

Sustainability x Design

Greater Vancouver Regional Charrette

a SUPER saturday event



sustainable region
design charrette
june 17, 2006

SIX PRINCIPLES FOR A SUSTAINABLE REGION

SUSTAINABILITY BY DESIGN

Welcome to the 2006 Greater Vancouver Regional Charrette!

Today's Regional Charrette is a project of the Sustainability by Design team, at the Design Centre for Sustainability (DCS) at the University of British Columbia.

Since January 2006, the Design Centre for Sustainability has been leading, along with three partner agencies (Fraser Basin Council, Greater Vancouver Regional District, and the International Centre for Sustainable Cities), a region-wide initiative to produce a long-range urban design vision for the Greater Vancouver region.

In a series of public forums, stakeholder workshops and local area design charrettes we've explored consensus-based concepts for how particular communities in the Vancouver region might evolve in the next 50 years. Three communities have completed design charrettes representing key urban building blocks:

| | |
|----------|---|
| NODE | Township of Langley - 200 Street – 64 Avenue to Highway 1 |
| CORRIDOR | City of Burnaby - Kingsway |
| EDGE | Corporation of Delta - East Ladner |

Today's Regional Charrette will create a design scenario for the greater Vancouver region over the next 50 years. With your assistance and participation, we will draw a regional vision that accommodates a doubling of the region's population, and relies on sustainable design principles to guide that growth and development.

SCENARIOS for a GREATER VANCOUVER REGION of 4 MILLION PEOPLE

Projecting future population and demographic change is a crucial tool for long-range planning, particularly for land-use decisions that will shape transportation, employment and housing choices for many decades.

In the last 20 years Greater Vancouver has experienced a population growth of nearly 60%, from 1.2 million people in 1981 to almost 2 million in 2001. Similar rates of growth are expected for the future. The Greater Vancouver Regional District expects a total population of 2.6 million by 2021 and nearly 3 million by 2031.

Our Regional Charrette assumes a total regional population of four million in 50 years, by 2056. This growth projection is very close to similar long-range predictions made by Urban Futures, a respected demographics firm in Vancouver. We provide three different scenarios of how this population growth would be distributed while at the same time preserving the Green Zone and Agricultural Lands. (See the accompanying Research Bulletin).

Participants are to draw projected housing units and jobs for selected 5 Square kilometre segments of the Greater Vancouver region.

Second is transportation: existing transit routes are to be emphasized on your sheets with white ink. Additional ones that you propose (to satisfy the five minute walk rule) should also be indicated with white ink. Finally, new roads or existing roads where new buildings have been located should also be in white ink.

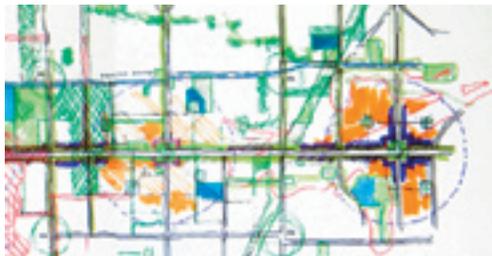
Finally: green infrastructure. Our challenge is to double the population of the region without harming the environment - most importantly its stream and associated riparian systems. Previous student work indicates various strategies for either protecting or restoring green infrastructure/riparian systems. Your squares should indicate similarly how you proposed to accomplish this task.



1 good and plentiful jobs close to home



2 mixed use corridors accessible to all.



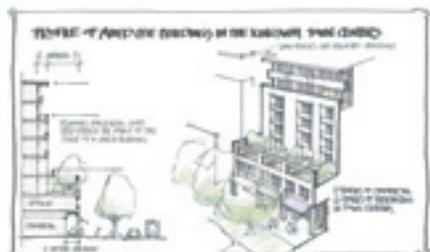
3 five minute walking distance



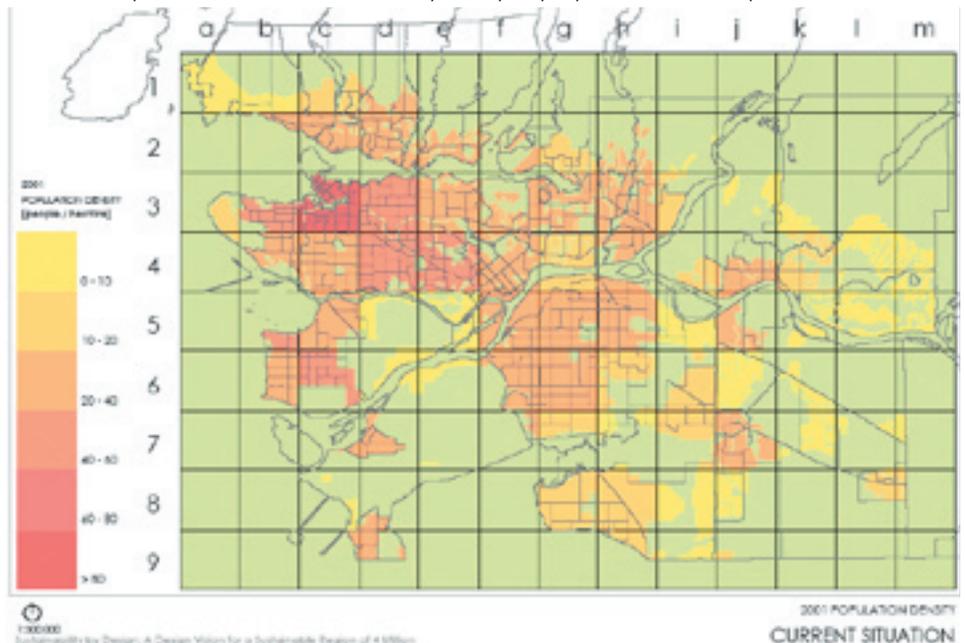
4 access to natural areas and parks



5 lighter, greener, cheaper, smarter infrastructure



6 different housing types



The maps on these facing pages show current and projected population densities for our region. The map above shows the current situation

The primary task of this Regional Charrette is to explore the design possibilities of accommodating twice the present population in our region in a sustainable way. To accomplish this, we will work with a simple set of tools, and use basic principles to explore sustainable growth in the Greater Vancouver region.

We will divide into teams of 3-4 and each team will intensively explore one 5 km square of the region at 1:5000 scale. With the tools and design brief provided, your team will draw a design scenario to accommodate the population of 2056 into housing units and employment locations within your team's grid square.

Using the design template (design brief, p. 4), and Grid Guide sheet (housing, job numbers) to draw new buildings only, in each of your respective grid square maps. You are also to indicate bus and transit routes in white ink and green infrastructure system in green pencil, using student produced panels as a style guide.

TOOLS AND MATERIALS

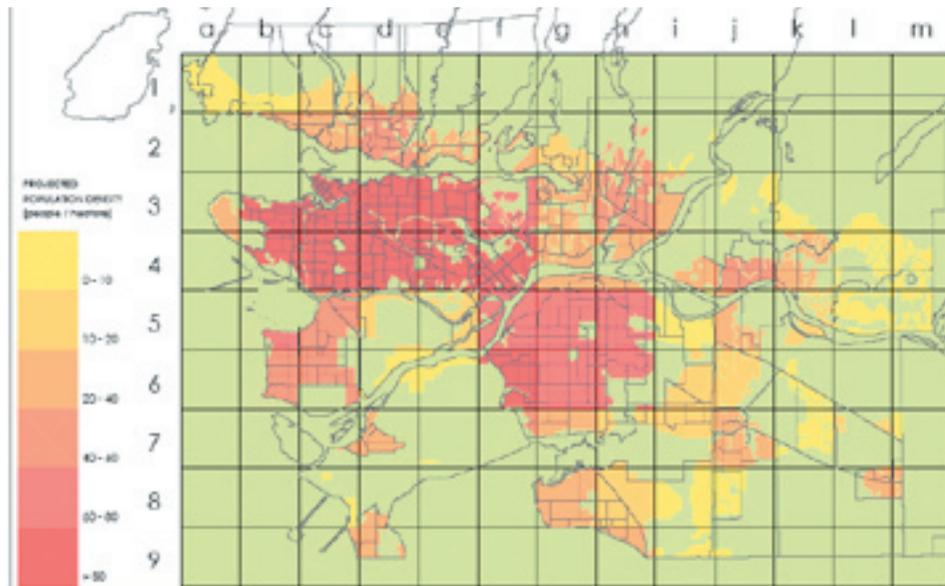
- Sustainability by Design: Guiding Principles (brochure)
- Regional Charrette Design Brief (4-page handout)
- Technical Research Bulletin (Population Scenarios)
- One 5km square ortho map
- Grid Guide Sheet (housing, jobs, population numbers)
- Colored pencils

THE DAY'S AGENDA

| | |
|--|---------|
| Introductory presentation (Prof. Patrick Condon) | 10:30am |
| Divide into groups, read through principles brochure and design brief. | 11:00am |
| Review materials, discuss with team, devise design plan | 11:15am |
| Use scale and building template to draw new buildings, transportation and green infrastructure (directly on map) | 11:30am |
| Working Lunch provided | 12:30pm |
| Continue drawing directly on 5Km Square map | 1:00pm |
| One hour left! Complete your drawings. | 4:00pm |
| Squares finished and pinned on wall. | 5:30pm |

FINAL INSPIRATION

The Greater Vancouver region has earned a reputation as one of the world's most livable places. That achievement is the direct result of our region's natural assets as well as the visionary long-term planning of previous generations. Our challenge, in this generation, is to transform our livable region into a sustainable one.



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Sustainability by Design: A Design Vision for a Sustainable Region of 6 Million

2054 PROJECTED POPULATION DENSITY SCENARIO #3

This map above shows one potential scenario where the cities of Vancouver, Burnaby, New Westminster, Surrey, and the Tri-Cities area (Coquitlam, Port Coquitlam, Port Moody) absorb most of the new population growth while the rest of the region remains at relatively low densities.



Single Family Residential in Maple Ridge



Multi-Family Townhouses in Langley



4 Story Multi-Family Residential in North Vancouver



Mixed-Use Commercial/Residential in Vancouver



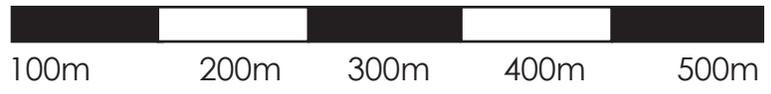
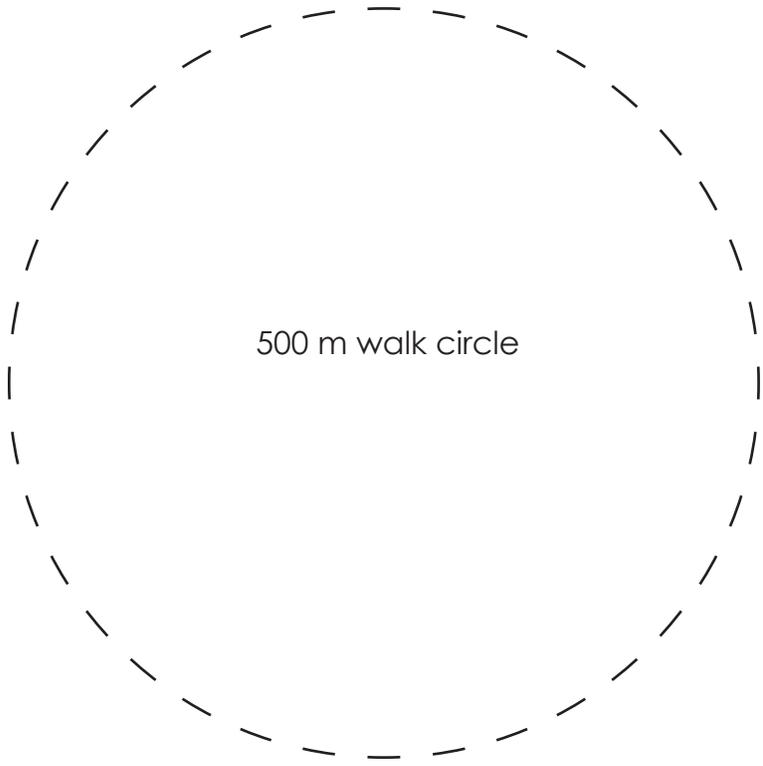
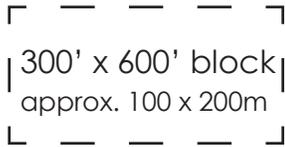
6 Story Multi-Family Residential in Vancouver



Residential towers in downtown Vancouver



Templates



| | | |
|-----------------------|---|--|
| Light Ocre | Single Family Housing 0-15 du/acre | |
| Light Ocre | Multi-family Housing 15-30 du/acre | |
| Light Ocre | Multi Family Housing 4 story apartment 30-45 du/acre | |
| Cadmium Orange | Multi family Housing 6 story apartment 45-80 du/acre | |
| Cadmium Orange | Multi Family Housing Tower 80 + du/acre | |
| Dark Red | Mixed Use Buildings | |
| Mauve | Employment Locations 200 sf per job | |
| Bluish Turquoise | Institutional Buildings Schools: 1 elementary school per 2000 du 1 highschool per 14000 du | |
| Bluish Turquoise | Streams | |
| Earth Green Yellowish | Protected Natural Areas Green Space & Green Infrastructure | |
| Correction bottle | Major transit Corridors | |

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