Example of a regional bike route: Off-Broadway. The street currently accommodates 2 lanes of parking and 2 lanes of traffic.

A TRANSPORTATION – VANCOUVER DISTRICT



Activity Intensity map showing the present concentration of activity. The main nodal area of Broadway and Granville is due to the services provided, such as shopping, businesses, and transit links.

Spruce St. which would become a bike route. There would only be 1 lane to park, and only from 7pm – 7 am.

Current and proposed Granville District characteristics.

The District map to the left shows how the area can take advantage of existing attributes and also how changes can be made to increase walkability and decrease VKT. An example of such a change is the linking of the Off-Broadway bike route with a new route along Spruce St. It is proposed that Spruce would have 1 lane of parking, 2 lanes of traffic, and 1 bike lane. This bike lane would have bike boxes as shown in the diagram on the previous page.

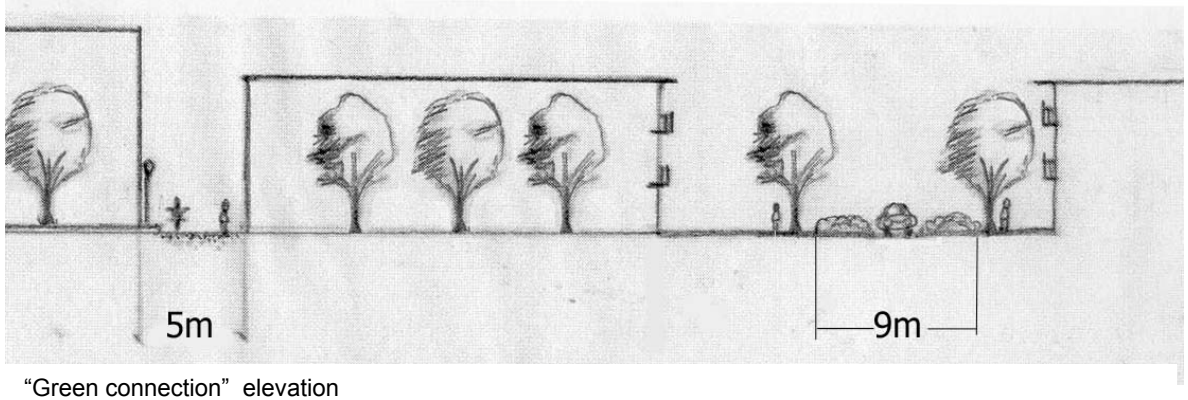
There would be major improvements in terms of greening both Birch and 11th by adding verges and street trees where necessary. This greening would play a pivotal role in increasing the connections to greenspace, transit, and services.

Also to increase walkability, traffic would be slowed by having 2 lanes of parking with only one lane of traffic on both Birch and 11th. A pedestrian activated light would be installed at the intersection of 11th and Hemlock to increase pedestrian safety and ease of movement.

To create more greenspace for the district, the schoolyard at 14th and Spruce would have minor improvements in terms of tree and shrub planting.

In order to further enhance the nodal area at the intersection of Granville and Broadway, the Firehouse / Library building would have additional floors added in order to accommodate a community centre. This building would also have an accessible roof-top garden.

"Green connection" street featuring narrow lanes, traffic-calming measures, street trees, and gravel lanes. Existing trees are shown in lighter green.

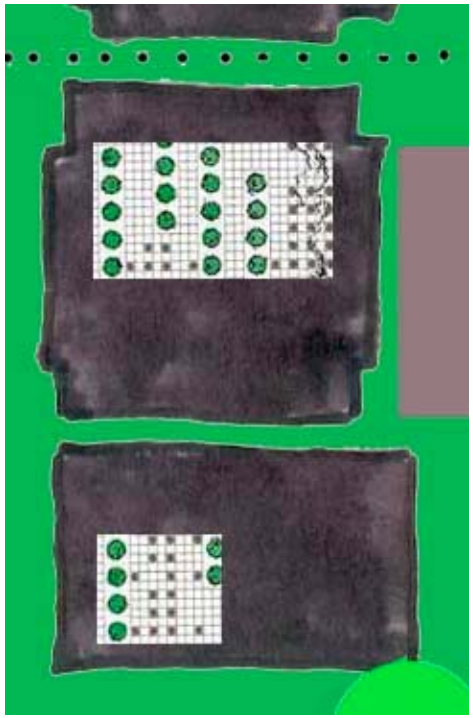


"Green connection" elevation

Interventions at the block scale are intended to encourage pedestrian and bicycle movement through designated "green connections" on 11th Avenue and Birch Street. These streets would not restrict the use of the automobile, but its access would be limited through traffic calming measures. These measures include traffic bulges at intersections, which decrease the distance that pedestrians must travel as they cross the street.

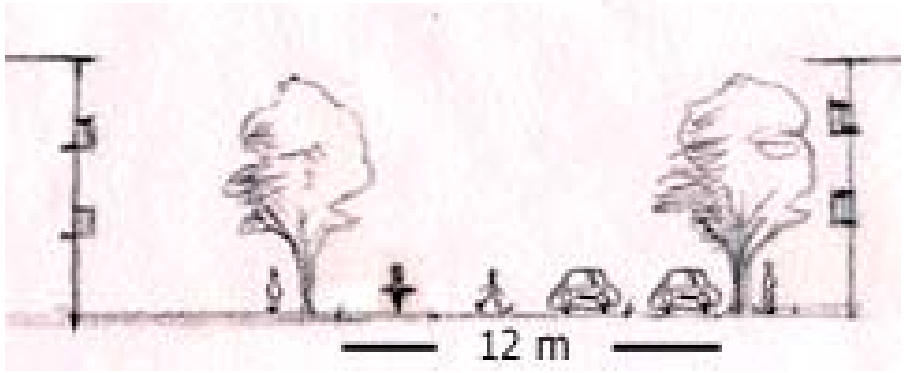
Two-metre verges would be added to the green connections, narrowing them to three lanes (9 metres) in width, while retaining the existing two lanes of parking. The resulting single traffic lane would allow automobile access for residents but discourage use of green connection streets as alternate routes to major vehicle corridors.

The verges added to both sides of the green connections would be used for the planting of street trees, which enhance the experience of travelling these streets for all users. Pedestrian scale lighting is also proposed for these streets for increased safety and aesthetic experience after dark.



Pedestrian path between buildings & green roof gardens.

Existing location for pedestrian right-of-way path



Bike route. Parking would be restricted on one side, from 7 am to 7 pm, to encourage bicycle travel.

The asphalt surface covering all of the alleys in the study area would be changed to crushed gravel, increasing stormwater infiltration and discouraging excessive vehicle speeds. Existing parking lots accessed via the alley would be retained, but their surface would be changed to porous pavement (where possible) or gravel, for a reduction in runoff rate and volume. Pedestrian – scale lighting is also proposed for the alleys.

Pedestrian right-of-ways would be established at two existing spaces between buildings on the block. These paths allow pedestrians to penetrate the block structure for easier movement to adjacent blocks (for example, to access a parked car). Ultimately, a network of such paths could be developed, allowing pedestrians a number of alternative routes for brief trips within the neighbourhood.

The area is dominated by low-rise buildings with large flat roofs, ideal for the development of “green roof” gardens. These spaces offer building residents a semi-private green space to cultivate or simply enjoy.

TRANSPORTATION – VANCOUVER DISTRICT MASTER PLAN

Master Plan of Granville District projecting recommended sustainable development pattern over twenty years.

- Primarily, these proposals address issues of connectivity, accessibility, walkability, groundwater recharge, and intensification of commercial uses. At the regional and district level, a hierarchy of pedestrian and bicycle friendly green streets connect residential areas to existing greenspace, bike routes, transit corridors and commercial and community services. This network is designed with walking in mind, however it is recognized that this cannot occur in isolation and that facilitating the effective movement of cars must be accommodated. Traffic calming measures such as 'bulges' as well as 'bike boxes', pedestrian crosswalks, widened sidewalks with grass verges as well as reduction of roadway width in some instances, keep traffic flowing while reducing its negative impacts. In order to minimize the ecological impact of roadways, parking lots and lanes, it is proposed to install porous surfaces on all publicly owned thoroughfares and to introduce incentives for building owners to convert all hard surfaces to porous materials.

- It is anticipated that there will be commercial growth that will serve the larger community as well as local neighbourhoods.

- These proposals recommend that growth occur in a nodal progression out from primary intersections helping to create complete neighbourhoods with easy access between homes, jobs and services. Where there is a deficit of community services such as recreation centres, opportunities should be sought to increase them. In the district selected, the existing library/firehall would be expanded to become a full community centre complete with an accessible roof garden. In fact, green roofs (accessible or inaccessible) would be encouraged throughout neighbourhoods, especially on the flat roofs of apartment buildings, to absorb rainwater and to enhance the attractiveness of the area.

- At the block and parcel level, in addition to porous hard surfaces and green roofs, tree planting and block beautification would be encouraged as well as mid-block rights of way that assist walking access.

- Projecting ahead one hundred years, such measures would facilitate pedestrian and other non-motorized movement through areas allowing for easy access to jobs and services. While it is quite possible and desirable that fossil fuel burning vehicles would have been superceded by more environmentally friendly engines, the physical impossibility of accommodating more cars on the road will eventually drive the development of more sophisticated transit options. Within the study area it is projected that 12th Avenue will need to become a major transportation route. It is recommended that this street would be closed to individual cars and would become a light rail transit system shared with bicycles and pedestrians. Transit stops would likely occur at the intersections at Granville and at Oak with perhaps an additional midpoint stop between Birch and Alder. Consequently commercial growth will likely develop out from those intersections.

- The charrette process revealed that increased commercial growth inevitably eliminated some housing stock, however when distributed evenly across the city neighbourhoods would become more evenly balanced between commercial and residential uses in a network of complete neighbourhoods. Creating incentives for more sustainable treatments of ground surfaces as well as structural changes, such as underground parking and green roofs, would likely necessitate a combination of ‘carrot and stick’ and punitive approaches. In established communities such as Vancouver, these might be politically unacceptable. However, public awareness of global sustainability issues might at this point allow for such approaches.

Bank of Montreal poster illustrating the concept of increasing commercial density for convenience of use.