

SUSTAINABILITY by DESIGN

Project Outline & Summary of Activities (2005-06)

The ***Sustainability by Design*** project is intended to galvanize support for a sustainable Vancouver region - among citizens, elected officials, government staff, the NGO sector, real estate professionals, and the broader population of community advocates.

The project's operating principle is that sustainable neighbourhood design, if widely applied, may be the crucial ingredient for a sustainable region. The focus will be on designing new and retrofitted neighbourhoods in conformance with sustainability principles and targets (principles and targets themselves arrived at via workshops, and captured in the form of "design brief" documents), principles and targets applied using state of the art visualization and analytic tools.

Project Summary

Sustainability by Design (SxD) will produce a series of sustainability targets (in the form of design instructions or "design briefs"), design charrettes (time limited multi party round table design events), exhibitions and publications. These products, focused on neighbourhood, corridor and district-scale responses, will collectively comprise a consensus-based vision for a sustainable Greater Vancouver region. These products will fill a void in the regional debate about a sustainable region: they will provide a neighbourhood by neighbourhood, district by district picture of what such a future would look like. Taken together, these deliverables form an integrated suite of strategies and events for a more sustainable urban region, with specific design scenarios set over a 30-50 year time frame.

The design briefs, charrettes and roundtable community processes will provide a unique opportunity to test emerging principles for a more sustainable region against real site constraints and current market conditions, and to see what kind of communities and neighbourhoods might result. The project will further demonstrate the economic and ecological benefits derived from such plans, in measurable terms, at both the local and regional scale.

Of specific interest are:

- ✍ Corridors (e.g. commercial arterials such as Hastings Street or Lougheed Highway)
- ✍ Edges (e.g. interfaces between the Agricultural Land Reserve, the GVRD "Green Zone" and developed urban areas)
- ✍ Nodes (e.g. key regional interchanges where transportation and natural systems conjoin)

Project Rationale and Objectives

Our overarching objectives are:

- i. To use a collaborative, learning process to produce a compelling vision of a sustainable region, at multiple scales;

- ii. To build citizen and stakeholder support for local and regional sustainability;
- iii. To demonstrate the opportunities and benefits of smarter, greener infrastructure;
- iv. To exchange and communicate our efforts and results with other regions and nations, and with policy makers, students, and professionals.

Over the longer term, **the Design Centre for Sustainability at UBC** (DCS) intends to use the **Sustainability by Design** framework as a way to structure related activities of many researchers and practitioners at UBC, NGOs, government agencies and other institutions. A central strength of the project's network of alliances and activities allows us to thread together research from various disciplinary realms including economic development, environmental management, housing equity, real estate development, transportation planning, and urban epidemiology (health issues consequent to city design). We strongly believe this project framework will provide a model for action, research, and education that can be transferred to other parts of Canada.

Project Partners and Personnel Resources

The project will be led by an **Executive Partnership**: the *Design Centre for Sustainability at UBC (DCS)*, the *International Centre for Sustainable Cities (ICSC)*, *Greater Vancouver Regional District (GVRD)*, and the *Fraser Basin Council (FBC)*. A **Stakeholder Alliance Leadership Committee** will formally advise the project. This Leadership Committee will be citizens and stakeholders drawn largely from the ICSC board, supplemented by appropriate representatives from partner agencies, academic institutions and NGO groups. The Committee will meet 3 times a year.

The DCS will manage the day to day activities associated with the project. Additional support, alliances and resources are anticipated via partnerships and contractual arrangements with area companies, agencies and companies, including the Real Estate Foundation of B.C., Urban Futures, and GVRD.

Implementation Plan (Schedule for Year One)

The full program plan for **Sustainability by Design** (SxD) runs from 2005 – 2008. The complete project entails an iterative series of events and activities – each resulting in specific deliverables. The Design Centre is currently seeking support and broad participation for year one (Oct. 2005 – Oct. 2006). In that period, the DCS will undertake the following initiatives:

1. Foundation Research Bulletins: Nov 2005 – February 2006

We will produce 2 to 3 research bulletins on specific project related questions (e.g. water/stormwater infrastructure, urban design, community planning, transportation). This will be the first in a series of published bulletins to outline charrette findings and support workshops and charrettes in 2007-2008.

2. Three Public Forums: Feb 23, March 02, March 06 (Location: SFU Surrey Central)

These three events will together launch the Sustainability by Design program, and highlight issues arising in typical *Corridor, Node and Edge* sites in Greater Vancouver region (the three 'building blocks' of our regional charrette process.). We will also formally announce selected study-area sites.

3. Design brief development and review: February-March 2006

Project team and municipal partners to develop draft design briefs that draw on a wide variety of inputs (demographic data, job growth projections, municipal OCP statements), as well as indicators derived from regional growth strategies, community plans and sustainability principles. The design briefs will be validated at subsequent workshops with stakeholders, advisory groups and partners.

4. Design Brief Workshops (Two ½ sessions for each Study Area site):

March-April 2006

Up to 15-20 invited participants (municipal staff, local stakeholders, community groups) will review design brief goals and objectives, develop performance targets, and approve a design approach for each of the respective study areas.

5. Three Study Area Design Charrettes: over four days, late April, 2006

A week-long design charrette will utilize design briefs, base maps and stakeholder input to render a design vision for the respective study areas, over a 10-50 year horizon. Process will be stakeholder driven, with municipal staff support, and facilitated by the Design Centre project team (UBC and Fraser Basin Council). The primary outcome will be a Consensus Vision for the Study Area sites. All three charrettes will be for respective case-study sites and participants, facilitated and resourced by Design Centre team. The four-day sessions will begin with regional context overview, and conclude with plenary presentations.

6. Regional Design Charrette w/Design Professionals: Saturday, June 17, 2006

This large one-day event will field-test the design brief and project methods insofar as it can be applied to the entire region. Up to 200 planners, architects and landscape architects will donate a day of professional time to collaborate on this project, as part of a large and unprecedented professional design congress scheduled in Vancouver with *Canadian Institute of Planners*, the *BC Society of Landscape Architects* and the *Architectural Institute of BC*. This design charrette also intersects with *UN World Urban Forum* proceedings (June 18-23, 2006), and is one of many "Super Saturday" events being organized by the City Building Planners Group.

The day's central visual tool will be a large aerial photo map (9 metres by 13) of the GVRD region, overlain with a five kilometers scale grid, plus topographical and other relevant data. Working with respective 5K square grids, participants at workshop tables (up to 20) would apply population and demographic data (provided in design briefs) to illustrate the growth trends and planning solutions that will shape the physical makeup and built environment of individual communities in the region. The results will provide participants, researchers and partners with valuable insights into broad future options and scenarios for our region, and serve as a unique interactive educational event.

7. Exhibitions - World Urban Forum and beyond: June 18-23, 2006

The formal results of charrette(s) will be unveiled through a series of exhibits, often in conjunction with related conferences, lectures and the like. The most immediate would take place at the United Nations' *World Urban Forum* (WUF) in Vancouver.