

# Emerald Hills Urban Village

## FOUNDATION RESEARCH BULLETIN

Design Centre for  
Sustainability at UBC

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### WELL-BEING

#### 1.0 Why is well-being a key theme?

Well-being describes the quality of life of a population. There are many components to well-being, some are concrete aspects such as access to goods and services, while other aspects are hard to measure such as health and happiness. Our physical surroundings influences our well-being by setting the framework in which we gain interaction with other people and nature, where we get access to services and jobs, etc. Issues relating to well-being are profoundly affected by factors ranging from the stress and difficulties of commuting to the presence or absence of natural areas and greenspace.

Without greenspace and walkable/active transit-oriented neighbourhoods, citizens' health and well-being is compromised. Greenspace helps limit the impacts of urban sprawl on wildlife as well as on air and water quality. Neighbourhood walkability tends reduce the prevalence of obesity by making it easier for people to lead active lifestyles. Together, these elements enhance the aesthetic value of the neighbourhood, provide opportunities for recreation, community interaction and make the neighbourhood more people friendly.

Neighbourhoods should be designed with the well-being of residents in mind and contribute to enhancing their physical and mental health through aspects such as greenspace and walkable neighbourhoods. These elements contribute to the feeling of their neighbourhood as not just a place to stay but a home.

#### 2.0 Why is well-being important to Emerald Hills Urban Village?

Within Strathcona County, citizens have expressed the need to have resources and areas within the neighbourhoods to support and facilitate the well-being of the community<sup>1</sup>. They would like their neighbourhoods to "provide a broad range of services and facilities that allow them the opportunity to lead a healthy lifestyle"<sup>2</sup>. The County also believes that it is the municipality that is in the best position to create the necessary infrastructure to support the social well-being of its citizens"<sup>3</sup>.

Strathcona County citizens also recognize the necessity of the less concrete aspects of well-being and have expressed the desire to "create a safe, caring and respectful community"<sup>4</sup>.

Strathcona County's current draft of the Municipal Development Plan (August 2006)

<sup>1</sup> Strathcona County Draft Municipal Development Plan. 2006.

<sup>2</sup> Ibid.

<sup>3</sup> Ibid.

<sup>4</sup> Ibid.

outlines several design strategies aimed at fostering community well-being, including the following:

- a) Improve the quality of commercial and residential environments through urban design;
- b) Ensure development occurs in an orderly manner and is tied to the logical extension of infrastructure;
- c) Create more compact, walkable communities; and
- d) Improve transportation connections between developments.

The visions of Strathcona County citizens and Council demonstrate a strong desire to implement strategies aimed at promoting healthy living within the community. Incorporating certain design principles that focus on creating vibrant, pedestrian-oriented public spaces will provide the foundation from which a healthy community can be achieved.

### **3.0 How can EHUV impact on this theme?**

The well-being of a community is influenced by its design features. People's quality of life, especially their health, has suffered as a result of living in car-dependent communities. By incorporating design strategies that are welcoming and safe into the Emerald Hills Urban Village, people will be drawn to spend more time in public spaces and will also use active forms of transportation. This will contribute to improving the community's well-being.

### **3.1 What strategies are relevant for EHUV?**

There are several design elements of public space that influence individual and community well-being- see Table 1. Specific strategies are outlined in more detail:

#### **Greenways**

Greenways are corridors that link parks, agricultural land, forest land and other greenspace. They allow movement of both people and wildlife. They can include bicycle, rollerblading and walking paths. Greenways provide opportunities for physical activity, social interaction and respite from vehicular roadways. In addition, they can be connected to local transit networks at regular intervals, providing alternative choices when moving through urban environments. Making greenways accessible and convenient is key for promoting their use. Greenways can also be an economic benefit to housing that is adjacent to these features because they can improve the aesthetic value of the area. They can also serve as a means to create unique natural and cultural attractions.



**Fig. 1 Greenways significantly add to a community's well-being.**

#### **Gathering Spaces**

Accessible and aesthetically pleasing public spaces such as plazas, patios, community parks, and playgrounds help attract more pedestrians to the



**Fig. 2 Well-designed gathering spaces encourage social interaction, a sense of ownership and increases safety.**



**Fig. 3 Incorporating natural areas into community plans promotes long-term health and well-being of people and animals, and helps preserve water, land and air quality.**

public realm. This contributes to the vibrancy of the area and promotes community interaction and community pride. These spaces should span a range of big and small, busy and intimate, and be adaptable for a variety of uses and events, such as farmers markets, festivals, and art displays. Gathering spaces also can help promote retailing and other local businesses by localizing areas of public leisure. Permitting shops, vendors and restaurants to serve customers outside their establishments, can also increase pedestrian street activity in neighborhood and commercial centers.

### **Urban Nature**

The inclusion of natural areas promotes the overall livability and vitality of communities. The aesthetics and environmental quality of a community are not only improved with trees, landscaped lots and streets, roofs, and parks not only improve, but they can sometimes have an impact on critical social issues such as health care, education, crime and safety, economic development, and social disenfranchisement<sup>5</sup>. Studies have shown that when greenery is incorporated into urban design people get along better, feel healthier and are more focused and productive<sup>6</sup>.

### **Healthy Indoors**

The average Canadian will spend approximately 90% of their time indoors. Incorporating building design elements that will ensure the provision and maintenance of comfortable and healthy indoor environments should be considered a high priority. Poor air quality and lighting levels, off-gassing of chemicals from building materials, and the growth of moulds and bacteria can adversely affect people. Sustainable design supports the well-being of people by reducing indoor air pollution through the selection of materials with low off-gassing potential and ventilation strategies, providing access to daylight and views, and controlling lighting, humidity, and temperature levels for optimum comfort<sup>7</sup>.

### **CPTED – Crime Prevention Through Environmental Design**

CPTED aims to reduce the crime and the fears associated with crimes such as robberies, assaults and vehicle thefts through design of the urban environment<sup>8</sup>. Some of the key design considerations include:

- Design crime prevention features (such as fences) to also support and enhance the overall quality of the urban environment, through improved design and beautification.
- Encourage “eyes on the street” by improving pedestrian activity and watching from homes. The building relationship to the street is key, see Table 1.
- Create a sense of ownership and claim the public realm so that people are more aware of their surroundings.
- Design spaces to be “clear and clean” with good lighting so

<sup>5</sup> Westphal, L. 2003. pp. 137-147.

<sup>6</sup> Kuo, F.E. 2003. pp. 148-155.

<sup>7</sup> Greater Vancouver Regional District. 2006.

<sup>8</sup> The Design Centre For CPTED Vancouver. 2003.

**Table 1**

\* Design Elements that Influence Well-being

- Mix of residential and commercial development
- Streets and sidewalks
- Vehicular traffic control and parking
- Transit access and bikeways
- Trees and landscaping
- Signage and way-finding
- Attractive and appropriate building materials
- Height and mass of buildings relative to the streetscape
- Space for public activities and civic events
- Provision for community gardens and farmers markets
- Farmland preservation around each urban area
- Mixed uses of the built environment for long term flexibility
- Public art and the integration of local design elements and themes

Fallon, L.F. and Jeffrey Neistadt. 2006. "Land Use Planning for Public Health: The Role of Local Boards of Health in Community Design and Development." (Ohio: National Association of Public Boards of Health). [www.cdc.gov/healthyplaces/publications/landuseNALBOH.pdf](http://www.cdc.gov/healthyplaces/publications/landuseNALBOH.pdf)



**Fig. 4 Traffic circle in a residential neighbourhood, Vancouver, B.C.**

that visibility is nearly instant, especially in parking areas, lanes, etc.

**Safe and Inviting Streets**

To promote active transportation (transportation by non-motorized means) in a community, streets design needs to be safe and appealing to the non-motorist. Attractiveness, comfort, convenience, safety, security and system coherence are all variables that will influence pedestrian and cycling activity.

Encouraging active transportation is an affordable way to improve people’s physical fitness and well-being. The table below outlines some effective measures for creating safe and inviting streets.

*Design Measures for Non-motorized Transportation*<sup>9 10 11</sup>

Design Element	Result
Reducing widths of roads	Reduces traffic speeds and volumes
Small traffic circles at intersections	Reduces traffic speeds
Wide sidewalks and bike lanes	Creates physical buffers from road traffic
Installation of bollards	Better defines a pathway within the road right-of-way and separate cars from bicyclists
Pedestrian-friendly medians and traffic signals	Eases crossing of streets
Raised crosswalks	Effectively slows traffic at crossing points
Appropriate street lighting	Enhances safety and sense of safety at night
Street furniture: postal boxes, telephone booths, benches, street trees, bus stops, public art and attractively designed street lamps	Adds aesthetic value to the streetscape
Planting trees along a street	Creates a sense of enclosure and improve the pedestrian environment
Curb extensions, planters, or centerline traffic islands	Narrow traffic lanes to control traffic and reduce pedestrian crossing distances

**4.0 What policies and/or programs will add value?**

- Create EHUV newsletter for social groups and events;

<sup>9</sup> Lusk, A. and J. Harris. n/d.

<sup>10</sup> Frank, LD., et. al. 2003. pp. 165-171.

<sup>11</sup> Victoria Transport Policy Institute. 2006.



**Fig. 5** Street lighting is important for safety. Ensure fixtures cast light downward to prevent light pollution and energy waste by inefficient illumination.



**Fig. 6** Street furniture provides needed amenities and can be opportunities for incorporating public art and a sense of identity and wayfinding to streets. Furniture should be made from reclaimed materials, and contextual details can be built-in which inform people about the place and promote sustainable ideas.

- Create shared-space community stewardship groups and programs that involve children, teens and seniors (eg. public gardens initiative, street beautification teams);
- Create partnerships, including public health officials, to initiate programs which educate about making healthy and sustainable lifestyle choices;<sup>12</sup>
- Create policird to ensure that all residents are within a 10-minute walk of greenspace, and a 3-5 minute walk of transit.

## 5.0 What other resources are available?

Foundation Research Bulletins:

#4: Carbon for more on technical aspects of green roofs.

#5: Transportation for more on greenways and pedestrian circulation.

## References

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## Photo credits

Figure 1: Centre for Neighborhood Technology. *Green Infrastructure Valuation-Greenways*. <http://greenvalues.cnt.org/i/greenways1.jpg>

Figure 2: Architype.net – *Integrated Public Spaces with Community*. <http://www.architypes.net/files/image/cache/shopping-plaza.jpg>

Figure 3: Great Streets. *Planting Strips - Lake Oswego*.

<http://www.greatstreets.org/PlantingStrips/PlantingStripImages/Oswego1.JPG>

Figure 4: Design Centre for Sustainability.

Figure 5: Architype.net – *Discourage Crime*.

<http://www.architypes.net/files/image/vancouver-library-square-light-fixture-thumb>.

<sup>12</sup> One Planet Living. 2006. p. 37.

jpg

Figure 6: Great Streets. *Street Furniture: Main Street – Independence, Oregon.*

<http://www.greatstreets.org/MainStreets/MainStImages/MainIndependenceImages/09IndependenceFurniture.JPG>

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