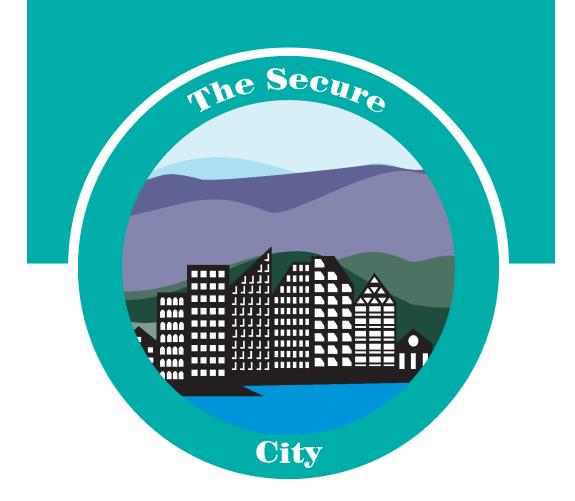
THE WORLD URBAN FORUM 2006

Vancouver Working Group Discussion Paper



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The Liu Institute for Global Issues at the University of British Columbia

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Turning Ideas into Action

In preparation for the 2006 United Nations World Urban Forum (WUF), the Vancouver Working Group (VWG) was created as a partnership of public and private agencies and civil society. It was mandated to initiate a series of research inquiries resulting in the *Vancouver Working Group Discussion Papers for the World Urban Forum*. These papers were prepared by members of the VWG with relevant experience and well-developed resources. It is hoped that these papers will contribute to the development of a thematic framework for WUF 2006 by articulating the concept and content of urban sustainability.

WUF will focus on urbanization as an all-encompassing global phenomenon and attempt to recommend effective actions to achieve a sustainable process of global urban transformation by balancing social, economic, environmental and political goals: *Turning Ideas into Action*.

The Vancouver Working Group Discussion Papers for the World Urban Forum are openended segments of a conceptual whole. Each of them will strive towards sustainability thereby transforming urban life into a productive, inclusive and environmentally balanced range of activities. These segments taken together will characterize sustainable human settlements. Sustainable urbanization can only be achieved through a mosaic of sustainable components that will add up to more than the sum of their parts.

All papers received comments from independent peer reviewers and this contribution is gratefully acknowledged.

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ACKNOWLEDGEMENTS

These papers continue the international dialogue on human settlements that began with the first UN Human Settlements Conference in Vancouver in 1976. They provide an initial analysis of diverse aspects of the current urban situation and create a basis for an informed discussion and development of ideas and relevant issues leading up to WUF 2006.

The purpose of the Forum is to engage people worldwide in discussions about urban issues and to stimulate significant change across generations in the field of sustainable urban development. The United Nations has challenged Canada to develop a more interactive and participatory Forum. Consultation, dialogue and conclusions formed prior to and during the World Urban Forum will also contribute to Canada's urban agenda and will help to create a long-term legacy of knowledge and action around sustainability issues in Canada and the World.

The papers contributed to Canadian efforts in Barcelona at the 2004 WUF. Ministers and Canadian officials held informal consultations with domestic and international stakeholders while in Spain. The WUF 2006 Secretariat will take into consideration all input received from interested stakeholders to ensure that Canada meets the challenge from UN Habitat in making the WUF 2006 more interactive and participatory.

These papers have been developed with the financial support of Western Economic Diversification Canada. The views expressed herein are solely those of the authors of this paper and do not necessarily reflect the official position of the Government of Canada.

Substantive contributions for this paper were also provided by The Liu Institute for Global Issues at The University of British Columbia and VanCity Savings.

FOREWORD

This paper is part of *Turning Ideas into Action*, a themed series created in preparation for the 2006 World Urban Forum. Together, this series forms a mosaic that sheds light on a common focus: the city. On a global scale, cities have become the dominant form of human settlement, socially, economically, environmentally and politically. The papers begin to examine how cities can continue to be dynamic and inclusive places in which to live and thrive. By illustrating explorations of the city with powerful stories of promising practices, the papers emphasize the assets from which cities draw their strength, and highlight dynamic participatory processes in action. Research for each paper draws on extensive experience in planning and managing cities. Selected lessons provide knowledge to achieve locally relevant solutions and supportive policies at the regional, national and global levels. They demonstrate the complexities of how cities evolve and transform, and challenge assumptions that are often taken for granted. Finally, the papers encourage the reader to view the world from different perspectives and discover successful and innovative solutions appropriate to their relevant conditions.

WUF 2006 will build on Canada's historic leadership in bringing the UN Conference on Human Settlements to Vancouver in 1976. It will also benefit from Canadian experience in improving human settlements at home and abroad. The 1976 UN meeting pioneered a participatory process of member nations and NGO's, and created a worldwide focus for human settlements issues through the establishment of the UN Centre for Human Settlements in Nairobi, now known as UN-HABITAT. WUF 2006 is part of an historic trajectory of UN Conferences and represents the 30th anniversary of HABITAT '76. These papers are intended to initiate an informed dialogue on the scope and scale of the evolving urban agenda through *Turning Ideas into Action* locally, regionally, nationally and across the world.

This paper is one of a series of discussion papers prepared in anticipation of the World Urban Forum 2006.

The papers in this series include:

The Capable City

The International Centre for Sustainable Cities

This paper examines non-traditional forms of governance with an emphasis on consensus that has emerged in a Canadian context and responds to three questions. Are there models of cooperation across jurisdictions that might provide lessons for city regions that do not require mergers? Are there models for management of global common goods – such as watersheds, that do not involve legislative powers? Are there models based on consensus and voluntary agreements across sectors that show promise for influencing decision making related to sustainability?

Three Canadian cases are presented: the Greater Vancouver Regional District (GVRD); the Fraser Basin Council (FBC); and the National Round Table on the Environment and Economy (NRTEE). The models are assessed using UN-HABITAT's criteria for good governance. The findings, along with pertinent literature and experience on governance and capacity building, yield observations and recommendations about their application to other cities.

The Ideal City

Department of Art History, Visual Art and Theory, University of British Columbia

This paper explores the history and force of ideal city planning and the related literary and visual genres of Utopian -- and Dystopian -- speculation. The Ideal City represents a highly significant aspect of human thought and endeavour, usually conceived in response to actual problems as well as intended to effect substantive improvement in the daily social lives of individual citizens. Linked to a thematic knowledge resource intended to establish an interactive website, this paper reviews the main constituents of the Ideal City tradition, examines its impact on the design of urban settlement, including across Canada and in Vancouver, and indicates how such conceptual approaches to the building of a better civic environment and society can contribute to the creation of more sustainable, habitable and civilized cities in the 21st century.

The Learning City

Simon Fraser University

The learning city is a city that approaches sustainable development as an ongoing educational process. This paper focuses particularly on the role of universities and colleges in the learning city, examining the different dimensions of sustainability education and best practices from British Columbia, across Canada and internationally. Lessons from this are applied to envisioning a new Centre for the Learning City in Vancouver's new Great Northern Way Campus.

The Livable City

The International Centre for Sustainable Cities

This paper is a case study of the Greater Vancouver Regional District (GVRD) in Canada, the host region for the World Urban Forum 2006. Drawing on the literature on livable cities and the region's efforts to bring this concept into practice, the paper poses two central questions: What key factors affect the livability of a city and how does livability relate to sustainability? Livability is defined as "quality of life" as experienced by the residents within a city or region, and the paper concentrates on a case study of planning for Greater Vancouver including the Livable Region Strategic Plan, the Sustainable Region Initiative, and the cities PLUS 100-year vision for the GVRD. The paper provides lessons for other cities and regions, and concludes that for Greater Vancouver, livability, sustainability and resiliency are three intertwined elements that together will define the quality of life of current and future residents.

The Planning City

The Canadian Institute of Planners

This paper looks at sustainability as a dynamic, continuous process of sharing and exchanging knowledge and experiences, and of learning through action. It contributes to this learning process by reviewing key trends and challenges that confront those responsible for planning cities in Canada and overseas. Examples of urban planning innovations and experimentations are drawn from a sample of cities and taken from the perspective of the urban planner who is usually a central actor in efforts to articulate, plan for and implement urban sustainability. The paper concludes with key findings, and offers direction about processes, structures and methods that could enhance the effort to achieve urban sustainability.

The Resilient City

Ministry of Community, Aboriginal and Women's Services, Government of British Columbia

This paper explores the resiliency of small Canadian communities dependent upon single resource industries by examining how they have coped with the economic and social pressures arising from the closure of their industries. It summarizes how they have managed their transition from communities existing to serve resource exploitation exclusively to communities based on a different, broader economy and suggests lessons from the Canadian experience that may be transferable to resource-based communities around the world.

The Youth Friendly City

The Environmental Youth Alliance

This paper explores what opportunities exist for the greater recognition of the rights and needs of children and youth in urban settings through a significantly enhanced role in urban governance and community building. By enabling children and youth to participate fully in their own development and environment, this paper demonstrates the potential among youth for building capacity, and for becoming insightful resources in developing strong and thriving local neighbourhoods and cities.

Abstract

The threats and forces shaping cities in the 21st Century are making it increasingly difficult for planning, policy and design models to respond effectively. Traditional pillars of urban security (security of the individual, security of the community and security of services and systems) need to become more responsive and resilient. The events that have followed September 11th 2001, superimposed onto an already fragile system, raise serious concerns about human security globally and challenge the goals of sustainability in local approaches to city design and governance. There can be no peace without freedom, and no freedom without security. In preparation for the World Urban Forum, a research agenda is proposed to explore the relationships between *adaptive security*, *preventive security* and *human security*. Grounded in a secure city agenda, alternatives are explored that advance current concepts for building capacity and creating more *resilient* design models, promoting integrated risk assessment that is *responsive* to community needs, and advocating enhanced roles for individual *responsibility* and community participation to expand social capital.



"I miss the security of a walled city."

http://www.cartoonbank.com/

Introduction

We are living through an historic transition that is being fuelled by dynamic processes of change: population growth, rapid urbanization, globalization, environmental degradation, the development and spread of digital technology, and geopolitical instability. Problems resulting from the interplay of these processes affect the security of the six billion people who now inhabit the earth and the urban regions where most of the growth and development is taking place. Urbanization is not the cause of the problems but is rather a mirror reflecting them, and the city is a microcosm in which these processes and their impact are magnified. Although they are the place where human security is most deeply challenged, cities nevertheless represent our best hope for achieving the highest level of security for the greatest number of people.

This paper builds on the metaphor of the city as a mirror to examine a series of reflexive relationships that have an impact on human security and inform a secure city agenda. This concept of reflexivity shows up at various points in the discussion as an organizing theme and heuristic tool. For example, the impact of global events on local conditions is seen to affect many facets of our economic, political, environmental, social, and cultural lives. Thinking globally and acting locally is almost a universal dictum. The reflexivity is also evident in relationships between the individual and the state, as for example in public policy debates over the balance between individual and state responsibility for the provision of community support services. A third set of relationships can be seen in the impact of human activity on the environment. Over the past thirty years, concern about the impact of population growth and urbanization on the environment and human settlements has shifted from a focus on the leadership role of nation states (explored at Habitat I in 1976) and city states (Habitat II in 1996), to a growing concern about individual safety and human security, explored here in the context of the World Urban Forum to be held in 2006.

When Vancouver was being considered as the venue for the 2010 Olympics, concerns about the region's security were important evaluation criteria. Since spectacles of this nature capture the attention of millions of viewers around the world, an attack by terrorists would have enormous strategic and symbolic impact. As the world grows in complexity and with concerns about security high on the global agenda, it is an opportune time to explore alternative planning and policy frameworks.

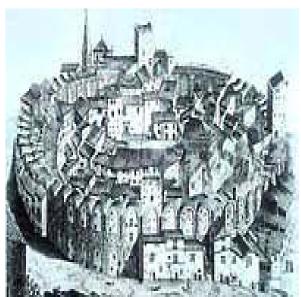
Grounded in a secure city agenda, the alternatives explored here advance current concepts for building capacity and creating more resilient and adaptive design models. They call for an integrated risk assessment that is responsive to community needs for prevention and precaution, and they advocate an enhanced role for individual responsibility and community participation to expand social capital.

The paper has three parts: an historical context for urban security; examples illustrating threats and forces shaping cities in the 21st Century at different scales; and in preparation for the World Urban Forum, a research agenda is proposed to explore the relationships between adaptive security, preventive security and human security as foundations for *The Secure City*.

Part One: Traditional Pillars of Urban Security

Throughout history, and across cultures, people have depended on the city for their safety, seeking protection within the ramparts and behind the walls. There was shelter from the elements, protection from the anarchy of the countryside, and security under the protection of those who were charged with maintaining public order. People were able to work in a variety of crafts that could thrive because there was a critical mass to sustain markets and foster economic diversification. Cities were places of freedom and liberty, where the escaping serf could challenge the rights of the feudal lord or the church. But this freedom had a price, and brought with it the responsibility to participate. Civitas – the governing ethos of rights and responsibilities through which citizens were expected to contribute to building the civil society, and ensure the security of the city. Citizens were free, but they still had to fight. This was evident as far back as the cities of ancient Greece and Rome. Security ensured social, economic and political order, which in turn enabled the city to prosper and citizenship to flourish.

Where conditions were favorable, the city became a focal point for international commerce and trade as people were exposed to goods, ideas and influences from around the world. Cities become the major engine for economic growth and a catalyst for social and political change. Increasingly sophisticated planning methods were needed to oversee orderly development and ensure that adequate services and infrastructure were maintained. Governance structures were required to deal with the complex relationships among competing levels of authority, while architectural variety and neighbourhood differentiation began to take shape as communities grew in size and diversity.



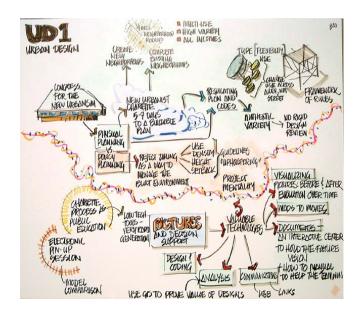
luciensteil.tripod.com/ katarxis/id6.html

This arrangement remained largely intact until the period Peter Marcuse describes as the advent of the bourgeois epoch. By the end of the 19th Century, with the impact of the Industrial Revolution and the ascendancy of mercantile capitalism, the city had outgrown the walls, and the securities that had previously been assured were being challenged in new and more complex ways. As the world's population grew exponentially, cities and the towns that grew up around them were becoming more popular and populated.

Power no longer had to be exercised with the symbolism, or the reality, of superior force behind it; the combination of a new economic and political freedom meant that hierarchical relationships of power and wealth could be put in place, protected, and enhanced through more subtle means than walls of stone.

The 20th Century witnessed levels of population growth, migration, and urbanization in unprecedented rates.ⁱⁱ Two major impacts of these trends have been significant environmental degradation, as well as urbanization and globalization combining to create a network of inter-dependent megacities that represent a phenomenal challenge to the effectiveness of contemporary models of planning, design and governance. ⁱⁱⁱ

Underlying the design and planning models which spawned this urban offspring was a widespread sense that the contemporary urban forms were not meeting the individual or community needs of their inhabitants. During this period in North America, fundamental changes to the morphology of cities were triggered by the confluence of three related factors - new transportation technology, demographic and social conditions, and economic organization - culminating in the advent of streetcar technology; the plotting of automobile-oriented suburbs around 1945; and the social transformations of the 1960s. The result in Canada and the USA was school-centred, auto-oriented subdivisions designed for "the new generation". In the ensuing decades, as urban growth and decline occurred in tandem, suburbanization underwent several mutations producing "edge cities", "penturbia", "pedestrian pockets", "neo-traditionalism", and "new urbanism".



One of the most robust community process models for the design process comes from the practice of New Urbanism. This concept map introduces the key concepts. First and foremost, New Urbanism is about physical planning versus planning by policy. What emerges from a compressed 5-7 day community process is a design that contains authentic variety, adjusts existing codes, and creates viable, living communities.

http://www.i4sd.org/urban.htm

There was strong reaction against the modernist-engineering view, prevalent from the 1920s-60s, that cities were essentially closed systems that could be managed like other production entities. By the 1980s, alternative design approaches developed, and a critique of planning models that fail to understand the distinction between direction of urban design (a political process to lead and change), and the administration of the design process (management and technical control) was well articulated. Demands for greater public input into the decision-making processes echoed a more informed and engaged planning process that promoted issues of livability and green design.

As our attention turns to the contemporary period, we examine several threats to cities ranging from hybrid catastrophes and pandemics such as SARS, fire, drought, floods etc. to the impact of urbanization, environmental degradation, geopolitical instability in the form of global terrorism, and related large scale forces that are shaping cities in the 21st Century. The examples suggest that traditional planning and governance models are in danger of becoming redundant. As the scale shifts from the global to the more localized, issues of individual and community involvement in policy and design models aimed at improving neighbourhood security are examined using local examples. The importance of civil responsibility as a measure of social capital (civitas) is raised as a potential countervailing force to the increased dependence on a state controlled social safety net that is becoming increasingly frayed and stretched beyond capacity.

The examples also shed new light on old problems that have threatened cities for generations. Climate change and environmental degradation through air and water pollution are both global and local in impact. Despite significant progress in technology, scientific discovery, and economic wealth generation, the perennial problems of poverty, homelessness, social disorganization and their correlates appear as intractable now as they were in the past. And while combating terrorism is an immediate and present concern, the structural problems raised in the examples appear to be resistant to current planning, design and governance models, and in some cases, pose as big a threat to human security as any of the cataclysmic ones.

Our findings support the argument that the impact of environmental disasters ranging from large scale, naturally occurring events such as earthquakes and mudslides, to more localized catastrophes such as Chernobyl, Exxon Valdez, Walkerton, Ontario; or the recent power outages in the USA and Canada, demonstrates how inter-dependent, interactive, and fragile our systems and networks have become. Threats such as these expose the intrinsic vulnerabilities of city form and function.

Governments are re-deploying billions of dollars in response to terrorism, but will this produce more secure cities? There is evidence to suggest that national defense strategies and public policies that over emphasize the strategic importance of territorial boundaries are losing relevance as the means of assuring the security of the city.

How well equipped are our cities to deal with escalating threats and vulnerabilities? Are risk assessment methods and response mechanisms integrated? Are there critical disconnects in our policy and governance structures? Are the planning models sufficiently resilient? To what extent are individuals prepared to become involved to ensure responsible and responsive design and planning? Our goal is to use these questions as a heuristic to stimulate discussion toward the articulation of alternative approaches to city design where the ideals of human security can find expression in the secure city.

Part Two: Threats to Urban Security

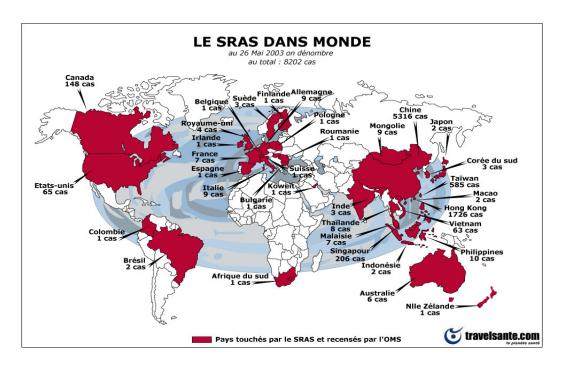
Pandemics

There is something significantly different about this period of history that allows remote and isolated problems to spread around the globe in unpredictable ways. vi

In February 2003, a young woman prepared for a journey that would take her on a flight from Beijing to Vancouver en route to Toronto to visit family and friends. After a few days, she would fly from Toronto to Florida for a relaxing cruise in the Caribbean.

The woman was completely unaware that she was a carrier of the corona virus commonly known as SARS. Her trip would have serious ramifications for several hundred people, as she became a member of a small group who created an incredible chain of events that would be felt in 24 countries and affect the health of more than 8,000 people. Wiii By the time the SARS crisis had abated in less than fifteen weeks, 774 people would die, hundreds of thousands were quarantined, many would lose their livelihood, and entire health care systems would be on the verge of paralysis. A siege mentality set in as cities lost the capability to contain the threat.

SARS began as a localized health problem that spread with alarming speed and relative ease to become a global phenomenon with significant economic, political, social and cultural impact. Despite the Global Outbreak Alert and Response Network, countries were ill prepared to deal with the outbreak of SARS that continues to be a threat to global health security.



Pandemics such as SARS are not just recent phenomena, but in the past, cities and regions were not as connected or inter-dependent. Today they are much more susceptible to external threats, while their capacity to anticipate and respond effectively is increasingly constrained. As countries around the world prepare for an outbreak of SARS in 2004, a new avian flu virus may prove instead to be the next major pandemic. This virus has already spread from chickens in Thailand and Vietnam to ducks in China, and epidemiologists and the World Health Organization fear that the virus will combine with an existing human flu to create an easily transmissible form that has a high mortality rate because humans lack a natural immunity.

There are separate considerations here. On the one hand, the "connectedness" of populations today creates ideal conditions for the spread of illness. On the other hand, so far, public health systems and medical technology have provided something of a barrier. There are still isolated cases of Plague in North America, but they don't spread. Had SARS occurred 80 years ago, it may have killed far more people, as the Spanish influenza of 1918 did. SARS was controlled – it is interesting to wonder how this happened, as compared for instance to HIV, which is uncontrollable because of its very nature, just as Plague was uncontrollable because of its nature 700 years ago. The deciding factor seems to be whether medical technology and the effectiveness of public health systems are enough of a bulwark in the case of each individual pathogen. In this respect, then, cities had the same kinds of health problems 80 and 700 (and no doubt 2000) years ago, when illness also seemed able to spread rapidly via travellers and animals from one population centre to another.

In 2003, prior to the SARS outbreak, 134 million travelers passed through airports in Hong Kong, Tokyo, Bangkok, Seattle and Vancouver. How well equipped are cities to cope with a pandemic that scientists predict is inevitable?^{xiii} In the aftermath of SARS, there has been little follow-up analysis into the effectiveness of our emergency preparedness systems and governance structures to respond to emergencies of this magnitude. What are we doing to become better prepared?^{xiv} Anecdotal evidence points to significant disconnects in the policy and planning responses among agencies with jurisdiction and responsibility to coordinate an integrated response. ^{xv}

Global Terrorism

Some events shatter the order of things — the routines and regularities of our lives that we rely upon for our sense of safety and our sense, most importantly, of who we are and where we are going. Some events change our perceptions forever. The world never looks the same again afterward. Suddenly, the reliable landmarks of life seem strange and distorted — recognizable, yet simultaneously weirdly unrecognizable.xvi



We have become the children of terrorism as fear and vulnerability pervade so many aspects of our daily routines. XVII We live with the knowledge that the probability of a terrorist attack is high, but we don't know when, where, or how the threat will directly affect us.

For most of its recent history, the United States believed it would never see a war waged on its own soil. September 11, 2001 changed everything when fanatics attacked two of the most recognizable symbols of urban global capitalism. People of forty-seven nationalities were killed in the World Trade Center. Barely a year later, the US had implemented National Security Presidential Directive 17, and Homeland Security Policy Directive 4, containing the essence of the "Bush Doctrine", the national security strategy that includes the "War on Terrorism" and the Patriot Act. The defense budget alone is currently estimated at USD \$400 billion annually, and depending upon the strategy chosen by the President from the options provided by The Council on Foreign Relations, this could grow by and additional \$100 to \$200 billion per year. **xviii** While some argue against the direction of this doctrine and call for a US foreign policy that is more closely aligned with international efforts to combat terrorism, the January 20th, 2004 State of the Union Address leaves no doubt as to the intended course: "*America will never seek a permission slip to defend the security of our country". **xix**

This goes beyond rhetoric. It has raised an important issue for many in Canada about the Charter of Rights and Freedoms now that landed immigrants are required to show an identification card if they want to enter the USA. Until the Patriot Act (and Canadian Security of Information Act), under the Charter, landed immigrants were afforded the same rights and privileges as citizens. By refusing to challenge the US on the unilateral imposition of border restrictions, Canada may have inadvertently reduced landed immigrants to second-class citizens. Critics also question the intrusiveness of the information being collected.*xx

The escalating war of attrition being waged against coalition forces by terrorist organizations vividly illustrates the capacity of networks of individuals who are neither

bound by nor confined to any one nation state, to undermine the way we live. They have dramatically influenced how we come to view the world beyond the security of our own institutions and conventions. This war is no longer something that happens elsewhere or to someone else.

Terrorist groups are developing global networks that permeate national boundaries with relative ease. Conflicts that were historically limited in place and effect have become global in scale and impact. **xi* But is the response appropriate? Where does it make sense to allocate scarce resources? Do we shore-up borders and airports but not ports? **xii* Critical installations need to be defended against terrorism, but will this be in lieu of fixing services and infrastructure to make them more resilient?

Making cities secure should be among the highest priorities. Currently however, it would appear that the intellectual capital, political rhetoric and discretionary money is going into missile defense and attempts to shore up porous borders at the expense of investment where it is most needed. One of the clearest examples of a political agenda being hijacked can be seen in the way several national governments have used the aftermath of the September 2001 terrorist attacks on selected cities in the USA, as a pretext to invade other countries and re-deploy billions of dollars into strategic national defense budgets while doing very little to empower cities to systematically address their vulnerabilities.

How do you prepare New York for another attack? Is it by increasing defense budgets by 7% to build more missiles in response to a 1% threat, but adding little to the budgets of cities to ensure the port facilities, water systems, power grids and critical support services are maintained and upgraded?

Across the continent, governments, institutions and agencies are being re-organized to be more responsive to external threats and to provide more integrated prevention. But the costs are enormous and the results ambiguous. In a recent example, the Department of Homeland Security issued a warning of an elevated threat of attack inside the USA in December 2003, and the country moved to a state of Orange Alert. This resulted in cities across North America increasing spending by billions of dollars as staff vacations were cancelled, surveillance was increased and security upgraded at strategic installations and symbolic landmarks. The cities bore the major brunt of a decision announced by a federal agency. Budgets were skewed, plans and priorities had to be altered, and the always contentious battle for scarce resources among different levels of government was brought into sharp relief as cities tried to figure out how to provide increased security.

Canada is not exempt. Our cities are at the forefront of the impact of threats and attacks, but they are ill equipped to respond effectively. There is limited redundancy in the infrastructure, support systems are too centralized, and risk assessment and prevention strategies are fragmented. The delicate balance between individual self-reliance and dependency is threatened when the power goes out, the water quality gets tainted, or the transportation system becomes paralyzed.

Urbanization: Coastal Cities on the Edge

At the beginning of this century, more than three billion people in the world were living in urban centres, a figure that will rise to five billion in less than 30 years. Experts agree that cities will have to cope with almost all of the population growth to come in the next two decades. In one of the most dramatic and largest human migrations of modern times, the majority of these people are moving in droves to coastal towns and cities, particularly in Asia and Africa xxiii



Analysts point to the explosion in global trade (a five-fold increase from 1950-1990), the internationalization of finance, production, and services, technological transformations, abundant cheap labour, and reduced boundaries as forces contributing to the phenomenal growth we are experiencing. In many cases, a coastal location adds a significant competitive and marketing advantage.

While this level of growth generates massive economic benefit to the regions, it is not without significant cost – in terms of urban sprawl, waste management, resource depletion, pollution etc. The problems are of scale as well as scope, and test the capacity of fragile ecosystems to withstand the onslaught. While demographic and environmental data suggest that the pace of change is most dramatic in the tropics, we are also witness to the burgeoning growth of megacities – cities of more than 10 million inhabitants. xxiv A recent report from the UN Population Division notes that 14 of the world's 17 megacities are located in coastal areas, 11 of them in Asia, with Tianjin, Istanbul, Lagos and Cairo expected to become members shortly. These figures are daunting, but tell only one part of the story. Upwards of 40 percent of the "second-tier" cities, with populations ranging from

1–10 million, are also located on or near coastlines. The threat to human security is significant.

The damage to coastal ecosystems from urban regions that cannot contain development or cope with the waste and pollution they create raises significant safety and security problems. A recent environmental study graphically illustrates the growing tensions that exist as urbanization and environmental forces collide:

Many coastal cities are growing rapidly across river deltas, draining wetlands, and building on floodplains, cutting coastal forests, and increasing sediment loads into estuaries. Sprawling urbanization across watersheds – which can include areas of hundreds of miles inland – harms streams, creeks, and rivers that flow into coastal waters…by virtually every measure of ecosystem health, the streams, creeks, marshes, and rivers surrounded by hardened watersheds are less diverse, less stable, and less productive. xxv

Natural catastrophes such as hurricanes, fires, floods etc. are devastating when they come into contact with populated areas. The problems are compounded in squatter settlements and unregulated developments in the poorest communities where structures are unstable; there is inadequate infrastructure, and levels of overcrowding compound the devastation and human suffering. Similar problems occur in floodplains where unregulated and even sanctioned settlements can be eradicated by flooding or rain induced mudslides. Last summer in British Columbia, forest fires destroyed hundreds of new houses that were built to accommodate the surge in population growth in the interior of the province. The epitome of individual security - the home - wiped out in a matter of minutes as natural and human forces collide.

Environmental Degradation



Curt Carnemark / World Bank

Many of air pollution's health effects, such as bronchitis, tightness in the chest, and wheezing, are acute or short term, and can be reversed if air pollution exposures decline. Other effects appear to be chronic, such as lung cancer and cardiopulmonary disease. As dangerous as polluted outdoor air can be to health, indoor air pollution actually poses a greater health risk on a global level. By far the greatest threat of indoor pollution occurs in the developing countries, where some 3.5 billion people --mostly in rural areas, but also in many cities --continue to rely on traditional fuels for cooking and heating.

http://www.cnie.org/pop/pai/water-21.html

There is a clear and reflexive relationship between human society and the environment. XXVI Air pollution is getting worse in most large cities, particularly in the developing world, a situation driven by population growth, industrialization, and increased vehicle use. Despite pollution control effects, air quality in megacities such as Beijing, Delhi, Jakarta, and Mexico City is approaching the same dangerous levels that were recorded in London in the 1950s. Some estimates suggest that as many as 1.4 billion urban residents breathe air that exceeds the WHO air guidelines. XXVIII The health consequences of exposure to dirty air are considerable. On a global basis, estimates of mortality due to outdoor air pollution run from around 200,000 to 570,000 annually.

Deteriorating water quality is also a particular threat. In developing countries where hundreds of millions of people lack access to clean drinking water, the vast majority of sewage is discharged into surface waters without wastewater treatment. People often have to compete for access to polluted water to satisfy their drinking needs. Access to potable water has become a hotly contested issue of human rights. XXIX

Closer to home, we can see these complex and reflexive relationships between human and environmental activity in recent remarks by Gordon Campbell, Premier of British Columbia, to delegates at the Union of British Columbia Municipalities annual convention:

We've had 9/11, and the War in Iraq, and the falling tourism market. We've had the softwood lumber dispute and the rising Canadian dollar. We've discovered a whole new set of initials since last year's convention here. How many people had ever heard of SARS, last year? It wasn't even in our minds. And although we knew about BSE, we sure didn't think it was going to touch us. We've got drought in the south and floods in the north. The pine beetles are ravishing 4 million hectares of land through the north and the Interior, all the way down to the Kootenays. We've had the worst forest fire season in the history of the province.

The security of the individual and the security of the community are intrinsically linked to the services and systems that support them.



Vulnerabilities in the Urban System

Social reforms of the 19th Century resulted in comprehensive public health systems that enabled societies to prevent the spread of disease and ensure health protection for the majority of citizens. As these systems evolved in scope and complexity, they became increasingly demanding on the public purse and susceptible to the arguments of rational planning in favour of centralization, spatial concentration and administrative central planning. One of the unintended consequences of this trend is the potential for systemic paralysis and the immobilization of core emergency response measures if centralized systems are cut-off or become quarantined.

Thomas Homer-Dixon argues persuasively that the structure of the city is becoming increasingly dependent on highly centralized networks and infrastructure. The growing complexity and interdependence of technological systems makes it more likely that damage to one system component will radiate outwards to other components. We can see such knock-on effects when infrastructure systems are compromised. At the same time, much of the impetus for community-based participation in the design of urban security has been eroded or ceded to top-down, centralized governance.

While the "imperial outreach" of the city has created highly integrated networks and infrastructure, it has also produced a new set of vulnerabilities — one break in the chain and the entire system can collapse or be paralyzed. Power grids, pipelines, water supplies, financial nodes and critical emergency response services are linked together in such a way that an attack on one of them (by natural or human agency) can have significant cascading effects on the others. Our growing dependence on computer networks increases the risk, and the probability, of direct attack on this critical infrastructure.



From the perspective of the secure city, a pressing design issue becomes: decentralized models support the capacity for self-management, built-in redundancy and adaptable systems. Why are we not incorporating more of these models into our city planning?

The examples cited above identify threats to urban security at the global scale that are, to a greater or lesser extent, being tackled by public policy interventions. As the scale shifts to the local community and individual scales, there is a paradox: on one hand is a public perception that threats to our security are increasing as urban life gets more complex and people feel more alienated. On the other hand is a view from the professional ranks that these issues are being addressed through land use planning and design solutions. The truth lies in-between. Individual perceptions and fears are being fuelled by news media that

seems to have an almost insatiable appetite for sensational reporting on criminal activities linked to gangs and organized crime, and a more recent emphasis on ethnic violence. Drive-by shootings, the infiltration of public spaces by drug traffickers and the concomitant escalation of personal and property crimes seems to take up more and more space in the local and national news. Locally, the image of Vancouver as ranking consistently among the world's most desirable or livable cities appears in stark contrast to a growing public perception that neighbourhoods are under siege, the streets are not safe, and people are being forced to resort to more and sophisticated methods of defending their personal space and private property. This is reflected in a renewed interest in the design of defensible space, a term used by Jane Jacobs and Oscar Newman among others to indicate a link between human interactions, urban design and crime prevention. Recent research and planning guidelines now emphasize a hierarchy of spaces, from public to private that can be created through barriers such as walls, fences, gates, lighting, vegetation, and surveillance, as well as increased levels of community involvement that can help to create social ties and sustain a sense of community.

Community Safety

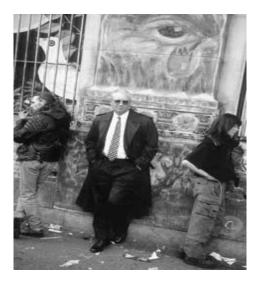
When the United Nations declared 1987 as the International Year of Shelter for the Homeless, there was extensive examination of the causes of homelessness across Canada. National and regional conferences brought together community advocates, officials from every level of government, media, and a broad cross-section of ordinary men and women whose lives had been significantly altered by one or more root cause (poverty, unemployment, mental illness, lack of affordable housing, crime, drug abuse, etc.). Several conclusions emerged from these meetings: homelessness was not restricted to one sector of Canadian society; many innovative ideas and creative solutions were being proposed to address the underlying conditions and alleviate the problems; and there was some recognition that homelessness is a collective responsibility that demands a collective response.

Seventeen years later, the Vancouver Sun newspaper is running a 7-part series on homelessness, and the CBC is airing a weeklong series on radio and television. The main conclusion: the problem is getting worse and there are no quick fix solutions. In January 2004, the Mayor of Vancouver convened a community forum to discuss issues of neighbourhood safety and livability. It drew representation from a wide range of community advocacy groups, business, service providers, homeless, as well as senior members of the Vancouver Police Department. The forum was prompted by pressure being put on the City by residents, businesses, social agencies and other levels of government to respond to a perceived increase in "quality-of-life" crimes in Vancouver (aggressive panhandling, open drug use and sales, squatting on public land, and property crimes). **Example 1.5 **Community**

A briefing paper circulated by the City at the forum stated:

Causes include housing cost increases that outpace income levels, putting more people at risk of homelessness. Changing rules for government income assistance leave many people with less money or no money from that source. The economic and social effects of drug and alcohol use and addiction continue to take their toll on people, families and neighbourhoods. More complex personal, social and cultural factors also play a part for many individuals, and they often have difficulty finding the right combination of treatment to help them overcome these barriers. XXXIIII

Source: Lincoln Clarkes



The challenge, according to Mayor Campbell, is to find the appropriate mix of enforcement, cooperative action, treatment and assistance, "a challenge that has been taken up by cities from Toronto to San Francisco, Atlanta to Winnipeg". The Mayor is candid: "The solutions are as complex as the causes".

The Neighbourhood Forum on Livability and Safety will follow a precedent that the City used to develop an integrated strategy for dealing with drug problems that were widely acknowledged to be getting out of control in Vancouver's downtown and eastside communities. The Mayor intends to set up a caucus of Vancouver's politicians from all levels of government to collectively address issues of crime, poverty and safety. This parallels the much-publicized 4 Pillars approach to drug problems in Vancouver that was created through *The Vancouver Agreement* to bring together municipal, regional, provincial and federal governments, community agencies, concerned citizens, the media, and a broad range of support groups as well as critics. *xxxiv*

Landscapes of Fear

One discussion thread in the forum has a clear link to human and urban security. According to the Mayor and others, problems linked to the use of crystal methamphetamines are at crisis levels, and will eclipse all the previous drug problems such as crack cocaine and heroin that have been vividly illustrated in recent documentaries made about the landscape of despair that is becoming Vancouver's Downtown Eastside. **xxv** Crystal-meth produces a vicious spiral. Users are often afraid because they are living on the street. They don't want to sleep because this makes them vulnerable to attack. The drug helps them stay awake but the side effects are toxic. To avoid the downside, they do whatever is necessary to maintain their habit. The cycle perpetuates around one of the most addictive and destructive street drugs on the market.

At the same time, communities feel under siege because of what is perceived to be a dramatic increase in crime, drug abuse, and poverty. Areas that are in transition with boarded up buildings, deteriorating streetscapes and a lack of housing and job opportunities

are perceived to be dangerous and a haven for lawlessness. Residents are afraid to move freely throughout the city. There is a sense (real or perceived), of a growing divide between the haves and have-nots that can be traced in part to the unintended consequences of public policies and planning models that do not address the inter-dependencies among the problems. Homelessness, poverty, unemployment, lack of affordable housing, and inadequate services rarely occur in isolation.

There is a growing clamour for stronger police presence and aggressive enforcement of city by-laws to "clean up the streets". However, while it is widely acknowledged that the enforcement component of the 4 Pillars Drug Strategy has had an impact in certain parts of the city, these problems will not be resolved through enforcement alone, or in the absence of the other pillars: treatment, prevention and harm reduction strategies.

Making cities secure depends upon our capacity to deal with the threats facing them, which in turn depends upon the capability of the planning, design and policy models we employ to cope with the forces that are shaping the cities and causing the threats. The Vancouver Agreement and subsequent 4 Pillars Drug Strategy raise interesting questions for our focus on a secure city agenda, suggesting promising areas for investigation into the dynamic interplay between root causes and sustainable solutions.



http://www.vancouveragreement.ca/Agreement.htm

Governments generally allocate budgets in ways that tend to separate issues rather than address their connectedness. Constitutional and jurisdictional boundaries make it difficult to create a seamless web of resources for issues such as homelessness that cut across traditional areas of policy demarcation (employment, health, housing, education, social services etc.). Cities are at the forefront of threats to human security. We see it in the form of terrorist attacks, but what about more systemically, through the devastation brought about by the destruction associated with drug trafficking and crime? When a cartel can generate \$50 million or more in profit from the distribution of illicit drugs, where is the logic in allocating limited resources to national defense strategies and ignoring domestic, city-based problems that are destroying the fabric of communities in every region of the world?

Part Three: A Secure City Agenda

We share a planet, a biosphere, a technical arsenal and a social fabric... The security of one person, one community or one nation depends on the decisions of many others.

Thirty years ago, Vancouver was a very different city - architecturally, environmentally, socially, and culturally – in a very different world. Canada was at the high point of three decades of post-war growth that was concentrated largely in the urban areas. This period also represents the high water mark for intervention by central government in the society and economy. The result was high levels of government spending, relatively expansive regional government programs, and the apparatus of the state oriented toward preserving quality of life and income levels across Canada.

Habitat '76 and the World Urban Forum Thirty years ago the concern was about the dramatic growth in the world's population and the corresponding impact on the human environment (Stockholm '72) and human settlements (Vancouver '76). Out of this came a focus on issues of urbanization and sustainability that would influence models of planning, design and public policy for more than three decades, and lay the foundations for significant advances in knowledge and understanding about how to improve approaches to building and managing human settlements.



Habitat '76 has become a landmark, marking a time when Vancouver and Canada came of age within the UN and among the international community.

Canada has played a leading role in promoting these issues onto the global agenda and remains committed to making substantive contributions to the dialogue on how best to create and maintain urban sustainability.

Twenty years later, the combination of cyclical and structural effects had forced a retreat. National programs initiated or supported by central government were drastically reduced, downloading of costs from higher to lower levels of government were common, fuelled by a slowdown in economic growth and a corresponding reduction in investment in the infrastructure and social safety net. From the mid-1990s, cities went through painful and severe transitions as the state lost the capacity to intervene in terms of providing transfers, income redistribution or stimulating regional economic development. Cities were forced to become the agents of their own destiny. *xxxvi*

In the aftermath of 9/11 concerns are being raised about the role of the city in providing security for individuals, for communities, and for critical services and strategic installations. There is also concern about the resilience of our infrastructure and the

capabilities of planning and governance frameworks to assess and respond to these types of threat. In preparation for the 2006 World Urban Forum, an ambitious research agenda is proposed that goes beyond the usual focus on national defense policy, law enforcement, and strategies for protecting private property, to include civil responsibility as a means of increasing social capital, resilient urban systems as a way to build capacity, and alternative policy and planning models that can be responsive to 21st Century urban concerns.

The analytical framework for the research agenda is derived from John Cockell's work in which he identifies four basic parameters for the conduct of peace building initiatives:

- focus on root causes
- pay attention to differences in local conditions
- seek sustainable and durable results
- mobilize local actors and resources

Placed in the context of a secure city agenda, Cockell's framework is helpful in grounding the research focus onto root causes and practical issues that are amenable to "durable and sustainable results". The research matrix shown below is also intended to focus on issues over which we can exert control, in contrast to what Malcolm Gladwell recently described as "learned helplessness", a syndrome he describes as the insatiable passion for control and safety brought on by a preoccupation that we are powerless to influence our own destiny:

It is irrational, neurotic, panic-stricken behaviour, a wild over-reaction to a tiny uncontrollable risk while we recklessly disregard risks we could control and which kill and destroy lives in large numbers everyday -- air and water pollution, tainted food from corrupt and under regulated meat packers, drugs in sport and airplane cockpits, drunk drivers, kids with guns, corporate frauds, a prison system that incarcerates the mentally ill and encourages criminal recidivism -- and on and on and on. Unfortunately, it is also in the best interest of the media and governments to focus on the uncontrollable risks, and to pander to public fear and fascination with them. They're more sensational, more visceral. And since there's really nothing that can be done about them, you can do anything, or nothing, in response to them, and not be held accountable. or responsible. The risks we could control, on the other hand, are mundane, dayto-day, hard and expensive but not impossible to remedy, would if remedied save thousands of lives, and is the responsibility of all of us. Viewers, voters, and consumers don't like to think about such things. Messy. Complicated. Nagging. Costly. And the media, and politicians, are glad to oblige. xxxvii

Secure City Agenda: analytical framework

This framework will build on existing case examples and on-going research initiatives as well as produce original work in Greater Vancouver that will have global applicability. Capitalizing on the 30+ cities network and related research endeavours of the International Centre for Sustainable Cities, the goal is to develop proof of concept locally as a basis for demonstrating application internationally. This is in keeping with Canada's leadership role in providing effective responses to pressing and complex international problems.

Research Focus	Scale	Process	Examples	Theme	Outcomes
ADAPTIVE SECURITY Seek durable and sustainable results - resilience - redundancy	Services + Systems	Design + Planning	Cities ^{PLUS} Green Policy + Design	Resilient	Building Capacity alternative design models
PREVENTIVE SECURITY Pay attention to differences in local conditions - risk assessment - adaptability	Community	Planning + Policy	Vancouver Agreement Sustainable Environmental practices e.g. food security	Responsive	Improving Security new models for policy + planning
HUMAN SECURITY Mobilize local actors and resources - civic responsibility - community-based involvement	Individual	Individual Empowerment + Community Involvement	Civitas + Emilio Romagna	Responsible	Increasing Social Capital encouraging public participation

Adaptive Security

The Government of Canada currently spends \$2.5 billion annually to build and maintain infrastructure, with provinces contributing an additional \$4 billion, and local governments adding \$7.7 billion. A recent study by the Canadian Institute of Chartered Accountants and the Public Sector Accounting Board suggests that an additional \$40 billion is required to bring our systems up to an acceptable standard. This is impractical. The money is not available to invest, but perhaps more importantly, our planning models and governance structures are not adequate to ensure the security of the infrastructure. They are outdated

and reflect what Moffatt describes as "supply side" or "end of pipe" approaches. **xxviii His critique is part of a substantive case study of long-term sustainable urban systems planning in Greater Vancouver, entitled Cities** Planning for Long-term Sustainability.

Cities PLUS identifies 3 integrated themes that offer a vision of the desired future of Greater Vancouver. These themes: sustainability, resilience and livability are dynamic and interconnected, representing the outcome of a series of key principles: interdependence, participation, connectivity, accountability, stewardship, equity, efficiency, diversity, adaptability, appropriateness, leadership, precaution, durability and compactness. These have relevance for a secure city agenda and resonate with the core research themes of Adaptive Security, Preventive Security and Human Security.



Moffatt's analysis of resilience as a way of managing uncertainty, coping with surprise and adapting to increasing change has significant potential to inform the research agenda on Adaptive Security and will be explored for potential synergy.

Resilience is about enhancing the personal and collective capacity of individuals and institutions to respond to and influence the course of economic, social and environmental change even in the face of the unexpected. Key principles which give substance to this theme are: adaptability, robustness, reliability, responsiveness, diversity and precaution. xxxix

Cities PLUS concepts of Resilience and Adaptive Management suggest considerable promise as practical tools that may be of use in defining place-specific as well as generic attributes of Adaptive Security. Their analysis is useful as an operational framework as it connects goals and strategies to feedback and accountability mechanisms.

We intend to build on the excellence in Cities PLUS by demonstrating how concepts such as resilience and redundancy can be applied to the planning and design of infrastructure and support services systems in regions like Greater Vancouver to build in greater capacity as a way to withstand catastrophic events. Adaptive Security will draw from research and best practices that continue to inform Cities PLUS and Green design and policy initiatives that are having increasing impact on the region.



http://www.busby.ca www.ntt.co.jp/kankyo/e/ 2000report/2/224.html

It is anticipated that leading proponents of Green Building Design will play a significant role in Charrettes and creative planning forums that will be set up to explore practical and durable outcomes of the research agenda. Another infusion of intellectual capital and practical experience to guide the research on Adaptive Security will be explored through the ideas and participation of Thomas Homer-Dixon and colleagues.

Preventive Security

It is difficult to ascertain the current state of security in Greater Vancouver as there is no public document that identifies the prevalent threats, or how vulnerable the human and physical assets of the region are. There is no consensus on a comprehensive set of benchmarks for an integrated risk-assessment. The information that does exist tends to examine issues in discreet thematic areas such as threats to communications systems, buildings, or the potential impact on economic conditions. Noticeably absent is any substantive consideration of the potential impact on the collective psyche of the region in the aftermath of a major catastrophic event. This is an interesting line of inquiry that warrants closer scrutiny in Greater Vancouver, particularly as it links to the issues of resilience, capacity building and the adaptive security research.

The research focus in this section centres on developing an integrated approach to risk assessment that can anticipate and respond to threats to physical structures and systems (energy sector, financial sector, heath services and emergency planning, food distribution and storage, governance (ports, borders etc), telecommunications, transportation, utility systems); social structures (health, education, spiritual, cooperative, neighbourhood support, social support services as well as accountability, civil liberties, enforcement, etc.); and threats to economic structures (regulatory and financial, manufacturing/production,

distribution and exchange, secure information/data, and media which, contrary to popular misconception, is not a public utility). This approach to risk assessment will allow for differentiation between domestic and external threats.

Vancouver's Downtown Eastside was once a vibrant commercial and entertainment district in the economic heart of the city. Over the past 20 to 30 years, economic decline, business closures, a large open market in illegal drugs, poverty and homelessness undermined the vitality of this historic community.

http://www.vancouveragreement.ca/Agreement.htm



In 1997, the region's health authority declared that rising HIV infection rates among intravenous drug users constituted a public health crisis. Government leaders jointly initiated the Vancouver Agreement to ensure a coordinated, effective response. Signed March 9, 2000, the Vancouver Agreement is an urban development agreement among the governments of Canada, British Columbia and the City of Vancouver. The agreement commits governments to work together, within their jurisdictions and mandates, and with communities in Vancouver, to develop and implement a coordinated strategy to promote and support sustainable economic, social and community development. The first focus of the Vancouver Agreement is Vancouver's Downtown Eastside.

This type of investigation requires a broad range of intelligence data and information to understand the nature and complexity of the threats to the region, and consequently, increasingly sophisticated tools and models to assess the risks and determine the appropriate responses. Cities PLUS called for the creation of small, specialized institutions with "all-source information systems that can evaluate the full gamut of national and human security threats, vulnerabilities and assessment of risk". While this idea has merit the capacity for this type of analysis currently exists within the research community associated with the Liu Institute for Global Issues at the University of British Columbia.

The Liu Institute was launched on the premise that scholars and practitioners working together in collaborative interdisciplinary fashion would be able to produce fresh, coherent, policy-relevant studies of value to the governance function. Current research interests at the Liu Institute link to the Harvard Program on Human Security, Global Environmental Change and Human Security at the University of California at Irvine, The MacArthur Program on Global Security and Sustainability, and the Woodrow Wilson International Centre for Scholars which supports the Environmental Change and Security Project. The potential for a research agenda to examine responsive models for preventive security is significant.

A secondary focus of the research involves a central issue of governance. Using the Vancouver Agreement and 4 Pillars Drug Strategy as a public policy benchmark, the

research will explore the potential of this type of coordinated strategy by all levels of government, the private sector and community organizations to respond to security issues that are in scale and magnitude considerably larger. The idea is to bring these two areas of research together into an integrated approach to risk assessment and policy response that will be sufficiently comprehensive to address the threats to the region.

Human Security

The concept of Human Security came to international attention after a 1994 report by The United Nations Development Project. This was the first systematic effort to create a new paradigm of sustainable human development that went beyond issues of national security and human rights to include an explicit focus on the lives of people and communities.

The concept has been refined over the last decade from a focus on military, diplomatic and political issues to include concerns about individual security, public safety, human rights and freedom. Recent work by the International Federation of University Women has shown that human security is translated differently in various societies according to the level of development, democratic orientation, ethics, social attitudes toward gender, and differences in ethnic group, opinions and beliefs.



Central to the concept of human security is the idea of balance between needs and resources, rights and duties, and order and tolerance. A lack of balance leads to problems in different areas:

- unbalanced economic globalization leads to economic crisis and poverty
- unbalanced use of natural resources results in destruction of the environment, pollution and famine
- unbalanced provision of basic health services results in the spread of pandemics
- unbalanced security measures, coupled with

declining civic responsibility, results in urban violence and, ultimately, terrorism.xl

Canada has taken a clear and internationally progressive position on human security issues, primarily through the efforts and leadership of Lloyd Axworthy. As Minister of Foreign Affairs, he was responsible for creating a \$50 million, 5-year commitment to Canada's long-standing foreign policy objectives: promoting human rights, alleviating humanitarian crises, supporting international peacekeeping and encouraging disarmament. Axworthy has continued to promote a strong vision of human security as Director of the Liu Institute for Global Issues, most recently with a compelling treatise informed by personal and professional experiences in which he provides a comprehensive definition of human security with which few could quarrel:

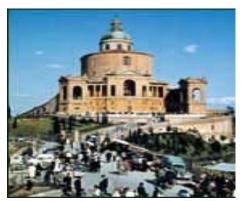
It is in essence, an effort to construct a global society where the safety of the individual is at the centre of international priorities and a motivating force for

international action: where international human standards and the rule of law are advanced and woven into a coherent web protecting the individual; where those who violate these standards are held fully accountable; and where our global, regional and bilateral institutions – present and future – are built and equipped to enhance and enforce these standards^{xlii}.

The challenge for the research team is to demonstrate how the essential dimensions of this global society can be translated into a secure city agenda.

Two areas of focus are proposed for the research. The first involves the application of Axworthy's definition of Human Security in Greater Vancouver to assess the degree to which the regional and bi-lateral institutions are woven into a coherent web protecting the individual. The results of this analysis have a direct tie-in to the adaptive and preventive security research agenda.

The second focus will examine specific and practical ways to increase the social capital of the region through improved levels of civil responsibility and community-based participation. The research will be informed by an examination of best practices that have produced resounding success in the community of Emilia Romagna in the Po Valley region of northern Italy.



What they have created in Emilia Romagna is a diversified "cluster" model where small firms operate in cooperative networks as the key to the commercial economy.

Principles of reciprocity are applied, not only as the medium of mutual self-interest, but with gratitude, empathy, consideration, liking, fairness and a sense of community that are intrinsically valuable and valued by all. This co-op model has seen the proliferation of small firms, self-employed artisans (artigianati) as the natural institutional vehicle to practice reciprocal arrangements. Co-ops are the vehicle for delivering "relational goods" - a gamut of services offered to people that are characterized by the exchange of human relations. With relational goods, the quality of the personal interaction lies at the core of what is exchanged between the provider and the recipient, and can be optimally produced only by the provider and the recipient together.

http://www.commonground.ca/iss/0306143/coop.shtml

The success of the Emilian model challenges the political dualisms prevalent in North America where participatory democracy is diminishing as more and more control over providing a social safety net is ceded to government. The interaction between political, economic and social structures in Emilia Romagna warrant investigation for potential application to our region and will be explored in the research.

In Conclusion

The Government of Canada has recognized in the most recent Speech from the Throne a pressing need for a national urban agenda, although at present, the debate is bogged down on issues of infrastructure improvement and related calls to restructure the taxation policies that would provide cities with more resources and political control. There are several inherent problems with this policy orientation if the proposed focus neglects or is not grounded in a secure city agenda. Either unintended in consequences may be created because the policies do not respond to the capacity building issues related to resilience, adaptability and redundancy that have been identified previously, or else the policies themselves may compound existing problems because they miss their intended mark. For example, public policy initiatives designed to improve border security that limit individual freedoms or suppress human rights at the expense of strengthening the multicultural foundation of our intrinsically ethnic urban areas is counter productive. Similarly, national security policies emphasizing missile defense systems at the expense of creating secure cities is counter intuitive given that most of the threats are targeted toward the cities.

A new urban agenda for Canada is a welcome initiative, but it will be most effective if it is set within an articulated and supported security matrix.

We have a unique opportunity to use our cities as a crucible for creating peace, liberty and security. Cities should be the locus for more integrated precaution, prevention and risk assessment. Preventive, Adaptive and Human Security provide direction for the stewardship of scarce resources to build capacity at the community level and enhance livability. The research challenge is to create effective models that respond to the threats and focus resources to support where they need them. This will require a network of local, national and international expertise to push the frontiers of our traditional planning paradigms, and design new pathways that can be shared with the world.

We invite your input. liu.institute@ubc.ca

End Notes

Severe acute respiratory syndrome (SARS) is a viral respiratory illness caused by a corona virus. SARS was first reported in Asia in February 2003 and spread to over 24 countries over the next few months including North America, South America, Europe, and Asia.

Fear induced by media reporting destabilized many cities, while at the same time, fear was also heightened by the suppression of information and denial of events, particularly in China, during the early stages of the spread of the virus. People were afraid to congregate outside their dwellings. In China, many were told to stay home from work until further notice; university students were quarantined en masse; in Ontario and British Columbia, vulnerable groups including some elderly were not allowed visitors and were discouraged from leaving their retirement homes; anyone visiting the major airports could watch as passengers and officials, wearing surgical masks, mounted a vanguard defense to monitor and curtail the spread of the virus.

Peter Marcuse Walls of Fear and Walls of Support. 1997. Princeton Architectural Press. Nan Ellin, Editor. According to Marcuse, "Walls today represent power, but they also represent isolation; security, but at the same time fear.

ⁱⁱ UN Conference on Human Settlements (Habitat II): Declaration on Cities and Other Human Settlements in the New Millennium. The UN estimates that close to one billion urban dwellers live in life-threatening conditions of deprivation and environmental degradation. This number is expected to double by 2025.

iii In this paper, we adopt the McArthur Foundation's definition of globalization – the rapid spread of technologies, people, money, and information in ways that do not conform to previous political, environmental or cultural boundaries. The US Council on Foreign Relations also uses a broad definition which has merit for our discussion: Globalization refers to the increasingly close economic ties among countries. These ties include trade, travel, immigration, shared information sent over the internet, increased investment in foreign countries, and an accelerated pace of technological advance. Globalization is also closely tied to corporations that that operate in many countries at once, as well as to international financial institutions such as the IMF and World Bank.

This section reflects the work of, and pays tribute to, Walter G. Hardwick. *Responding To The 1960s: Designing Adaptable Communities in Vancouver*. Environment and Behaviour, vol.26, No. 3, 1994, 338-62. Sage Publications.

^v (http://www.canoe.ca/CNEWS/Canada/2003/08/16/162203-cp.html)

^{vi} Fraser, E. Mabee, W. and Slaymaker, O. 2003. Mutual dependence, mutual vulnerability: the reflexive relation between society and the environment. Global Environmental Change, 13, 137-44.

vii http://www.tourism.gov.on.ca/english/tourdiv/research/studies/pkf execsum1 june2003 e.pdf

viii http://www.citymayors.com/features/largest cities.html

ix http://www.tourism.gov.on.ca/english/tourdiv/research/studies/pkf execsum1 june2003 e.pdf

^x http://www.who.int/csr/outbreaknetwork/en/

xi http://www.tourism.gov.on.ca/english/tourdiv/research/studies/pkf execsum1 june2003 e.pdf

The WHO placed a non-essential travel advisory on Toronto that had a devastating impact on the economy, showing up most dramatically in the tourism and hospitality industries. Ontario alone suffered an 18.5% decline in occupied room nights in April '03, compared to April 2002, and an 8.5% reduction in average daily rate. According to the Ontario Ministry of Tourism and Recreation and Canadian Tourism Commission due to the SARS outbreak, Canada's 19 major accommodation markets reported an estimated 11,500 room nights cancelled in early 2003, which equates to an estimated \$1.3 Million in lost room revenue.

- xii Vancouver Sun. Thursday January 29, 2004. A20. "Bird flu is a wake-up alarm for world health officials.
- Health Canada and the World Health Organization say there is presently no vaccine to handle this type of emergency, and that it will take 4-6 months to produce one for the strain of virus currently being analyzed. Stephen Hume, writing in the Vancouver Sun newspaper notes that if a widespread pandemic were to happen in Canada, at least one third of the population could become sick in the first wave, which would last 6-8 weeks.
- The Influenza Pandemic Preparedness Committee is about to release a 300-page plan to get Canada ready for a major pandemic, but we have not seen this report and cannot tell if this will provide the type of integrated risk assessment we believe is necessary to respond to this type of threat to urban security.
- In the scenario, a death from a virus in China quickly spreads to Canada through an international conference at a large Ontario city. The emergency response teams very quickly had to contend with 27,000 casualties of whom 500 required immediate hospitalization and 200 were dying. What were normally mundane problems very quickly became critical and almost paralyze the system: "As care providers became ill, managers also had to deal with a 40% absentee rate at hospitals, long-term care facilities, community health centres and among first response teams. Lab tests slowed to a crawl as technicians were overwhelmed with samples. Bed shortages and insufficient ventilators meant that deaths began to rise from secondary infections. Doctors became too busy to sign death certificates, but morticians refused to move corpses without them. As schools and daycare centres closed, essential service providers suddenly were faced with unexpected child care difficulties while being required to work overtime in the middle of a raging epidemic.
- xvi Dixon, Thomas-Homer. *Now Comes the Real Danger*, Toronto Globe and Mail, September 12 2001.
- According to the US Council on Foreign Relations, terrorism has 4 main characteristics: it is premeditated; it is political; it is aimed at civilians; and it is carried out by sub-national groups.
- xviii A New National Security Strategy in an Age of Terrorists, Tyrants and Weapons of Mass Destruction. Three options Presented as Presidential Speeches. Lawrence J. Korb, Project Director, Council on Foreign Relations. The options: US Dominance and Preventive Action; A More Stable World with US Power for deterrence and Containment; A Cooperative World Order).

I know that some people question if America is really in a war at all. They view terrorism more as a crime, a problem to be solved mainly with law enforcement and indictments. After the World Trade Centre was first attacked in 1993, some of the guilty were indicted and tried and convicted, and sent to prison. But the matter was not settled. The terrorists were still training and plotting in other nations, and drawing up more ambitious plans. After the chaos and carnage of September the 11th, it is not enough to serve our enemies with legal papers. The terrorists and their supporters declared war on the United States, and war is what they got. From the beginning, America has sought international support for our operations in Afghanistan and Iraq, and we have gained much support. There is a difference, however, between leading a coalition of many nations, and submitting to the objections of a few. America will never seek a permission slip to defend the security of our country.

A letter by the Mayor of the City of Santa Barbara, California to members of the US Congress eloquently expresses concerns raised by many regarding the role of the city in protecting civil liberties in light of the Patriot Act and powers granted to the department of Homeland Security. Communities across the nation are concerned that the Homeland Security Act violates the fundamental principles of open governance by exempting the Homeland security Department from the disclosure requirements of the Freedom of Information Act and the Sunshine Act, thereby drastically limiting the agency's responsibility to answer public questions and concerns. http://www.secure.ci.santabarbara.ca.us/departments/mayor_and_council/internet_postings/letters/blum_-_patriot_act_to_capps.pdf

^{xxi} Prior to 1990, most terrorist groups limited the scope and scale of their attacks in part because they feared that too much violence might backfire, and also, that they could lose valuable international funding support.

xxii http://www.dhs.gov/dhspublic/interapp/press_release/press_release_0316.xml At the time of writing, Tom Ridge, chief of Homeland Security announced that the US would spend USD\$179 million for security planning and projects to improve dockside and perimeter security. Ridge noted, "[Homeland Security] is committed to further securing our nation's highways, mass transit systems, railways, waterways and pipelines, each of which is critical to ensuring the freedom of mobility and economic growth."

http://ehpnet1.niehs.nih.gov/members/2002/110-11/focus.html

The paper notes that in contrast to the rapid growth in coastal cities in Asia and Africa, the percentage of people living in cities in North America, South America, Europe and Japan is relatively stable at 75-85%.

xxiv http://www.guardian.co.uk/print/0,3858,4777794-107025,00.html

Peter Beaumont writing for The Observer reviews the trend toward megacities through data and images released in the recent edition of the Times Atlas. Two excerpts are worth repeating: "But the megacities are not the only major human impact noted by the Atlas. There has also been a catastrophic impact on the environment. The Atlas authors estimate that 90,000 square kilometers (35,500 sq. miles) of forest are being lost each year, the equivalent, since the last edition of the Atlas in 1999, of an area the size of the British

xix http://www.whitehouse.gov/news/releases/2004/01/20040120-7.html

Isles". "Perhaps the most compelling evidence of the global climate change has come not between editions of the Atlas but during the preparation of the present volume when the cartographers had to redraw the coastline of Antarctica after the Larsen ice shelf, which is the size of Luxembourg, disintegrated last year".

xxv http://ehpnet1.niehs.nih.gov/members/2002/110-11/focus.html

In February 2002, the Stakeholder Forum for Our Common Future, formerly the UN Environment Development Forum, disseminated Environmental Briefing 3 which described regional and coastal trends around the world. The report pointed to the loss of coral reefs as an important leading indicator of environmental crisis, producing statistics from the main locations of coral reefs that paint a horrific picture of destruction.

xxvi Fraser, E. Mabee, W. and Slaymaker, O. 2003. Mutual dependence, mutual vulnerability: the reflexive relation between society and the environment. *Global Environmental Change*, 13, 137-44. The authors acknowledge the promise of existing analytical tools such as the Genuine Progress Indicator, Total Material Requirement Index, Living Planet Index, Environmental Sustainability Index, and research being conducted by the Land Use Cover Change Project and International Earth Science Information Network.

xxvii http://www.wri.org/wri/wr-98-99/airpoll.htm

xxviii http://www.ec.gc.ca/press/000824 n e.htm;

http://library.thinkquest.org/26026/Environmental_Problems/air_pollution.html

 $http://library.thinkquest.org/26026/Environmental_Problems/water_pollution_-causes.html$

http://www.ec.gc.ca/science/sandenov02/article2 e.html

xxix http://www.cnie.org/pop/pai/water-21.html In 1980, 1.8 billion people lacked access to clean drinking water and a 1.7 billion lacked access to adequate sanitation services. After the United Nations declared the 1980s the Drinking Water Supply and Sanitation Decade, the next 10 years saw 1.3 billion people supplied with new water sources and 750 million with sanitation. Yet at the end of the decade, 1-2 billion people still lacked safe water and 1.7 billion lacked sanitation services, making freedom of access to water a highly contested and debated issue of human rights.

xxx H.P. Oberlander and Arthur Fallick. Homelessness and the Homeless in Canada: Responses and Solutions. 1987. Prepared for the International Year of Shelter for the Homeless.

xxxi The Vancouver Sun articles coincides with extensive coverage on the issue by CBC radio and television and The Georgia Straight

xxxii http://www.city.vancouver.bc.ca/ctyclerk/councillors/mayor/announcements/2004/mayorsforum_recommendations.pdf

xxxiii The forum was widely viewed to be a successful exchange of ideas for improvement.

xxxiv http://www.city.vancouver.bc.ca/fourpillars/pdf/Factsheet harmreduction.pdf

xxxv http://www.canadawildproductions.com/fix/; http://www.oddsquad.com/whyte.html

xxxvi Comments made during a symposium in Vancouver to mark the 20th anniversary of Habitat '76 and in preparation for Habitat II. See Urban Solutions to Global Problems. Vancouver, Canada, Habitat II. Patrick J. Smith, H. Peter Oberlander and Tom Hutton. 1996. UBC Centre for Human Settlements and SFU Institute of Governance Studies.

xxxvii http://blogs.salon.com/0002007/2004/01/08.html

xxxviii Cities PLUS http://www.sheltair.com

xxxix Cities PLUS Planning in the Face of Increasing Uncertainty. http://www.sheltair.com

xl http://www.ifuw.org/saap2001/security.htm

xli Canada. Foreign Affairs and International Trade. Freedom from Fear: Canada's Foreign Policy for Human Security.

xlii Lloyd Axworthy. Navigating a *New World*: Canada's Global Future. 2003. Knopf Canada.