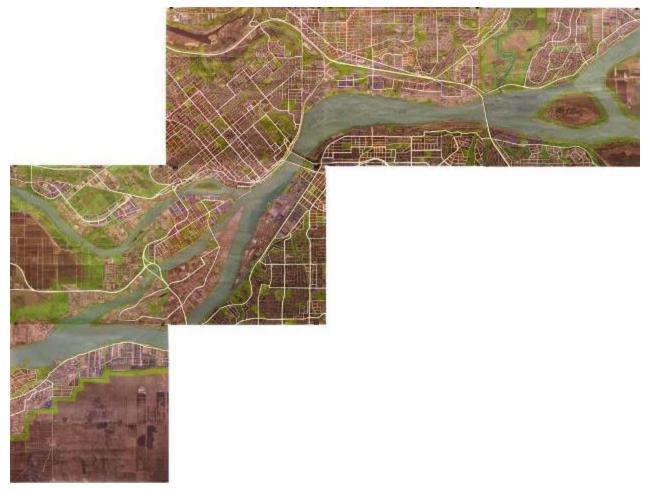
The River Hub: NEW BUILDINGS

Summary

The River Hub includes municipalities that all boarder the Fraser River. Combined, they are expected to double in population over the next 50 years. accommodate this new population, 138,831 new housing unit have been added to the area. Of these new homes approximately 20% are highrise apartments; both low-rise buildings and townhouses account for 10% each: 7% are mixed-use commercial: 3% are live-work situations: and 40% are detached homes. Some of the detached homes are new, while others have had secondary suites added to them, essentially doubling number of housing units without changing the overall appearance in many existing neighbourhoods.



A diversity of new housing:

New population is accommodated in accordance with the OCPs of the surrounding municipalities. Namely, new housing has been concentrated around major transportation hubs and corridors, or near commercial centres. Where new neighbourhoods take over industrial lands, this is made up for by adding industrial lands elsewhere or increasing the intensity/ efficiency on existing industrial lands. Finally, many neighbourhoods do not change visually, but each home adds a new secondary suite.

The River Hub: NEW BUILDINGS

Neighbourhood scale solutions

Because most of this area is already developed, new housing had to be added mainly through retrofitting existing buildings and infilling of blocks. This approach applies two key strategies for creating sustainable communities: *create flexible blocks* and *work with existing communities*.

In New Westminster, flexible blocks were created by increasing housing diversity. Along main corridors, a range of high-rise apartments, townhouses, and mixed-use commercial was added. This was done with consideration for the existing community. Infilling occurred in areas that were previously low density, and onestory buildings were retrofitted to create housing above commercial uses.



Adding to developed lands in New Westminster:

Retrofitting existing buildings and infilling of block adds more housing diversity and density to New Westminster.

The River Hub: GREEN INFRASTRUCTURE

District scale overview

The Fraser River is the largest river in BC and considered to be the one of the most important salmon rivers in the world. Its location at the centre of the GVRD creates a range opportunities that are often conflicting. For the municipalities that boarder it, the Fraser is an excellent resource for industry and shipping. For the region and province, it is a vital ecological resource. One of the main goals for the design of the River Hub was to make the Fraser a centre and focus in the area. The obvious way to do this was to create an extensive network of green fingers and greenways that connect back to a continuous buffer along the shores of the river. This strategy achieves multiple goals: it connects the different municipalities, protects the edge of the Fraser, and enhances public access to the riverfront.



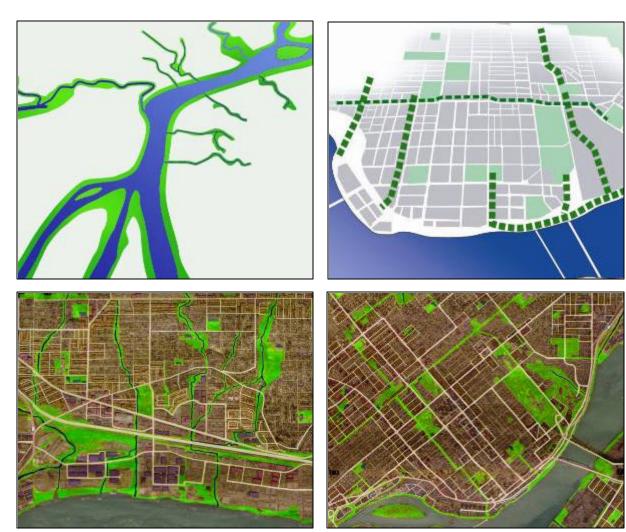
An area green network:

A buffer along the shores of the Fraser River forms the backbone of the green network, while greenways and buffers along the river's tributaries connect to parks and open space, forming an area-wide green infrastructure system.

The River Hub: GREEN INFRASTRUCTURE

Neighbourhood details

The keystone of this area's green infrastructure is a buffer lining the edge of the Fraser River. While this buffer is thin in some portions, it is continuous; thereby ensuring public access and flow for people and wildlife. Green fingers and greenways connect to the Fraser's buffer and extend back into the surrounding communities joining with parks and open spaces. Important industrial uses are maintained along the river, while the green fingers and greenways- in the form of paths and bike routes- transect the industrial lands at intervals. This ensures public access to the riverfront as well as revealing industrial processes and activities to the public, which may increase awareness and concern for stewardship.



Green fingers and greenways:

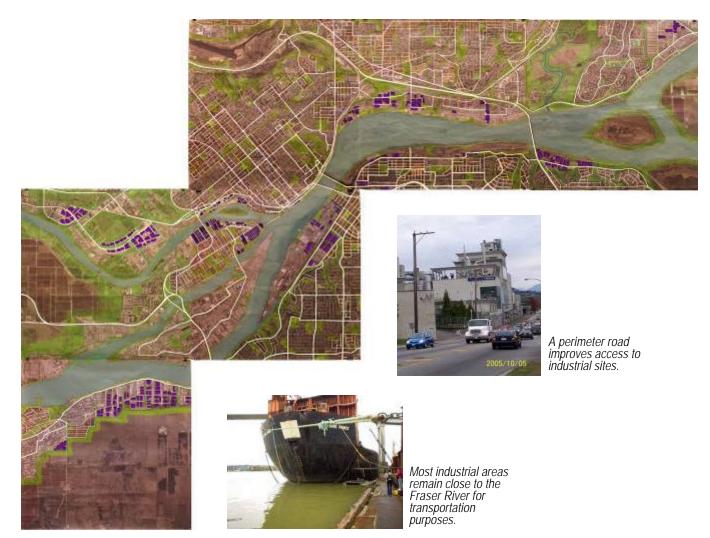
Buffers along the Fraser River and its tributaries create the first level of a green network, as shown in the example taken in Port Coquitlam (right). Greenways add a second level to this system, as shown in the example of New Westminster (left).

The River Hub: JOBS CLOSE TO HOME

District scale overview

Approximately 140,000 jobs have been added in this area. This is equal to one job per every new household. The majority of jobs were created in industrial areas; however, little new land was used in this process. Instead, existing industrial areas were converted to more intensive and efficient uses. In addition, jobs were created in live-work spaces, commercial and business areas, and the public sector.

Because the industrial areas tend to be located near the riverfront, perimeter roads (with buses running along each of them) north and south of the Fraser River work to improve truck access and to connect people to these workplaces.



Industrial workplaces:

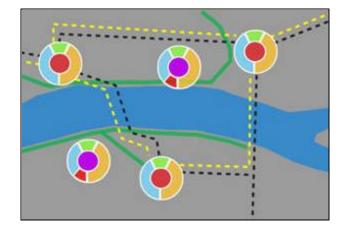
The purple buildings in the above image represent areas where industrial jobs were added by intensifying and more efficiently using existing space, as opposed to creating new industrial lands. As well, north and south perimeter roads have been added to connect these industrial areas.

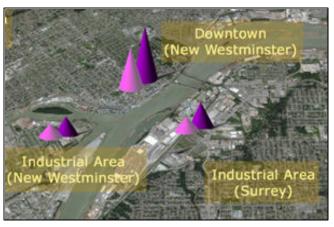
The River Hub: JOBS CLOSE TO HOME

Job Sites

Jobs in growth concentration areas were increased. These areas are arranged around either an industrial or a commercial centre. Regardless of the main use, a diversity of uses was also incorporated so that there is always some residential, commercial, and business uses in close proximity. This contributes to creating complete communities- allows people to live work, and meet their daily needs in a close area.

The centres are also well connected by transit, major routes, and north and south perimeter roads to improve access to workplaces.







Connecting diverse job centres:

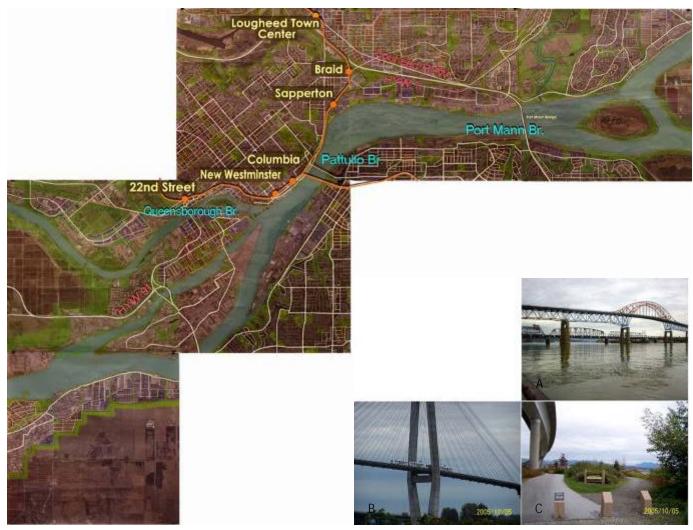
Major job growth areas are concentrated, divers, and well connected.

Moving around the district

In this part of the region, the Fraser River might be perceived as an obstacle or an opportunity in terms of movement. For commuting, the river is a challenge for vehicle traffic and buses alike. The river must be crossed via one of the 3 bridges, which inevitably become "bottlenecks" at peak hours. The Sky Bridge is the only other alternative. In response, HOV lanes have been made more continuous over the bridges major routes, while more express bus lines that connect to the sky train have been added to encourage people to use public transit.

On the other hand, the Fraser River also presents an opportunity to encourage alternate modes of transportation, as it is at the core of an extensive green network that provides routes for walking and cycling.

The River Hub: TRANSPORTATION



Working with the existing infrastructure:

The existing patterns of movement across the Fraser River have been retained and enhanced. (A) Continuous HOV lanes and frequent buses have been added to bridges. (B) New bus lines that connect to major routes and the sky train have been added. (C) An extensive green network over the area promotes alternate modes of transportation such as walking and cycling.

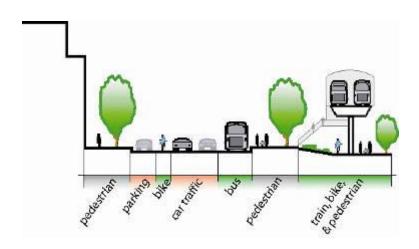
The River Hub: TRANSPORTATION

Moving around the neighbourhoods

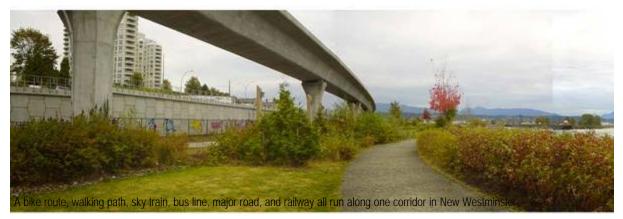
Within parts of the River Hub, movement has been enhanced by improving the transit system, extending the green system, and integrating the different modes.

New bus lines that connect to major routes and the sky train have been added. A more robust, efficient system will encourage people to use public transit. An extensive green network provides continuous, more enjoyable routes for pedestrians and cyclists. Along major corridors, the different modes of transportation have been integrated. For example, a greenway follows the length of the sky train line so one can ride or walk part the distance and then hop on public transit. As well, park n' rides and connecting bus routes allow people to travel via a combination of transportation modes.





New bus lines



Options on the ground:

More east/ west bus routes through Surrey and North Delta enhance public transit south of the Fraser River, while strategies to integrate modes- as in the above diagram and photo- give people multiple options for moving around the area.