UN-LOCKING THE POTENTIAL FOR CHANGE: COMMUNITY MOBILIZATION FOR SUSTAINABLE COMMUNITY DEVELOPMENT

by

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ABSTRACT

Canadian communities are being forced to integrate planning for global issues (e.g. climate change and trade agreements) into systems that are already struggling with increased infrastructure costs, dwindling natural resources, and land-use development conflicts. Many are turning to sustainable community development as a means of integrating planning priorities, improving public participation, leveraging resources, and generating creative and practical solutions to shared economic, environmental, and social problems. However, despite integrating sustainable development principles into their planning and decision-making processes, few have succeeded in translating high-level sustainability goals and objectives into tangible projects in their communities.

Why are some communities more successful at bridging the planning — implementation gap than others? This dissertation research develops a framework for mobilization for sustainable community development consisting of actors, motivations, and decision-making processes to explore the role of community mobilization in award winning sustainability case studies in urban (Toronto and Surrey), rural (Craik, Sk.) and First Nations (Rolling River, MB) contexts.

The findings from the research stress the importance of linking institutional capacity and community-based processes in order to bridge the gap between planning and implementation. Linking institutional and community –based

processes requires a shift in the way we think about planning and implementation as discrete entities, in the way options are evaluated and in how we engage as citizens and government in the decision-making process.

These findings have important practical and theoretical implications for understanding sustainability initiatives. To advance sustainability, community engagement needs to go beyond planning processes. Communities need more than plans – they need committed leadership, resources and willingness to learn and adapt as they transition to more sustainable communities. The research indicates that planning processes are most effective when the outcome is not a plan but an increased capacity both of local governments and the broader community to address the complexity of sustainability implementation. Focusing on the relationship between values, structure and agency provides the foundation for greater theory building of mobilization for sustainable community development.

Keywords: sustainable development; sustainability; community; mobilization; planning; implementation gap

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CHAPTER 1: INTRODUCTION AND RATIONALE

Introduction

While many communities in Canada have integrated sustainable development principles into their planning or decision-making processes, few have succeeded in translating their high-level goals and objectives into tangible projects and actionable implementation strategies. Evidence suggests that one of the reasons for lack of action is that despite the recognition of the importance of citizen participation in sustainability initiatives, much of the emphasis remains focused on top-down, technological approaches and policy-led initiatives, which have had the effect of eroding citizen engagement (Onyx, 2004).

Much work has been done that is critical of policy prescriptions that assume that communities operate as a collection of rational, self-serving individuals with well-defined property rights, moderated only by government interference to promote the public interest (Blomley, 2004; Bowles & Gintis, 2002; Friedmann, 1998; Harvey, 1989; McCann, 2001). However, this market-based view of community is still dominant (Holcombe & Staley, 2001). It is also clearly at odds with the principles of sustainable community development that emphasize the multiple pathways and approaches to achieving sustainable community development (SCD) based on the particular needs and priorities of individual communities, and their related ability to take collective action. These divergent views of communities raise a number of important questions related to

implementing SCD. For example, how are diverse communities expected to come to agreement over priorities and approaches? Do community-based SCD initiatives depend on the strength of community interactions and ties that promote collective action strategies rather than individual interests? Can top-down approaches be effective when communities are unable or unwilling to participate or agree?

McCay (2002) identifies common property theory as a useful theoretical framework for examining a range of similar questions in the social sciences. Common property theory demonstrates that self-interest is not the only motivator behind individual decisions and illustrates the impacts that social mechanisms such as communication, trust and collective rules – also referred to as social capital – can have on controlling self-interest and free-riding. However, social capital is not a panacea. It must be mobilized towards specific agreed upon goals. Community mobilization for the implementation of sustainable development initiatives, which can also be referred to as the interactions between community and local government, is the focus of this research. Clearly, both grassroots citizen involvement and formal policy initiatives must play a role in sustainable community development, yet existing research has not provided a clear understanding of what type of policies, processes or initiatives work in which type of situations, or under what circumstances (Portney, 2003; Saha, 2009).

On a theoretical level, my research will contribute to a better understanding of community mobilization processes by providing a governance

and decision-making framework that draws on 'commons' theory to explain how certain communities manage to promote collective action over individual interests in pursuing local sustainability initiatives. On a practical level, this research will contribute to a better understanding of how communities and their governments can strategically identify the actors, roles, policies and processes that will translate community visions and plans into actionable implementation strategies.

Context and Rationale

Canadian communities are undergoing rapid changes as a result of globalization and the associated impacts on economic, environmental and social systems. Communities are consequently being forced to integrate planning for global issues (e.g. climate change and trade agreements) into systems that are already struggling with increased infrastructure costs, dwindling natural resources, and land-use development conflicts. Consequently, many communities are turning to sustainable development frameworks as a means of integrating planning priorities, improving public participation, leveraging resources, and generating creative and practical solutions to shared economic, environmental, and social problems. However, while many communities have integrated sustainable development principles into their planning and/or decisionmaking processes, few have succeeded at translating their high-level goals and objectives into tangible projects and actionable implementation strategies. Barriers to implementation include inadequate human and financial resources: a limited awareness of, and experience with, sustainable development tools; and a

lack of long-term stakeholder engagement (Dale, 2001; Gahin, Veleva & Hart, 2003; Parkinson & Roseland, 2002).

The consequences of the inadequate implementation of SD plans are significant and include:

- increased public scepticism regarding the value of participating in planning processes, and the value of the sustainable development concept as a tool for change;
- continued erosion of economic, social, and natural capital as a result of a non-integrated planning processes; and
- lost opportunities as key land and infrastructure are developed with little regard for long-term local sustainability and community development.

Many researchers and organizations have presented visions and frameworks that describe the practical elements of sustainable community development. Their work indicates that there is no shortage of social, economic, and environmental tools for fostering sustainability in communities (InfraGuide, 2003; Robert et al., 2002, Roseland, 2005). Missing are solutions and approaches that are led by communities themselves, as well as the decision-making processes and tools needed for strategically selecting, prioritizing, and implementing the policies, programs, and structural changes that will enable communities to build their capacity and attain their sustainability objectives.

Community mobilization is a key element in sustainable community development

(Roseland, 2005), yet there is little understanding of the factors and circumstances that enable certain communities to mobilize around sustainable community objectives and not others.

Much of the literature on community mobilization for sustainability draws on social capital theory to explain how communities are able to mobilize and successfully implement specific SCD initiatives (Coleman, 1990; Olson, 1965). Concepts of consensual decision-making, shared values and shared beliefs are presented as key aspects for making resource allocation decisions in support of SCD initiatives. As Roseland's (2005) community capital framework demonstrates, a community's resource base can be thought of in terms of six forms of community capital – physical, human, environmental, social, economic and cultural. The challenge for SCD is to mobilize community stakeholders¹ in the maximization of each form of capital. These resources (or community capitals) often exhibit many of the same characteristics of common property resources - subtractability, non-substitutability and the associated problems of exclusion of non-participants to community-wide benefits. Despite these similarities, common property theories are rarely used in analyzing case study research of sustainable community initiatives.

-

The term 'community stakeholders' is used throughout this dissertation to refer to the collection of actors engaged at the local level, regardless of the scale at which they are typically associated. Community refers to the local-scale community - to the place-based collection of people, organizations and institutions in a specific locality such as a municipality. It is recognized that communities can be defined in a variety of ways (i.e. communities of place or communities of interests). The term community is used here to refer to geographic communities of place represented by a municipal, local or band form of government.

Yet the "commons" framework offers a promising approach to understanding sustainability. The "commons" approach highlights the role of different actors at different levels of action and decision-making, places greater emphasis on the instrumental role of participatory processes and focuses attention on the way people relate to one another. These factors and the values that underlie these interactions in a specific place and context are critical for understanding how communities move from planning to implementation (Clapp and Meyer, 2000; Portney, 2003; Onyx, 2004). Portney (2003) uses the term civic environmentalism to refer to the linkages between the commons and sustainability – suggesting it is a more collaborative and integrative approach to policy development than traditional regulation.

Drawing on theories of sustainability, urban governance and the commons, this research seeks to explore the relationship between successful implementation of SCD planning initiatives and the nature and processes of community mobilization for specific SCD objectives. These theoretical foundations will provide a framework for analysis of SCD implementation activities in order to determine how decision-makers and community members prioritize and take action on specific SCD objectives. The results of the research will contribute to both the theoretical understanding of SCD and to practical understanding of community mobilization and implementation activities.

Research Questions

The questions used to guide the research are designed to link broader issues of community mobilization for sustainability with the contextual processes

of governance, partnerships and decision-making for implementation of specific initiatives in the case communities. Therefore, the broad research question refers to concepts such as governance and community mobilization and their relationships to the planning and implementation gap experienced by many Canadian communities. The subsidiary questions provide points of inquiry within the case communities by focusing on the actors, relationships, decision-making processes, key elements and barriers to sustainability and community responses.

Primary Research Question

What role does community mobilization play in support of sustainable community development and how does it affect the relationships between community actors in governance and decision-making processes?

Subsidiary Questions

- 1. How are community actors engaged in identifying, prioritizing and selecting policies, programs and actions to achieve their sustainability objectives and what role do these actors play in changing outcomes of municipal government decisions (i.e. corporate planning, capital planning and municipal budgeting)?
- 2. What role does institutional capacity and social capacity for sustainable community development play in the ability to implement policies, plans and initiatives for sustainability?
- 3. How have networks focused on sustainability objectives formed and what are the relationships among network participants? How have

they changed? What are the linkages between actors that enable implementation of SCD initiatives?

In the following chapter, the conceptual foundations for the research are introduced. The literature review examines concepts of sustainable community development, governance and community with the purpose of developing a framework for community mobilization.

CHAPTER 2: LITERATURE REVIEW

The literature review begins by exploring the concept of sustainability and sustainable community development. Two opposing approaches to sustainability are identified with the goal of demonstrating the range in which SCD is discussed. Existing planning frameworks for sustainability are introduced to outline common approaches and processes for planning for sustainability in Canada. Sustainable community development is linked to existing governing processes in Canadian municipalities. The literature of urban governance is examined and again, the range in which the role and character of development in our communities is identified to demonstrate the similarities in SCD discourse. The chapter concludes by discussing community mobilization by drawing on the commons to link these bodies of literature in the development of a research framework for community mobilization for sustainable community development.

Sustainable Community Development

Sustainable Development

Sustainable development is a concept that has achieved widespread recognition, yet has been interpreted in different and often competing ways.

Despite the diverse and contested meanings attached to concepts of sustainability, they all fundamentally begin by recognizing the mismatch between increasing human demands on the Earth and the ability of finite natural systems

to cope with those demands (Williams & Millington, 2004). While sustainable development is a relatively new term, the concept of ecological limits to human activity is not. The concept has been traced back to historical societies and traditional belief systems that recognized the relationship between humans and nature, planned Utopian models of self-sufficient communities, Malthusian theories of limits to economic growth and more recently through social movements focused on human scale development, appropriate technology, green movement, bioregionalism and social ecology (Mebratu, 1998; Roseland, 2001).

While at a conceptual level, sustainable development makes the linkages between economic growth and environmental limits explicit, the manner and methods of reconciling the paradoxical elements of growth and limits (what has also been identified as either a demand or supply problem) has been interpreted in many ways. In very broad terms, the diverse perspectives of sustainable development and related responses to environmental problems can be placed along a continuum from weak to strong sustainability (see Table 1 based on Hamstead and Quinn, 2005; Wiliams and Millington, 2004).

Table 1: Weak vs. Strong Sustainability Characteristics

	Weak sustainability	Strong sustainability
Worldview	Anthropocentric	Biocentric/biotic rights
Characteristics	Rational individuals	 Collective action
Role of	Economic growth	Qualitative development
Economy	Centralized	Social justice
Source of	Supply problem	Demand problem
problem and	Technocratic	 Need to change pattern of
solution	Use of EIAs, cost/benefit	economy
	analysis	Small scale
	Efficiency, substitution of	decentralization
	different types of capital	Self-sufficiency
		 Finite natural capital

Weak sustainability advocates recognize that economic growth needs to do a better job at accommodating environmental issues, but feel that there is no need for changes to the fundamental system of economic growth. They take a rational, human-centred approach to human-environment relationships and believe that environmental problems will be resolved through technological changes, more economically efficient use of resources, and substituting manufactured capital for depleted natural capital. For advocates of weak sustainability, continued economic growth and incremental change in the redistribution of the costs and benefits of growth are what is required to achieve more sustainable societies. In terms of resolving the apparent paradox of sustainable development, weak sustainability advocates believe that ecological limits to growth are surmountable through substitution, technological innovation, development of new resources and the more efficient use of existing resources.

Approaches to sustainability on this side of the spectrum draw largely on assumptions of individual behaviour focused on private property, individualism, minimal role for the state and reliance on the market and technological innovation to address environmental or social problems. The concept of market rationality is based on the assumption that of prevailing individual interests that in turn result in societal benefits, based largely on Lockean views that justify private appropriation as a right that derives directly from nature (Friedmann, 1987). In terms of advancing sustainability, assigning property rights and getting the prices right for environmental externalities is a necessary and sufficient first step. After that, we can rely on individuals acting on their best interests, market interactions of demand and supply and technological innovation to resolve environmental problems – what Rees (1995) refers to as 'staying the course' based on an expansionist paradigm.

Strong sustainability advocates, on the other hand, believe that the sustainability paradox can only be overcome by explicitly recognizing the finite nature of the Earth and by reducing the demands placed upon it. They take a biocentric view of nature that argues for greater resource protection, particularly for those natural capital assets that are critical for the functioning of the system as a whole. Therefore, the substitutability of manufactured capital for natural capital is limited by environmental characteristics of uncertainty and irreversibility. A society based on principles of strong sustainability requires the maintenance and improvement of natural capital assets and asserts that the problem is not the pursuit of economic growth per se; rather the pattern of economic growth causes

environmental problems. Development from a strong sustainability perspective focuses on the qualitative improvement of all types of capital, rather than focusing on the quantitative expansion of any one type of capital, as is the case with existing pattern of growth (Hamstead & Quinn, 2005). From this perspective, it is apparent that well-being can be enhanced through different forms of community capital (social, human, cultural, physical, economic and natural) (Roseland, 2005) and not just through quantitative measures of wealth and consumption and that the paradox of sustainable development is resolved by reducing the human impact on the environment.

Collective action, finite limits to growth and social innovation are at the core of the strong sustainability perspective. In contrast to weak sustainability, strong sustainability is based on social rather than market rationality. Drawing on the work of Kant, the social rationality approach suggests that collective recognition of rights comes before individual appropriation (Bromley, 1991). Society is of primary importance, as individual rights that are not recognized by society are meaningless and it is through advancing collective interests that benefits will flow to individuals. With greater emphasis placed on the role of society, there is less reliance on the invisible hand of the market to resolve the sustainability dilemma. Rather, it is through social innovation, based on recognizing that social, economic and environmental systems are interconnected and for which there are no technological substitutes, which provide solutions to sustainability problems (Rees, 1995).

The Brundtland report defines sustainable development as "development that meets the needs of current generations with out compromising the ability of future generations to meet their own needs" (WCED, 1987: 43) and reflects the ambiguity of sustainability. It can be interpreted along either weak or strong lines based on different definitions of needs and development. In some respects, this ambiguity provides the flexibility to define sustainability based on local contexts and local needs, however, it also allows for a number of unsustainable activities to fall under the umbrella of sustainable development. At the heart of each of these divergent perspectives is a fundamental difference in worldviews, the role of the economy and the nature and solution to sustainability problems. Each perspective draws on a long lineage of social theory about the role and relationship of individuals and society. Drawing on planning traditions of social reform, policy analysis, social learning and social mobilization, Friedmann (1987) provides the foundation to link these divides in thinking about sustainability with the long historical development of different planning theories. Drawing on these planning traditions highlights how the differences between strong and weak sustainability described above are based on a much debated and theorized role of individuals, the state and society. For example, strong sustainability perspectives can be traced back through the Utopian planners, while weak sustainability perspectives are closely related to those of social reform, and policy analysis. The point here is that sustainable development is not atheoretical, it is based on social theory.

However, thinking of sustainable development in conceptual terms masks the fact that ultimately, sustainability outcomes will not depend on worldviews of the global economy or the role of technological innovation, despite their influence. Rather, outcomes will be dependent on what people, living in communities do about it, through local projects and local conflicts, and how they link their communities to their local environment (Evans, 2002). The way that those conflicts are addressed and resolved in a given community will differ, and may draw on elements from across the weak – strong sustainability continuum, depending on the context. In practice, sustainability initiatives are often evolving processes that change and shift in focus as the values, relationships and contexts in which the initiatives are situated shift over time and place.

Sustainable Community Development

The need for multi-level participation that involves every level of society, from national governments to regional and municipal governments, from neighbourhoods to household was firmly recognized with the development of Agenda 21 at the national level and the subsequent commitments to support Local Agenda 21s at the local government level during the Rio Earth summit in 1992 (White, 2001). These commitments were reconfirmed 10 years later in Johannesburg. Despite the strong linkages between the local, national and the global scales, practitioners of sustainable development have struggled with how to operationalize the concept, how to move beyond generalities and put the concept into practice and have struggled with what sustainable development really means for each and every community (Mebratu, 1998).

Sustainability is used at a variety of spatial scales, from the global to the local and there have been different approaches proposed for implementation. At global and national levels, the Rio commitments to Agenda 21 and the Johannesburg plan of implementation demonstrate the political commitment to sustainable development, although concrete actions are more difficult to identify. The private sector has also begun to make credible commitments towards sustainability, despite the fact that for many businesses, the term has been interpreted to mean staying in business. However, it is at the local level where significant action towards implementation can be observed (Beatley, 2000; Roseland, 2005).

Many authors make the case for implementing sustainability at the local level. A focus of sustainable development at the local level explicitly acknowledges that we all live in local communities where our everyday actions contribute to environmental, social and economic problems, and therefore, it is at the local level that solutions need to be developed through a culture of community involvement, multi-stakeholder participation and consensus-building that our cities and communities will be made more sustainable (Otto-Zimmermann, 2002). Local governments also play a crucial role in sustainable community development as it is in local communities where the tangible impacts of global social, environmental and economic trends play out, as well as being the locally elected, representative and accountable bodies responsible for local decision-making (Brugmann, 1994; Parkinson & Roseland, 2002; Roseland, 2005).

However, the appropriate scale for approaches to sustainability remains open for debate. Research on sustainable cities and communities recognize the potential of local, contextually sensitive approaches and strategies for advancing sustainability in a given place. However, other research is more critical of the potential of local strategies and place greater influence on powerful global structures in shaping local outcomes. In their introduction to a special issue of Antipode on localism and neo-liberalism, Brenner and Theodore (2002) raise critical questions about the capacity of local projects to shape local development given the increasingly influential political-economic forces that lie beyond their control. It is argued that powerful forces (such as global capital, financial markets, global deregulation) beyond the local can have much more influence in shaping the construction of place, defining priorities and shaping outcomes than local participatory democracy (Purcell, 2006).

Sustainability requires action by both institutions and citizens and research on sustainability initiatives needs to begin by looking at a variety of actors at the community scale, with the understanding that they are all imperfect agents for sustainability (Evans, 2002). However, it is these imperfect community actors (public, private, NGO, etc.), the values they share that provide their predisposition to take action and the decision-making structures and processes that govern their relationships that in combination provide the capacity to act for implementing sustainability. Therefore, SCD initiatives rely less on rational planning models and processes with municipal practitioners working in their "silos" and more on individuals and groups working together on the basis of

experiential learning, where intuition, experience and judgement are critical (Flyvbjerg, 2001).

Campbell (1996) also argues for the need of an incremental, iterative process for identifying local sustainability visions that are able to address the often contradictory goals of environmental protection, economic development and social equity². Locally specific needs, priorities and responses for sustainable development can be identified through contested participatory negotiation and experimentation at the community level.

While definitions of sustainable community development will vary, based on locally specific needs, priorities and actions, there are five practical principles that give sustainable community development tangible meaning (Roseland, 1998; Hamstead and Quinn, 2005; Roseland et al., 2007):

- Equity and Long-term Thinking: Sustainable development emphasizes the need for inter- and intra-generational equity in terms of access to environmental, economic and social resources and opportunities.
- 2. Living Within Environmental Limits: An acknowledgement that we are living in a closed system (the Earth) which provides unique and non-substitutable products and life-support services and inherently places biophysical limits on extraction, deposition and growth. In essence, the 'carrying capacity' of local, regional and global ecosystems define what types, levels and scales of consumption are sustainable (or not).
- Development is Different than Growth: An emphasis on qualitative and quantitative development as opposed to only economic growth; in other words, measures of success that include non-financial and qualitative components, such as indicators of environmental quality, quality of life, health, education, freedom and cultural diversity.
- 4. **Promoting Integrated Governance and Decision-Making**: Sustainability requires an interdisciplinary, multi-stakeholder and participatory approach for the identification of needs, priorities and actions at the community level.

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² While much of the discourse around sustainability is focused on removing the distinctions between environment, social and economic goals and addressing each holistically, the reality is that the bulk of sustainability efforts are still focused on particular areas and not others and therefore, the distinction is required to highlight where action is taking place and where it is not.

5. **Systems Thinking**: The use of systems thinking and integration of scientific knowledge and economic, social, and ecological factors into decision-making, i.e. seeking decisions that are ecologically viable, socially desirable, and economically feasible.

Sustainable Community Development (SCD) applies the concept of sustainable development to the local or community level where the challenge is to integrate sustainable development principles, long-term planning processes and specific community priorities. The Simon Fraser University Centre for Sustainable Community Development (CSCD) uses the community capital framework as a way to illustrate the need for integration as well as to understand and implement sustainability (see figure 1).

The goal for SCD is to adopt strategies, structures and processes that mobilize citizens and their governments in the quantitative and qualitative improvement of all six forms of capital (see table 2). Community mobilization – integrating the actions of citizens and their government – serves to coordinate, balance and catalyze the values, visions and activities of various community actors through democratic processes, resulting in outcomes that strengthen all forms of capital. A culture of community involvement, multi-stakeholder participation and consensus-building within our communities can identify the values, visions and outcomes necessary to make our cities and communities more sustainable (Roseland, 2005).

Natural Capital

Polysical Capital

Community

Mobilization

Human Capital

Figure 1: Community Capital Framework (Roseland, 2005)

Table 2: Types of Community Capital³

Natural Carital	Network (an autimorphy and a social pict) agricultural social of	
Natural Capital	Natural (or environmental or ecological) capital consists of	
	the biophysical resources, living systems and life-support	
	services of our planet.	
Physical Capital	Physical (or manufactured or produced) capital is the stock	
	of material resources such as equipment, buildings,	
	machinery and other infrastructure that can be used to	
	produce a flow of future income.	
Economic	Economic (or financial) capital, refers to the ways we	
Capital	allocate resources and make decisions about our material lives and include cash, investments and the monetary system. Unlike other capital types, its value is not intrinsic and derives instead from the human, physical, social, cultural and natural capital it represents (e.g. via shares, stocks, cash etc.).	
Human Capital	Human capital consists of health, knowledge, skills,	
	motivations, competencies and other attributes (such as emotional and spiritual capacity) embodied in individuals that	

³ Based on Roseland (2005, p. 4-14).

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	facilitate the creation of personal, social and economic well-being.
Social Capital	Social capital consists of relationships, networks and structures and institutions that facilitate collective action and the shared knowledge, understandings, and patterns of interactions that a group of people bring to any productive activity. It includes families, communities, businesses, trade unions, voluntary organizations, legal/political systems and educational and health bodies. Social capital is embodied in formal (e.g. government) and informal (e.g. social networks) structures, organizations and institutions.
Cultural Capital	Cultural capital is the product of shared experience through
	traditions, customs, values, heritage, identity, and history.
	Cultural capital is particularly important in aboriginal
	communities and in other communities with a long history.

Sustainability Planning Frameworks

There is no shortage of frameworks, tools and systems for sustainable community planning (e.g. ICLEI, 1996; InfraGuide, 2003; James & Lahti, 2004; Robert et al., 2002; Roseland, 2005). These frameworks and tools serve various purposes, ranging from the process of planning to screening and evaluating outcomes (see Table 3 for categorization based on Lindberg and Connelly, 2007).

Table 3: Sustainability Frameworks and Tools

Process Tools	 Visioning tools (charrette), Decision-making tools, (TNS), Guiding Principles (CASE)
Measurement and Reporting	Sustainability Indicators, Lifecycle Assessment, Eco-Footprint, Quality of Life Reporting, Visible Strategies, etc.
Screening and Evaluation	Checklists, Matrices, Guiding Questions (TNS), Adaptive Management
Networks and Programs	 Plus Network (ICSC), EarthCat, Local Agenda 21, Smart Growth
Management and Engagement	MetroQuest, Imagine Process

In a general sense, all of the frameworks, strategies and tools can be understood as consisting of a series of steps designed to define the specific sustainability values and objectives of the community, identify actions that can be taken to achieve those objectives and to review progress and monitor results – in parallel to standard strategic planning models (Cyert & Williams, 1993; Eisenhardt & Zbaracki, 1992). Whether applied in an urban, rural or First Nations context, each sustainability framework roughly consists of the following steps:

- Development of a multi-stakeholder and shared decision-making process designed to be cross-sectoral that will provide guidance for the overall process;
- Assessment of baseline conditions to determine the current state of environment, economic and social conditions and identify key indicators;
- 3. Development of a sustainability vision and objectives and goals regarding where the community wants to be;
- 4. Creation of action plans and priorities designed to achieve intermediate targets; and
- 5. Monitoring and review to track progress and hold participants accountable to the long-term objectives and goals.

These frameworks build on value-focused thinking that places the emphasis of decision-making on values rather than on choosing between alternatives (Keeney, 1992). It is focused on first deciding what is important and then figuring out how to ensure that it is achieved. There is also a growing body of literature in the applied decision-support sciences that have integrated decision-support tools with sustainability principles in the planning process (see

for example Trousdale et. al, 2008; Gregory, Fischhoff & McDaniels, 2005; Trousdale & Gregory, 2004). These approaches to structured decision-making seek to make better and more transparent decisions about complex problems, based on tools and techniques at each of the steps above that help participants identify values, develop priorities and take action.

In most cases, sustainability frameworks and tools present an idealized approach to strategic decision-making based on a linear, rational process. However, in reality SCD decision-making is complex, chaotic and contextually specific. SCD planning processes can be sidetracked by conflict, power struggles, ambiguity, crisis, availability of resources, lack of leadership and commitment, opportunism, etc.

Therefore, despite the fact that over 6,000 communities worldwide have committed to these types of sustainable community development planning processes, actual cross-sectoral implementation is less common (ICLEI, 2002). Many Canadian municipalities have integrated sustainable development principles into their planning and/or decision-making structures, typically via public participation (Conroy & Berke, 2004). In addition, effort has been made to orient local land use planning tools and municipal by-laws towards sustainability objectives (Crofton, 2001; Curran, 2003), however, these activities have been unable to shift local development and redevelopment towards sustainability in a comprehensive way or on a larger scale.

Most frameworks begin with the presupposition that sustainability in some general way has been accepted as a positive goal for a given community, but

many fail to adequately take into account the specific rationale or motivation that led a community to undertake sustainability planning in the first place.

Related to the lack of context is the emphasis placed on stakeholder participation and agreement, with the assumption that this can be readily achieved. There is often little consideration given to the cost-benefit ratio of undertaking a participatory sustainability planning exercise versus going ahead and undertaking a "sustainable" action.

Finally, while most of the frameworks address explicitly the current status of environmental, social or economic conditions, many fail to include an assessment of capacity to undertake sustainability. Without the resources, both financial and human, and the commitment of senior management to incorporate sustainability into their decisions, municipalities will struggle to move towards sustainability. These frameworks provide little guidance on managing the risk / innovation ratio, determining key issues that could serve as catalysts for sustainability, or assessing the related incentives, investments and pay-offs for various actors to be engaged in participatory processes. While all of these frameworks and tools contribute significantly to capacity building for sustainable community development, they struggle with incorporating the underlying local beliefs and assumptions, and the particular complexities of local contexts.

Barriers to implementing sustainable community development initiatives include governance structures that have been unable to integrate institutional processes with grassroots initiatives (van Bueren & ten Heuvelhof, 2005) and problems generating effective citizen engagement and social capital (Dale &

Onyx, 2005; Rydin & Pennington, 2000). These barriers are aggravated by the tendency to focus exclusively on the environmental elements of sustainable development instead of capitalizing on the economic and social benefits of integrated decision-making (Anand & Sen, 2000).

When sustainable community development initiatives are examined in light of these barriers, a number of questions are raised. Why are certain communities engaged in sustainability and others are not? What are the most effective sustainability program elements or components? What are the key factors that led to the creation and operation of sustainability initiatives? The existing literature is relatively weak on addressing these issues (Portney, 2003).

There is a lack of knowledge about the decision-making tools and processes required to build capacity for community mobilization, creating conditions where communities can strategically select, prioritize and implement the policies, programs, and structural changes to attain their sustainability objectives. The starting point for addressing this research gap is to examine the conceptual linkages between community planning and development at a theoretical level and the actual practice going on in communities as they engage in sustainable community development processes.

Governance for Sustainability?

A key principle of sustainable community development is commitment to participatory and multi-stakeholder engagement processes. These processes are also an important means for community mobilization around specific

sustainability community objectives. Terms such as local and community are often used interchangeably when discussing processes of participatory and multistakeholder engagement. However, conflating the local with community often fails to account for the manner in which the interrelationships among scales are fixed, unfixed and refixed by particular social actors pursing specific sustainable community development initiatives. Local and community are not just terms that define geographical scales but are also strategic approaches for the implementation of specific agendas. For example, non-local actors may play a significant role in community development in a particular location that furthers their interests, while local actors may be engaged in community development at larger scales. Most obvious in this context is the relationship between neighborhoods, city governments and regional governments. As Purcell (2006) notes in his warning of the 'local trap', the community scale should not be seen as having inherent qualities, but rather as a strategy that is pursued by and benefiting social groups with particular agendas and as a way to mobilize their interests (Born & Purcell, 2006; Brown & Purcell, 2005; Purcell, 2006).

Understanding the context under which communities are able to successfully mobilize around specific sustainable community objectives provides one way of addressing the above issues of the meaning of participatory approaches to community development. However, interpreting the role of community mobilization is based on certain understandings of local political and economic processes, the character of cities and communities and different definitions of community development. Approaches to understanding these

issues can be summarized by two opposing views to development – elite driven processes on the one hand and participatory processes on the other (see table 4) (Cochrane, 1999; Friedmann, 1998; Gilbert, 1999; Jonas & Wilson, 1999; Logan, Whaley, & Crowder, 1997; McCann, 2001).

Table 4: Elite vs. Participatory View of Development and Character of Cities

	Elite View	Participatory View
Development and whose interests it serves	 Property led development. Goal is economic growth through increased property values Expansion and trickledown Meeting the needs of regime participants Elite interests are presented to be in congruence with interests of society. Economic space. 	 Development defined in opposition to elite views. Quality of life, rather than economic growth Concern and voice for have-nots. Improvement to life space.
Character of Cities	 Shift from managerialism to entrepreneurialism is favourable. Better able to compete in global marketplace City as site of consumption. 	 Shift in governance requires greater participation of civil society Local quality of life concerns are being ignored. City as site of production.

Again, it must be recognized that the divide between the two approaches is not absolute and in practice, the way development proceeds and the resulting views of the city are developed based on conflict, confrontation, accommodation and consensus that draws on aspects of both sides of the divide. The process of urban planning is full of political conflicts and often participatory processes are

presented as a means of resolving the contradictions between elite-led and grassroots initiatives. However, the specific socio-spatial context is critical in understanding how those conflicts are resolved and the degree of commitment to participatory processes in practice (McCann, 2001).

Conceptually, we can identify similarities between views of the city and weak and strong approaches to sustainable community development. Similar to strong sustainability approaches, participatory approaches to the development of the city seek to disrupt existing social and economic networks and develop new ones based on principles of equality and good governance (Hamdi, 2004). Similarities between elite approaches to development and weak sustainability approaches can also be identified, particularly concerning the emphasis placed on the primacy of economic growth.

The role of local government in Canada, and elsewhere, has changed and is increasingly reliant on partnerships between public and private sector actors (McAllister, 2004). The changing role of local government has resulted in a more nuanced approach to understanding the complexity of issues faced by local governments and communities. Many describe the changes in local government as a shift in focus from managerialism to entrepreneurialism, where local government plays a coordinating and enabling role to promote certain social and economic networks (Harvey, 1989; Healey, Cameron, Davoudi, Graham, & Madani-Pour, 1995). The shift from government to an entrepreneurial approach to governance has also resulted in a shift from an inward looking service provision approach to an outward-looking perspective designed to attract new

investment, often in direct competition with other locales (Hubbard & Hall, 1998). These shifts in local governance have been interpreted as either providing for increased commitment to local economic growth and a reinforcement of elite-led local politics or as providing the potential for greater involvement and opportunity for the participation of civil society in the formation of local development objectives.

Urban regime theory offers a more nuanced interpretation of local development and to a large extent avoids the dichotomy of elite vs. participatory approaches. Urban regimes are focused on generating the cooperation and coordination to act to implement policies of urban development that meet the needs of regime members (Stoker, 1995). They are frequently composed of, but are not limited to the participation of urban elites. They attempt to bridge the gap between the popular control of government and the private control of the economy by including not just local government and local businesses in regimes, but by also including certain neighbourhood associations or other community-based organizations that can increase the capacity of the urban regime to implement its desired development policies (Mossberger & Stoker, 2001).

The emphasis of the urban regime is on the management of a network of diverse interests that form a heterogeneous coalition around specific policy purposes and of managing the continual political struggle involved in attempts to reconcile elite and participatory approaches to urban development (McCann, 2001). Its focus is to influence, rather than control the purpose and direction of urban policies and urban regime theory directs attention away from conflicts

between elite hegemony and interest group politics (Lauria, 1997). The challenge of building a governing coalition with a sustainable community development focus must consider not only resources available, but also the nature of community involvement or the context under which such regimes develop and the capacity for regime participants to engage with complex local sustainability issues (Gibbs & Jonas, 2000).

Evans (2005) describes local governing for sustainability as two separate but interlinked processes of government and governance for sustainability. Government for sustainability refers to the institutional capacity of local government, the internal organization of local government and the legal, financial and political processes therein to address sustainability challenges. Governance for sustainability refers to the social capacity of a community and includes spheres of public debate, partnership, interaction, dialogue and conflict entered into by local citizens, businesses and organizations in order to address sustainability issues. Governing processes link the two together (see table 5).

Table 5: Government, Governance and Governing

Government for sustainability	Governance for sustainability	Governing for sustainability
Institutional capacity to address sustainability challenges, to innovate and to implement complex solutions	Social capacity to address sustainability challenges, to express visions, to network and partner with diverse interests and to promote community-wide interests	Interactions between the two: o Take open, accountable and transparent decisions, etc. o Participate and provide political support to decision- makers, etc.

Decision-making for sustainability is dependent on building the necessary capacity within local government and within civil society so that both segments can effectively engage with complex sustainability issues. Within government, capacity building involves such things as breaking down the silos of government departments, the ways of working and the ways of budgeting to allow integrated decision-making to flourish. Building social capacity involves providing opportunities for diverse groups to engage over issues to develop the trust, reciprocity, networks and partnerships required to engage with and support democratic decision-making processes. It is the social capacity that is critical, as Portney (2003, pg. 16.) reminds us: "Without changing the way people relate to each other, and the values that underlie these interactions, pursuing sustainability would simply not be possible."

There is little argument that underlying much of the advocacy of sustainable community development is the assumption that related participatory processes will be instrumental in transforming our cities and communities into more sustainable places. However, much of this assumption is untested empirically. Will participatory processes result in qualitatively different decisions at an individual and institutional level? Can shared community values be expressed in such a manner to generate community mobilization over sustainability issues? In effect, what role does community mobilization play in implementing sustainability initiatives and what characteristics are important?

At the heart of both strong sustainability and participatory governance processes is the belief that collective action strategies are required to develop

communities that are more socially, environmentally and economically sustainable. However, the largest body of research on collective action strategies for communities is based on Ostrom's work (e.g. 1990) with small scale common property resource communities. While these communities offer proof that the tragedy of the commons can be overcome through communal approaches, at least at that scale and Ostrom identifies some of the key factors that are necessary for community mobilization, there has been little attempt to demonstrate empirical evidence for communal approaches to sustainability in cities and communities (Portney, 2003). Research on the commons and social capital provides a promising opportunity to explore in greater detail the linkages between governance and community mobilization for sustainable community development. The next section will explore these linkages in more detail by first discussing the role and meaning of community and community mobilization. The following section will then draw on the principles and characteristics of the commons to develop a research framework for community mobilization for sustainable community development.

Community Mobilization

The key to sustainable community development is mobilizing citizens and their governments in the improvement of all forms of community capital (Roseland, 2005). In a similar vein, Evans (2005) describes governing for sustainability as incorporating the institutional support of local government and the social support from community members and community organizations as being the key to advancing sustainability objectives. Yet despite these broad

calls for community mobilization for sustainable community development, there has been little research done that defines, identifies or assesses the role and characteristics of community mobilization in specific initiatives in a comprehensive manner. What does the term mean? What are the critical components and what role do they play in advancing sustainability?

In order to address these questions, first it is important to briefly discuss the meaning of community. Hamdi (2004) recognizes that the term community is often contested, variable and overlapping. Yet no matter how it is defined, five definitions emerge:

- Communities of interest where bonds are formed between members that share a particular interest,
- Communities of culture where bonds are formed between members that share a history and way of doing things,
- Communities of practice where bonds are formed between members that serve similar functions,
- 4. Communities of resistance, where bonds are formed between members in common opposition to other communities; and
- 5. Communities of place, where bonds are formed between members in a given place.⁴

Herbert (2006) critically examines the meaning of community and of the normative values that are often associated with the term. He cautions against

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⁴ In this research communities of place, defined by municipal or First Nations government and jurisdictions is the scale at which other types of communities are examined.

conflating the terms neighbourhoods and communities, without careful analysis of actual practice, as communities of practice, culture, interests and resistance often play greater roles in "community" action than communities of place.

However, the role of local community can not be denied in establishing common values that serve as the foundation of social goods that make our neighbourhoods function (Herbert, 2006).

Planning literature also struggles with notions of community; particularly in the role that planning plays in developing community. The approach to building community is often focused on the physical design of places, with the assumption that the environment will shape human interactions (Morris, 1996). This approach to building community through design is at the heart of New Urbanism, with a focus on developments with a friendly face to the street, front porches, integrating private residential spaces with public spaces and creating multiple opportunities outside of the home for people to mingle and thus generate a greater sense of place and community (Talen, 2000). Talen (2000) argues that planning practice needs to be more open to multi-dimensional approaches and meanings of community, recognizing that physical design is but one aspect and that building a sense of community is more of a process than an end goal.

The challenge is that much of the discussion of community approaches the concept as a passive object rather than an active force. The passive version of community implies that it just simply is, not that it is created and recreated by on-going processes that result in specific actions. Therefore, one has to ask, what does community do? What purpose does it serve? Much of the SCD

literature and planning literature is dependent on an either explicit or implicit assumption that strong community ties are a pre-requisite (Morris, 1996; Portney, 2003; Roseland, 2005; Talen, 2000).

SCD planning literature suggests that community is a site of communal values that provide meaning and direction to community members. A thick version of community enables a wide range of possibilities for engaging in communal politics, including the development of shared visions, shared goals and consensual decision-making. At the opposite end of the spectrum, the thin version of community is based on the assumption that communities are merely loose and occasional associations of like-minded people who are capable and who flow from community to community, as suits their needs. On the one hand, people are no longer tied to locales for employment, relationships, basic needs, etc. Communities of interest exist and people are engaged politically well beyond localities. Yet community is essential for common values that serve as the foundations of social goods that make our neighbourhoods function.

Both Hamdi and Herbert would agree that the concept of a "grassroots community" is insufficient to support the political responsibilities it is meant to assume. Even when members are able to collectively articulate a common concern, the political voice of communities is inadequate in the face of a large bureaucracy or powerful outside forces (Herbert, 2006). Hamdi comes to a similar conclusion in his analysis of planning as a model for social change. Conventional approaches to planning view social change resulting from grassroots initiatives in opposition to institutionalized processes. However, the

grassroots can never address the root causes of problems, despite their effectiveness in implementing isolated projects. The institutional processes are too rigid and the structures tend to prevent innovation and suppress oppositional tactics (Hamdi, 2004). The solution lies in approaches that recognize the importance and relationships between grassroots and institutional processes, between citizens and their governments, which is the foundation of an urban regime approach to exploring governing and decision-making processes. When regimes develop that are collaborative, focused on transformation and change, progress towards sustainability is possible. In other words, for transformative change to occur, grassroots community initiatives need to have access to institutional power and resources.

Planning Theory and Community Mobilization

The planning – implementation gap for sustainability initiatives has been discussed earlier. The persistence of the gap between planning and implementation contributes to an increasing scepticism about the value of comprehensive planning processes (Burby, 2003). Friedmann (1987) suggests that any planning – implementation gap results from continual tensions between institutions focused on maintaining the status quo and the political community focused on change and these tensions have their roots in the gap between knowledge (and control of knowledge) and action. Friedmann divides the history of planning theory into four traditions that approach this gap in different ways:

- Social Reform planning as guidance based on rational, technical and scientific decision-making where actions are based on improving effectiveness of existing processes and structures;
- Policy Analysis planning as information analysis and management where actions are measured against predetermined goals to improve future decision-making;
- Social Learning planning as experimentation where actions and knowledge are based on practice; and
- Social Mobilization planning as transformative where actions are designed to challenge the status quo.

The approaches to planning that result from these four traditions are closely related to weak and strong sustainability approaches and to differing views of the character of communities and the interests served by development. Reading Friedmann's analysis would suggest that community mobilization for SCD has its root in the social mobilization tradition. Social mobilization arose as a response to the "dark underside, injustices and exploitation of industrial capitalism" where radical transformation occurs in one of two ways; either through self-reliant communities on the margins or through transformative change to the existing power structure (Friedmann, 1987).

This tradition is based on challenging the status quo, building on the foundations of utopianism, social anarchism and historical materialism (Friedmann, 1987). Utopianism seeks the development of small communities

apart from the state that are self-sufficient, in harmony with the local context and that contribute to individual development. These communities rely on social capital, collective action, trust and the social economy to transform society by example.

Similarly, social anarchism is based on the concept of reciprocal exchange, federative principles that join small groups to the larger whole, self-management based on social, landscape and cultural conditions, spontaneity, altruism and cooperation as alternatives to competition. Social anarchism relies on communal traditions and regional, self-sufficient networks to transform society.

Historical materialism is based on class struggles, where structural change results from political process and the role of critical theory is in sustaining political processes focused on structural change. While at a theoretical level, historical materialism is focused on macro changes, in practice, action is local. It is focused on gender, race and social justice issues that are more tangible and more easily identifiable with people.

However, the focus of social mobilization on opposition assumes that collective action strategies will develop in isolation of institutional structures and does not account for the role these structures can play in societal transformation. In addition, Roseland (2000) suggests that the social mobilization tradition is insufficient for advancing sustainability as it does not place sufficient emphasis on the role of the environment in planning processes. Roseland (2005) suggests that an emergent "5th tradition" needs to be included based on the foundations of

healthy communities, appropriate technology, social ecology and bioregionalism (Roseland, 2000). Berke (2008) also highlights the lack of connection between sustainable community development ideals and planning practice and stresses the need for more collaborative planning processes that can strengthen and mobilize social networks in support of sustainability. Regardless of whether the social mobilization tradition in planning can accommodate issues related to sustainable community development or whether a new radical emergent tradition of planning is created based on sustainability principles, processes of community mobilization are dynamic and cannot be categorized simply as grassroots vs. institutional.

Characteristics of Community Mobilization

Research on the importance of various aspects of community mobilization, coalition building, agency and collective action for sustainability is varied. One approach to the analysis of community mobilization is through the emphasis on social capital as the mechanism that facilitates collective action (Onyx, 2004). Social capital is embodied in the relationships between individuals and organizations through obligations and expectations, norms and sanctions and authority relations. Research in this area focuses on the nature of relationships among networks (bonding) and between networks (bridging) to determine how to build trust and expectations of shared benefits through collective action (Coleman, 1990). However, this research tends to ignore the connection to local resources and the local context in which social capital is created and mobilized

(Wakefield, Elliott, Eyles, & Cole, 2006) and has failed to address how and why individuals or organizations determine to take action in the first place.

Research on the individual motivation for collective action has also contributed analysis of community mobilization (Rydin & Pennington, 2000). Much of this research draws on Olson's (1965) logic of collective action and is focused on the rational decisions of individuals as they pursue their objectives through collective action. Olson presents organizations as the sum total of resources and the influence of individuals and takes a rational actor approach to the analysis of each individual's decision to participate in collective action strategies. This approach has been criticized as being too focused on individuals (Wakefield et al., 2006), often ignoring structural processes, local context and social capital relationships that contribute to community mobilization.

The role of politics and power relationships has also been an area of research for community mobilization initiatives for sustainability (Agyeman & Evans, 2004). Such research often approaches community mobilization as a mechanism for social change, focused on empowering marginalized and disenfranchised groups to improve both social and environmental conditions. While research in this area is primarily focused on local contextual conditions, it has been criticized for its failure to account for broader social structures and conditions at larger scales that contribute to mobilization processes (Walker, 2003).

A fundamental assumption for all research on community mobilization is that individuals can be effective agents for change by influencing the policies and practices of community organizations and public institutions through full participation in public life (Foster-Fishman et al., 2006). In short, agency matters. Yet, with a focus on agency, research on community mobilization often ignores the role of institutional structures and processes that both shape and are shaped by local contexts. Sustainable community development requires action by both institutions and citizens and research on community mobilization processes needs to begin by looking at a variety of actors at the community scale, with the understanding that they are all imperfect agents for sustainability (Evans, 2002). However, it is these imperfect community actors (public, private, NGO, etc.), the values they share and the decision-making structures and processes that govern their relationships that in combination provide the capacity to act in implementing sustainability.

The commons is one body of research focused on collective action strategies that integrates social and institutional responses to resource management decisions that can potentially contribute to a more integrated understanding of community mobilization for sustainable community development. Incorporating an understanding of research on common property resource management systems serves two purposes: First, it is a body of literature dedicated to highlighting the importance of communities and their ability to act collectively, an issue that research on sustainability, participatory development and community mobilization all suggest is critical for transformative change. Secondly, the commons literature identifies key factors and specific

approaches to understanding and analyzing research on collective decisionmaking.

Toward a Framework for Community Mobilization

The commons has been identified as a good theoretical framework for examining a range of issues in the social sciences. It demonstrates that self-interest is not the only motivator behind individual decisions and illustrates the impacts that social mechanisms such as communication, trust and the ability to develop and enforce collective rules can have on controlling self-interest and free-riding. The theoretical framework of the commons stresses the importance of relationships between communities, their members and the environment and addresses questions such as how do we manage to live together and promote collective action over individual action (Agrawal, 2002).

The development of theories and frameworks to explain the management systems for common pool resources are largely based on examining resource dependent, small scale, rural societies. In these societies, local economies are closely tied to natural resource use, and this dependence has resulted in joint use of communal property in which a number of households share resources. Runge (1992) describes three main factors that contribute to the development of management systems for common pool resources. They include the high transaction costs of creating and enforcing private property rights, dependence on natural resources for which the assignment of exclusive rights is difficult or undesired and environmental or social uncertainty, all of which support efforts to

organize collectively as a solution to dealing with factors beyond the control of individuals or groups.

Ostrom (1990) provides numerous examples of rural, small-scale resource users who have generated their own common pool resource management systems that demonstrate that full private property rights or centralized regulation are not the only solution to these incentive problems. In fact, public policies based on the notion that all common property resource (CPR) users are helpless and that they must have rules imposed on them can destroy whatever institutional and social capital that may have accumulated over many years of experience in a particular location.

Based on case study examples, Ostrom describes a series of rules and conditions that are believed to be crucial for addressing the incentive problems related to overuse and to overcome the tendency for individuals to free-ride. A selection of the rules for individual common pool resource management systems include:

- Clearly defined boundaries where the individuals or households with rights to use are clearly defined,
- Rules for use directly related to the resource being controlled and directly to the community of users,
- 3. Collective choice arrangements designed by resource users,
- 4. Monitoring and enforcement of rules by accountable individuals,
- 5. Sanctions for rule breakers are graduated, and

Rules for conflict resolution.

Users commit to following the rules as long as others do and if the longterm benefits of doing so are greater than immediate short-term individual strategies. The majority of these rules are informal and based on principles of commitment, trust, reciprocity and cooperation, principles that develop when community members share common experiences and interests and where there is sufficient social stability so that users can expect to continue to share these common experiences and interests in the future. While the formal rules are important, they are supplemented by social values and norms. It is in rural, small-scale societies that personal relationships among resource users develop based on incremental and repeated contact over time. Specific physical and social spaces and open communication for deliberation about common problems is also important in the development of CPR management systems (McCay, 2002). The small successes generated through incremental approaches to CPR management, or "muddling through", build trust among resource users and reduce future transaction costs associated with the development of management rules.

Common pool resource systems vary in nature, size and internal structure, but they all exhibit certain characteristics. The systems all contain social units with definite membership and boundaries; they share certain common interests and interactions among members. They share common cultural norms and often have their own internal authority systems that are based on economic and non-

economic incentives that encourage compliance with established norms (Bromley, 1991).

From this discussion, the effectiveness of CPR systems seems to be closely related to the degree of community strength: the presence, absence or strength of shared beliefs and interests with stable membership and multiple kinds of relationships among community members (McCay, 2002). The assumption is that where people who interact share a common sense of identity and belonging, where they share a dependence or interest in a resource and where they share similar values and goals, they are more likely to develop endogenous institutional arrangements to manage common pool resources. These institutional arrangements will overcome obstacles of collective action such as self-interest and free-riding (McCay, 2002).

Therefore, the key aspect in determining the effectiveness of CPR systems at larger scales, where the likelihood is greater of being forced to deal with more complex issues and with greater heterogeneity of actors and interests, seems to be the degree of strength of community. As resource management increases in complexity, as diverse interests are introduced and as the geographic scale widens, the importance of shared norms and values and the sense of belonging among resource users becomes more important. If the complexity of resource management becomes overwhelming, common resource management systems are likely to fragment and dissolve, which can result in the fragmentation of community in general as resource use becomes more conflictual.

But what does a commons framework have to add to an analysis of community mobilization for sustainable community development? Social capital, as discussed above serves as the lubricant for mobilization and is embodied in the relations among people (bonding) and between organizations (bridging) who come together to address a certain problem or issue. It is developed through social interactions and is embodied in obligations and expectations, information potential, norms and sanctions, authority relations, appropriable social organization and intentional organization (Coleman, 1990). However, social capital is only a means to an end; it needs to be activated towards an agreed upon purpose. The commons literature provides a systematic focus for social capital in the way that resources are managed – the decision-making arrangements that govern access to, benefits from and control over resources that are held in common. Thinking of SCD in terms of commons allows us to address different actors at different levels of action, the structures and processes for decision-making, the associated values and vision for the community and the strategies used for action.

Literature on common property theory and practice demonstrates the possibility of community organizations overcoming individual, short-term strategies, recognizes the formal and informal arrangements to property and explicitly places emphasis on the value of community approaches, local knowledge, local needs and local solutions (at least for small scale resource dependent communities). A common property framework stresses the importance of relationships between communities, their members and the

environment and addresses questions such as how do we manage to live together and promote collective action over individual interest (Dietz, Dolsak, Ostrom, & Stern, 2002). Roseland's (2005) community capital framework identifies 6 types of community assets (natural, physical, economic, human, social and cultural) that can be thought of in terms of common property resources. The goal of sustainable community development is to strengthen each of the types of community capital – the result being that multiple community interests and stakeholders exist who are engaged in attempting to balance oftencompeting interests such as the distribution of environmental risk and liability, economic vitality and infrastructure quality. As a result, these community capitals share key criteria with common goods – the use or abuse of any of the forms of community capital affects others with claims to those resources due to the difficulty in exclusion and their non-substitutable nature. A community's resources such as infrastructure, land use patterns, financial, regulatory, environmental and political contexts can be treated as common goods and therefore, an understanding of community mobilization based on the commons framework can address resource use problems that shift between public, private and common interests.

But how are diverse communities expected to come to agreement over priorities and approaches? Are community-based SCD initiatives dependent on the strength of community interactions and ties that promote collective action strategies rather than individual interests? Can top-down approaches be effective when communities are unable or unwilling to participate or agree? The

analysis of community sustainability can build on the efforts to link environmental and social justice concerns in rural settings, particularly through the research on the commons (Evans, 2002). Much of the research on the commons is based on management arrangements developed in small-scale, resource dependent communities. What use is the commons for urban and more heterogeneous communities where initiatives and actions are primarily based on public or private property decisions?

Runge (1992) reviews research on the commons and identifies three factors that are critical for the development of common property management systems that pose particular challenges to applying the concept at larger scales. The include: 1) the high transaction costs of creating and enforcing private property rights, 2) dependence on natural resources for which the assignment of exclusive rights is difficult or undesired and 3) environmental uncertainty as factors that lead to the development of CPR systems in rural settings.

The high transaction costs associated with the development of private property systems should not be a factor as important in determining the development of urban CPR type management systems. In urban areas, private property rights are dominant and well established for most resources (Blomley, 2004). However, if the resource of concern is land or housing, the relatively high costs of private property in urban areas has been an important factor in the development of alternative housing organizations such as community land trusts or 3rd sector housing. These alternative arrangements can be thought of as a

community response overcoming individual obstacles to home ownership (Davis, 2000).

The dependence on natural resources for which exclusive use rights are difficult to assign is the second factor that Runge (1992) uses to explain the emergence of CPR systems in rural areas. Again, this factor does not seem particularly relevant to the urban setting; resource dependency is not as common in urban settings. However, this factor can be interpreted to mean dependence on place. Cox and Mair (1988) discuss how the local dependence of people has changed from the traditional (based on kin, religion, ethnicity) to modern local dependence (based on career, consumption and status) which is more mobile. However, not all residents are socially mobile due to economic barriers, and therefore, they may have greater interest in strengthening and improving their local community.

The final factor Runge identifies as being important in explaining the emergence of CPR systems is uncertainty. In rural settings, people tend to be closely tied to natural resources for their livelihood, and environmental uncertainty in the form of poor weather conditions can ruin crops, for example. In urban settings, environmental uncertainty takes the form of social hazards for vulnerable populations, such as job loss, neighbourhood gentrification and housing concerns. However, uncertainty can also lead wealthy residents to act collectively. Nelson (2000) describes common interest housing developments and suggests that one of the reasons that people in North America are turning to these forms of collective private ownership is that they are willing to sacrifice

certain individual freedoms in exchange for greater control and certainty over their neighbours. These concerns often are the basis of bringing residents together in opposition to neighbourhood changes, most commonly reflected through NIMBY (not in my backyard) responses.

Despite the challenges of directly applying the commons framework to urban areas, there is value in incorporating it as part of an analytical framework for understanding community mobilization for SCD. To summarize, it is argued that neither the literature on sustainability, urban governance or the commons are sufficient on their own for explaining community mobilization processes. While the literature on sustainability stresses the importance of participatory processes for bringing actors together and identifying high level sustainability goals and principles, it often fails to account for the power dynamics that exist in communities. The literature on urban development processes provides a way of looking at the power relationships that shape decision-making processes and how outcomes shape further action. The commons stresses also emphasize the role of collaboration, collective action and trust in guiding community decision-making related to place-based community resources and outlines the factors that should be considered in exploring community mobilization processes.

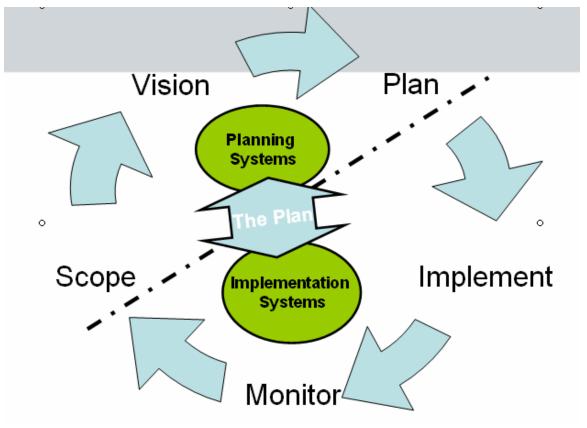
In summary, issues of resource characteristics, group characteristics, institutional arrangements and external influences are all important when considering the ability of communities to come together and develop collective action strategies to deal with their needs and priorities, in both rural and urban settings. However, the problem is that relationships between community strength

and issues of scale, heterogeneity of actors or interests, external influence or frequency of contact are not simple, direct and causal; rather, they are contextual, interdependent and particular to specific places, peoples, environments, histories and cultures. Therefore, specific predictors of cooperation and the conditions likely to be supportive of increased cooperation over resource use in rural or urban settings are equally difficult to isolate.

Research Framework – Community Decision-Making System

Implementing SCD is dependent on adopting and integrating high level sustainability values and principles, a long-term planning horizon and specific community priorities (Roseland, 2005; Seymoar, 2004). Ultimately, the processes used to develop policy as well as broader issues of governance, decision-making and community engagement, including the strategic decision to consider sustainability in the first place, influence community decision-making. The literature review (see above) suggests that the implementation gap is real, and is partly a result the lack of integration between planning and implementation systems (see Figure 2), based on the generic five step planning framework described earlier (scoping, vision, plan, implement, monitor). Often, the only linkage between planning processes and actual implementation is the plan – a document that on its own is insufficient at reconciling long-term planning goals with the reality of short-term economic and political decisions.

Figure 2: The Planning - Implementation Gap



The challenge for bridging the gap between planning and implementation is in identifying multiple opportunities for integration beyond just the planning process through community mobilization. Often, planning processes are the domain of citizen participation and are considered to be based on social processes within communities. It is in the planning arena where citizen access to the process and commitment to participatory engagement in decision-making is most pronounced. Implementing projects, however, is generally thought of more as an institutional process that involves the internal structures of local government and project proponents – most commonly developers. Community mobilization requires thinking of community decision-making as an integrated

process that engages actors from both planning and action, and moves beyond the "silos and stovepipes" that characterizes traditional governance and decision-making at the local government level (Boydell, 2005). We need to think of planning and implementation as one system – a community decision-making system.

Rather than approaching planning and implementation in isolation, a systems approach is used for understanding the decision-making processes within the case study communities. The research framework seeks to understand the multiple opportunities that exist as communities move from planning to implementation (or from implementation to planning).

As discussed above, the research on the commons provides specific guidance here, as it specifically links both planning and implementation by including the role and relationships between actors, decision-making processes and outcomes in the analysis of CPR regimes. The commons framework offers the potential to integrate social and institutional responses to sustainability challenges and provides valuable contributions to understanding community mobilization. Research on the commons suggests that the key to understanding collective action strategies for common property resource management lies in the inter-relationships between the resource, decision-making arrangements that govern resource use, the interactions among resource users and outcomes (Bromley, 1991). Drawing on the literature review above, a research framework is developed for understanding community decision-making processes in the specific case study communities based on:

- 1) Actors involved,
- 2) Motivations and values for SCD in a specific place and context,
- 3) Governance structures and processes,
- 4) Policies and strategies, and
- 5) Outcomes.

For example, identifying the actors involved and their relationships is important in establishing the linkages between institutional processes and grassroots initiatives as well as in who is participating in the decision-making process. The role of actors has been identified as a critical component for sustainability research (e.g. Conroy & Burke, 2004, urban regime development (e.g. Stoker, 1995) and the strength of community based processes (e.g. Hamdi, 2004). Understanding the motivations for engaging in sustainability in the first place provides an opportunity to explore both formally recorded values and visions as represented in official planning documents and also the informal values that are expressed through the day-to-day interactions and through both formal and informal decision-making arrangements. Likewise, understanding how the outcomes of a particular initiative influences the future involvement of actors in new initiatives, how outcomes build capacity to undertake new initiatives and how outcomes can result in shifting underlying values and visions for the community is critical for understanding the evolving process of community mobilization.

The framework elements include five interacting and interdependent elements that together make-up a community decision-making system - a way of strategically bridging planning systems with implementation systems (see Table 6, based on Roseland et al., 2006; Lindberg and Connelly, 2007).

Table 6: Case Study Framework Elements

Framework Element	Description
Community Actors	Community actors influence policy development and community outcomes in a variety of ways. Each actor's values inform a vision for its future which it implements through its own set of strategies, tools and activities. This element represents actors' motivations, mandates and involvement.
Community Values and Visions	Community members interact through formal policy and planning processes, and informally through their everyday interactions. This element represents how values and visions are expressed through formal planning processes (such as Official Community Plans) and informally through action and how these in turn inform decision-making and policy development.
Governance Structures and Processes	Governance structures and processes shape and are shaped by actor involvement, organizational principles and decision-making structures that contribute to the development of a strategic direction, policy and decision-making processes.
Policies and Strategies	Policies and strategies are explored through the processes for policy development in terms of actors, strategies and instruments designed to achieve certain sustainability outcomes.
Community Signals, Actions and Outcomes	Community signals, actions and outcomes are links policies to outcomes. Each policy interacts with external factors and internal factors to produce signals that influence community actions and outcomes across all six types of community capital. Outcomes also influence future participation of actors, shape future values and decision-making processes and can result in new policies.

The first element of the framework is community actors. This includes individual citizens and public, private or non-profit organizations and their specific motivation and mandates for engaging in and working together for sustainability initiatives (Minnery, 2007). The second element – community values, is often expressed as homogenous in planning initiatives and is used to guide activities. However, tensions and conflict among actors, and the ways they are mediated

often play a significant role in determining implementation activities (Healey, 2006). The values are expressed both formally through official planning documents and informally through the day-to-day interactions between actors and how conflicts are resolved. The third element of the framework is governance and decision-making structures that include both formal decisionmaking procedures within local government and also the more informal processes that guide community action (Evans, 2005). This element captures the processes and opportunities for actors to engage in decision-making processes and the structures and principles that govern that engagement. The fourth element – policy mechanisms explores the formal policy mechanisms used to guide activities of various community actors towards expressed sustainability outcomes. The fifth element of the framework is community outcomes. This element explores the linkages between how sustainability outcomes result from combining the other framework elements and how sustainability outcomes in turn influence and shape the other elements of the community decision-making system. Literature on sustainability, urban regime formation and communitybased processes all stress the importance of outcomes in shaping future involvement and future interactions (e.g. Minnery, 2007). For example, lessons learned from a particular project (regardless of whether that project was deemed a success or failure) can result in changes to the actors involved and decisionmaking processes for future sustainability initiatives.

The conceptual framework allows for an understanding of the components of an integrated community decision-making system that bridges the planning –

implementation gap through community mobilization. Each community will approach planning and implementation with emphasis on different elements, depending on the specific context, resources and capacity. However, the key for community mobilization is understanding the inter-relationships, synergies and opportunities for bridging the gap at each stage of the planning – implementation cycle.

The framework is used to guide interview questions and to analyze the case study research results. The next chapter presents the methods for the project, the rationale for case study research, data collection and data analysis considerations. The methods chapter concludes with a section on how the research framework is used to identify the practical strategies used by the case studies as they moved from planning to implementation and how that in turn helps to understand the role of community mobilization for sustainable community development.

CHAPTER 3: RESEARCH METHODS

Case Study Research

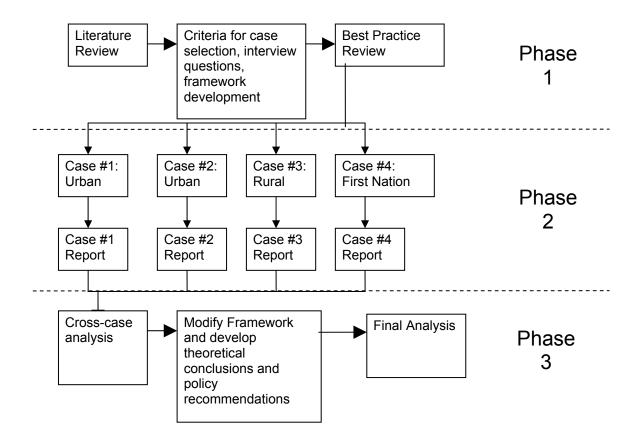
Case study research is widely used to address research questions related to the commons, where local context and conditions are important (Bromley, 1991; Ostrom, 1990). There are also calls for systematic case study research on implementation of SCD initiatives (Portney, 2003). From a geographic perspective, case study research provides the opportunity for examining the combination of social, political and environmental structures and individuals that make up particular places and communities (Winchester, 2005).

Case study research is a comprehensive research strategy that encompasses the logic of design and a variety of data collection techniques and approaches for data analysis guided by a specific theoretical framework (Yin, 2003). The rationale for using case study research to examine sustainable community development implementation is based on a number of operational reasons (Stake, 1995; Yin, 2003). First, the researcher has no control over the decision-making and implementation processes of sustainable community development in the case communities. Second, the research topic is defined broadly to accommodate the complex and contextual conditions in the case communities, guided by a conceptual decision-making framework based on urban regime theory and the commons. Finally, the research is dependent on multiple sources of information and data collection methods. In addition, case

study research provides a degree of flexibility in conducting research of contemporary phenomena in the case communities.

The research involves a general review of 20 "Best Practices" in sustainable community development and implementation and a detailed analysis of four cases: two urban communities, one small-town / rural community and a First Nations community and is divided into three separate phases (Figure 3).

Figure 3: Research Overview



The first phase of the research consisted of a literature review to identify the key themes and issues related to governance and decision-making for sustainable community development (SCD) in an urban, rural and First Nation context. These reviews formed the basis for the development of a theoretical framework for community mobilization for SCD, criteria for case study selection and case study interview questions.

A review of 20 best practices in SCD was also conducted to assess the successes, challenges and barriers to sustainable community planning and implementation in Canada (see section on Case Selection below for more details). These existing best practices were supplemented with interviews with select key informants from the academic and practitioner communities as a preliminary test of the theoretical framework and to ensure that key themes and issues were not missed. The results from phase 1 research allowed for an in depth understanding of the sustainable community development planning processes used by Canadian communities and identified the specific questions for case study research in phase 2.

Phase 2 consisted of case study analysis of 4 communities (2 urban, 1 rural and 1 First Nation) chosen from the "best" practice review. Data collection for the case studies relied on multiple sources, including document analysis, site visits and in depth interviews with a cross-section of stakeholders. A set template was used to guide research questions for each interview that allowed for consistency among interviews, yet also provided the opportunity to explore in greater detail unique issues raised in a specific interview. Each case study

report followed a similar format to provide the opportunity for cross-case analysis in phase 3.

Phase 3 of the research consisted of a cross-case analysis of the 4 individual case studies in relation to the overall research questions. This step allowed for a cross case comparison that informed modifications to the theoretical framework and was useful in the development of policy implications. The cross case analysis also provided the basis for overall theoretical conclusions and policy recommendations.

Case Selection

A broad review of 20 "best practices" in sustainable community planning and development contributed to the theoretical framework that links literature on sustainable community development, urban governance and community mobilization. This broad review strengthened the framework by providing concrete examples of issues raised in the literature and provided a general exploratory assessment and analysis of the critical opportunities, innovations and barriers to sustainable community development implementation at the local government level in Canada. The review of these "best practices" also aided in the selecting four case study communities for more in-depth research. To conduct the review, I relied on assistance from the Infrastructure Canada research project team⁵ who assisted in reviewing existing documents related to

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⁵ Project team refers to the Infrastructure Canada project "Strategic Sustainability and Community Infrastructure" led by the SFU CSCD, in partnership with the Centre for Indigenous Environmental Resources and ICLEI – Local Governments for Sustainability.

the 20 "best practice" examples and in conducting telephone interviews with key contacts involved in developing and implementing sustainable community plans.

The rationale for focussing on peer reviewed "best practices" is that if multiple cases with exemplary outcomes share common characteristics, these characteristics may be causal. Examples of potential characteristics include:

- Collective approach to SCD initiatives
- Geographical location and context
- Policy intervention by levels of government
- Formation of partnerships
- Regime actors and roles
- Citizen and NGO capacity
- Mandates and motivations for engaging in SCD.

The Federation of Canadian Municipalities (FCM) is a member organization for municipal government in Canada and represents the interests of municipalities on policies and programs related to federal jurisdiction. FCM has been at the forefront nationally in publicizing the actions of municipalities in advancing sustainability through their annual FCM-CH2M Hill Sustainable Community award competition. Ten of the case studies were drawn from past award winners. These awards are judged by an independent expert panel that evaluates submissions by municipalities based on the degree to which initiatives take a holistic approach to sustainable community development and are able to

demonstrate innovation and excellence⁶. The award application form provides a structure for applicants to follow and indicates the weight that judges apply to each section in their evaluation. The applications are judged based on seven criteria for a total mark out of 100 as follows:

- Summary and background 15 points
- Measurable results 20 points
- Policy and governance 10 points
- Partnerships 10 points
- Communication 10 points
- Leadership 20 points
- Lessons 20 points

Relying on the FCM sustainability awards serves practical purposes.

First, it provides an existing collection of national municipal best practice that are written in a similar structure, providing opportunities for easy comparison of various initiatives. However, relying on municipalities' award submissions as the initial source of data collection also places limitations on the research. First, these awards are treated by municipalities as opportunities to showcase their work to a national audience and to showcase their municipality as a leader in sustainability. As, such, the award submissions serve certain "city booster" and marketing functions (McCann, 2004) for the internal marketing of particular municipal departments responsible for the award and marketing externally to other municipalities. They are not critical documents.

In addition, while the awards are open to community groups, the majority of the sustainable community initiatives submitted for consideration are examples

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⁶ The FCM application website defines innovation and excellence as the development of new knowledge, practices or advanced technologies; the application of current or emerging technologies or practices; or the adoption of an advanced technology, knowledge or practice in a region in which the technology has not been applied before.

where the municipality played a critical leadership role. Therefore, the award categories are confined to areas of municipal government responsibility – namely different categories of planning and infrastructure provision that focus on technological innovations to address community sustainability problems. There is no doubt that a number of sustainability initiatives occurring in Canadian municipalities, particularly those led by community groups, are not captured by the award criteria. Therefore, caution must be taken to avoid considering these award winners as the final word on best practice for sustainability implementation in Canada. However, despite these concerns, these awards are one of the few credible sources of national municipal best practices of sustainability initiatives and the award winners do represent examples of municipalities addressing sustainability challenges.

An additional five cases were selected from the ICLEI-Local Governments for Sustainability database of international best practices in sustainable community development in order to highlight international innovations in sustainable community planning. ICLEI-Local Governments for Sustainability is an association of over one thousand local governments from around the world that have made commitments to sustainability. The final five cases included best practices in First Nations sustainable community planning, based on the experience of the Centre for Indigenous Environmental Resources (CIER). CIER is a national First Nations organization focused on building the capacity of First Nations communities to meet their sustainability objectives. These sources of "best practice" were chosen because they all provide documentation in a similar

manner, providing information on general contextual information, keys to success, timelines, barriers, partnerships and the roles of various actors involved and key contact information. Therefore, they provide key cross-case empirical examples of how leading communities in Canada and other jurisdictions plan for sustainability and identify the key elements, process and barriers for sustainable community plans and their implementation. Existing documentation was supplemented with brief telephone interviews with one key respondent from each best practice to explore community mobilization processes in greater depth.

The final four case study communities (2 urban, 1 small town / rural and 1 First Nation) were selected from the group of 20 "best practices". Case selection was based on the following criteria:

- Have engaged in a sustainable community planning process;
- Have implemented an innovative initiative with a tangible outcome;
- Demonstrate a linkage between the planning process and implementation;
- Have broad governance and community mobilization; and
- Have Implementation outcomes with multi-sectoral impacts.

Given that the purpose of the research was to explore and understand the role that community mobilization played in advancing sustainability planning initiatives to actual implementation, it was important to draw on case studies where there was some evidence of this occurring. However, in so doing, it is recognized that by relying on "successful" cases with evidence of community

mobilization makes it difficult to evaluate and make claims about any potential causal relationship between sustainability and community mobilization

Based on these criteria, the following communities were selected as case studies for the project (see figure 4):

- Craik (SK) Sustainable Living Project
- Rolling River First Nation (MB) Comprehensive Community Plan
- Toronto (ON) Better Building Project
- Surrey (BC) East Clayton Neighbourhood



Figure 4: Case Study Locations⁷

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⁷ Map credit John Ng.

The focus of analysis of the case study was the process of moving from planning to implementation and was analyzed within the community mobilization / decision-making framework developed through the literature review and review of best practices.

Data Collection

Common concerns of case study research are of validity and of generalizing beyond the case (Stake, 1995). One approach to address concerns of validity is triangulating multiple data sources and participant review of case study reports (data analysis section below discusses concerns over generalization). Data collection for the case studies relied on multiple sources, including document analysis, site visits and in depth interviews (in person and telephone) with a cross-section of stakeholders in order to determine the specific context and to evaluate community mobilization processes for sustainability initiatives. Strategic selection of cases can address issues of generalizing beyond the case (Flyvberg, 2006). The selection of cases relied on established "best practices" or successful examples of SCD implementation in a range of different contexts and was focused on the processes that enabled success. Therefore, lessons or "the force of example" from the case studies are useful beyond the case (Flyvberg, 2006).

The review and analysis of key documents included relevant local newspaper coverage, municipal planning documents, minutes of council meetings, reports on public consultation, consultant reports and NGO / private sector reports related to sustainable community planning and implementation.

Site visits to the respective case study communities were conducted in over the period of May – July 2007; each site visit lasted for a week and a half. The site visits provided the opportunity to establish personal contacts with key stakeholders. Semi-structured interviews were conducted with a variety of key stakeholders in each community, including municipal officials, community organization leaders, business leaders and community planners. Follow-up telephone interviews were used in a few instances where it was impossible to arrange a meeting during the case visit.

Semi-structured interviews are appropriate given the need to maintain sample consistency across the cases, yet still provide the opportunity to explore informational tangents presented by interviewees. They provide a sufficient balance between the information needs of the researcher and unique experience and perspective of each interviewee (Stake, 1995).

For each case study, between 10 and 15 interviews lasting 90 minutes were conducted with key stakeholders. Transcripts were kept of all interviews for data analysis purposes and were kept strictly confidential. In accordance with SFU's policy on research ethics, all interview participants were informed of the purpose of the research and were provided the opportunity to withdraw from the research at anytime. In addition, research participants were given the opportunity to comment on early drafts of the case study reports (although only one participant provided feedback).

Data Analysis

Data analysis relied on the use of coding. Coding of data serves three main purposes: data reduction and theme identification; data organization and integration; and data exploration, analysis and theory building (Cope, 2005). Coding of data provides structure upon which generalizations can be made. Given the diversity of the cases (urban, rural and First Nation), and the resulting difficulty in making generalizations across cases, the data collected from the review of key documents and of interviews with key stakeholders was analyzed based on a extended case approach. The extended case method seeks to "elaborate the effects of the macro on the micro (Burowoy, 1991, p. 9)." The extended case method allows for rebuilding of theories, in this case of community mobilization for sustainable community development, based on anomalies, internal contradictions or theoretical gaps or silences from the case study research.

A case study report was created for each of the case communities based on a similar framework that was checked for accuracy by research participants. The case study analysis report explores the relationship between community mobilization processes and their congruence with theoretical frameworks. A final synthesis report was used to integrate the analysis of each individual case report in order to begin to address the broad research questions.

The community decision-making framework was derived from the literature on sustainability, governance and community to provide structure to the questions asked in the case study research and to identify the practical elements

of what was going on "on the ground" in the case studies as communities moved from planning to implementation. Based on the findings from this analysis, the case studies were then analyzed more broadly on the approaches to sustainability, governance and community. This level of analysis was intended to provide insight into how each of these concepts have been framed in the case communities, to highlight linkages between concepts and to reflect on the utility of exploring community mobilization as a means for overcoming the planning – implementation gap by borrowing from different literatures.

In the next chapter, the results from the best practice review are presented. This review provided the opportunity to test the interview questions with individuals engaged in forty different best practices, drawn from across urban, rural, First Nations and international examples. The review of best practices also served as an opportunity to gain additional information that was used in selecting the four case study communities.

CHAPTER 4: BEST PRACTICE RESULTS AND CASE SELECTION

There is widespread recognition of the "local" as the focal point for sustainable community development (Mazza & Rydin, 1997; Mercer & Jotkowitz, 2000; Newman, 1998; Parkinson & Roseland, 2002) and the inclusion of the local scale as a critical component of a global movement for sustainability (e.g. Local Agenda / Action 21). However, others express concern that the focus on the local scale often fails to adequately acknowledge the dependencies and vulnerabilities of local governments to forces beyond their control and the important relationships between the local, national and global scales (Guy & Marvin, 1999; Rees & Wackernagel, 1996; Vigar, 2000). As a result, there is increasing reliance on regional approaches to sustainability, particularly with regards to sustainability planning that identifies the need for higher levels of coordination between regional, national and international scale required to fully implement local and national sustainability initiatives (Berke, 2002; Conroy & Berke, 2004; Naess, 2001).

Despite the importance and concerns regarding linkages between various scales, Parkinson and Roseland's (2002) review of FCM award winners found that the majority of the projects reviewed were undertaken in response to local issues and even those initiatives driven by mandates from senior levels of government were responding to a current local issue.

The issue of scale and the regional, national and international linkages of sustainability are equally applicable in an urban, rural and First Nations setting. In this chapter, sustainability planning will be briefly reviewed in each context to provide a basis to review of the motivations, processes and approaches used and to identify some of the challenges and barriers to mobilization processes in Canadian communities as they move from sustainability planning to implementation. The results from a review of best practices focused on these aspects of community mobilization will be presented, with the goal of linking literature and practice prior to selecting case study communities and identifying key focal areas for exploring community mobilization in greater depth.

SCD in Urban, Rural and First Nation Context

Urban Context

One way of conceiving of urban sustainable development is that it is an issue "not really [of] 'sustainable cities' but cities whose built form, government structure, production systems, consumption patterns and waste generation and management systems are compatible with sustainable development goals for the city, its wider region and the whole biosphere" (Satterthwaite, 1999, p. 6).

In the urban setting, two areas on which the literatures have converged are the importance of both long-term planning (Campbell, 1996; Jepson Jr., 2003; Mirza, 2007; Naess, 2001; Newman, 1998) and the importance of citizen participation in the urban sustainability process (Mazza & Rydin, 1997; Mercer & Jotkowitz, 2000; Parkinson & Roseland, 2002). In this sense, urban sustainable

development offers a renewed role for both planners (Brand, 1999; Brand, 2005) and citizens in the absence of modernist planning and government intervention.

Even with the emphasis on participation in SCD, there is a lack of related increase in the emphasis placed upon social, socio-cultural and economic sustainability and equity – those issues that in most communities remain politically conflictual (Pugh, 1996). Rather, the bulk of sustainable community development and urban sustainability literature, particularly with regard to systems analysis and assessment of sustainability, still focuses primarily on the environmental factors of sustainable community development (Kenworthy, 2006; Mazza & Rydin, 1997). More specifically, it is those aspects of the environment which lend themselves more readily to quantification, measurement and rational system changes that are given particular emphasis, such as air quality, transportation, and waste management. In addition, these environmental aspects are also commonly thought of as the "business" of local government (Evans, 2005), areas where local government has jurisdiction and control, reflecting the bias towards environmental issues in local government sustainability initiatives at the exclusion of social justice and equity issues (Saha, 2009).

Rural Context

While the concept of sustainability is generally understood, its application to rural community development and planning remains sparse and highly variable (Parkinson and Roseland, 2002; Audric, 1997). There is a tendency in the literature to view rural as "not urban" or to generalize the application of concepts

and processes despite the very real contextual differences that separate urban and rural communities. The literature cites two reasons for this rural gap: definitional variability and perceptual blocks to the relevancy of rural sustainability⁸.

First, there is no definitive statement on the meaning of sustainable development in the rural setting. Rural definitional adaptations of sustainability are as numerous as interpretations of sustainability in a larger sense. Definitional uncertainty may impede action towards sustainable development by either interpreting rural communities in overly homogeneous terms, thereby missing the importance of contextual specificity for successfully implementing initiatives, or conversely, by being confused by the variability of the rural landscape which hinders policy development and application (Markey, Halseth, & Manson, 2008). That said, a review of the literature has revealed a sample of thematic concentrations:

- Rural sustainability and integrated planning, where integration is seen as a way of mobilizing capacity to ensure that development is economically viable, socially appropriate and ecologically sound for rural communities (e.g. Bryant, 1995);
- The spread of Local Agenda 21 and its relationship to rural sustainability. Local Agenda 21 has popularized the concept of sustainable livelihoods, which emphasizes the capacity of individuals

⁸ Given that approximately 80% of Canada's population lives in a handful of major urban centres, it is perhaps not surprising that research and practice related to sustainability have naturally focused on urban rather than rural issues.

to earn a living while limiting further environmental degradation (e.g. Audirac, 1997; Mikos, 2001), and;

Rural sustainability and the shift to post-productivism. The
transformation in values and economic activity, associated with a deemphasis on primary resource production in favour of more diversified
economic activities and the relationship to sustainability (Markey,
Pierce, Vodden, & Roseland, 2005; Reed & Gill, 1997).

From an infrastructure perspective, however, the most prominent definitional theme in the literature concerns the connection between sustainable development and processes of rural restructuring. Changes in the policy environment (from equity-based to enabling and from sectoral to place-based) and in the economic context (forces of globalization in terms of trade, information exchange, and industry-place connectivity) have dramatically increased the vulnerability of rural communities and regions. From this perspective, the literature on sustainable rural development cited above represents a significant opportunity for rural communities to accommodate additional burdens of responsibility through the governance regimes of sustainable development (i.e. greater local participation) and plan in more integrated ways to maximize rural economic advantages while maintaining a high quality of life now necessary to be economically competitive. Furthermore, the potential cost advantages associated with sustainable forms of infrastructure (e.g. less waste, less energy use) may provide viable solutions for rural communities to afford infrastructure renewal.

First Nation Context

In order to fully grasp the context of sustainable community development in Canadian First Nation communities it is important to recognize that while Canada was ranked first on the UN Human Development Index (1998), calculations by Indian and Northern Affairs Canada (INAC) determined that First Nations communities were equivalent to 63rd. Therefore, it is not surprising that the focus of INAC sponsored capital and community planning in First Nation communities is typically developmental, often focused on:

- Demands for adequate housing for the existing population, in particular to address over-crowding, and housing demands stemming from projected on-reserve population growth;
- Need for educational facilities;
- Evolving or emerging infrastructure needs such as long-term care facilities for the elderly; and
- The extraordinary or 'one-off' infrastructure needs such as flood protection, all weather road and electrification of some remote communities, remediation of contaminated sites, and broadband access, etc.

However, First Nations engaged in comprehensive community planning (CCP) initiatives are more focused on what has been referred to as soft infrastructure (e.g. social development, health and healing, capacity building, employment and economic development - see for example (INAC, 2006). The meaning of sustainable community development for First Nations is more often an approach that at its core involves embracing and reinforcing the culture and unique identity of the community as well as community empowerment. This

cultural pillar of sustainability is often overlooked in urban and rural sustainability initiatives.

Summary of Best Practice Review

The purpose of the best practices review was to provide the opportunity to "ground truth" the findings from the literature review with selected best practices and to test and refine the interview questions and analytical framework. The best practice review provided the opportunity to explore in more detail how "successful" communities were bridging the planning – implementation gap, the approaches that were being used and the decision-making processes involved. Twenty projects / communities were identified (see Table 5), divided equally into categories of urban, rural, First Nation and international. For each community, a key contact person was identified and arrangements were made to conduct a one-hour telephone interview to discuss the specific exemplary initiative in their community. Each interview covered the following topics:

- Motivation for engaging in sustainable community development initiative,
- Approach and framework or tools used,
- Barriers to implementing SCD planning initiatives,
- Solutions to bridging the planning implementation gap, and
- Identification of the key actors and their roles.

The above interview topics provide the opportunity to link the interview questions specifically with the framework for community mobilization based on the actors involved, the stated values and visions for sustainability, the decision-making process, the policy instruments and the outcomes of a given initiative.

Table 7 provides brief descriptions of the communities included in the review. The results from the interviews are summarized below.

Table 7: List of Best Practices Included in Review

Urban Best Practices	
Saskatoon (SK)	Focus on social infrastructure in declining, under serviced neighbourhood in core of city, linked to residential intensification.
Calgary (AB)	Wind powered transit and commitment to 75% municipal energy from renewable sources.
Halifax (NS)	Climate Smart program as a mechanism to incorporate climate change issues into municipal decision-making.
Surrey (BC)	Comprehensive community plan based on green infrastructure considerations.
Toronto (ON)	Building Better Buildings partnership is a city-wide program to retrofit buildings to reduce energy consumption and related infrastructure.
Rural Best Practices	
Craik (SK)	Eco-centre and eco-village development to serve as demonstration project and tourism draw.
Ucluelet (BC)	Use of density bonuses, LEED and alternative development standards to shift to Smart Growth type developments that provide financial resources to promote green infrastructure.
Sunshine Coast (BC)	Linking demand management to water infrastructure decision- making through deferred infrastructure costs.
Perth (ON)	Community-based greenhouse gas reduction initiative for all municipal buildings.
Okotoks (AB)	Revolving loan fund to invest in solar infrastructure throughout municipality and in new subdivision (90% of energy is solar).

First Nation Best Practices	
Ouje- Bougoumou FN (QC)	New community in harmony with environment and Cree philosophy, renewable energy from industrial waste.
Mt. Currie FN (BC)	New housing built by local labour force has drastically reduced social problems.
Pictou Landing FN (NS)	First Nations Community Planning Model has resulted in a number of improvements to the social and physical infrastructure of the community.
Lytton FN (BC)	Linking community physical infrastructure needs with a comprehensive planning initiative.
Rolling River FN (MB)	Community planning initiative focused on economic development opportunities linked to renewable energy.
International Best Practices	
Calvia, Spain	LA21 to guide and constrain growth in order to preserve the character of the town that is main draw for the tourism based economy.
Leicester, UK	Implementation of remote intelligent metering for all public utilities that are updated on city website. Provides real time data that can be assessed against historical use to measure progress.
Malmo, Sweden	Ecocity project is a partnership between MKB Housing Company and the City that was designed to meet the LA21 objectives.
Portland, OR	A green building program was developed to engage the private sector in the city-wide Local Action plan for global warming.
San Francisco, CA	The Moscone Convention Centre was a demonstration project of leading edge green building. It was funded through a voter plebiscite and is one outcome of the SF sustainability plan.

Respondents described the motivation for engaging in SCD initiatives fairly consistently across urban, rural, First Nation and International categories. In each case, SCD initiatives were seen as a means of engaging citizens in planning processes and raising awareness of particular issues in a given community. However, for rural communities, SCD planning initiatives also arose as a means of preserving small town values or to address the viability of the

town. For First Nation communities, SCD was seen as reinforcing traditional values around the use and preservation of natural resources, while in urban communities, SCD was closely tied to land use planning and a desire to lead by example through institutional changes.

The approach taken to sustainable development varied considerably, both between the various contexts examined and within a given context. For example, for some communities, the approach to sustainability was through specific sectoral issues, such as water management, air quality and GHG emissions, health, housing, growth management or heritage preservation. A key difference was with the First Nations communities. They all treated SCD as a developmental project, with much more focus on social issues, job creation and community economic development, in response to the real pressing needs in those communities. While each community had a specific sectoral focus, SCD was seen as a means of integrating interest and expertise in a specific area in a more comprehensive way and to use a practical response to a specific issue as a means of identifying the inter-linkages with other issues.

The number of different frameworks and tools for SCD planning and implementation were discussed earlier. In terms of how they have been used in the best practice examples, it was interesting to note that the most common response was that they were not being used. SCD planning frameworks and tools were considered to be too complex, required too many resources and suffered from a lack of coordination between various tools and the everyday functioning of local government. Rather, a variety of existing frameworks were

being used as a general framework to raise awareness of SCD. Communities were relying on a more organic process to actually guide planning and implementation, based on available capacity and resources. Most of the urban and international communities were familiar and engaged with the ICLEI campaign processes, either through their participation in the Cities for Climate Protection Program or through the Local Agenda 21 campaign. Again, First Nations communities stand out as being unique. Frequent reference was made to the use of the medicine wheel as both a guiding framework and a way to represent the traditional linkage between First Nation communities and their environment.

Some of the key barriers identified in best practices review included:

- Minimal financial and staff resources;
- Lack of expertise;
- Maintaining momentum and interest in planning initiatives;
- Difficulty in setting priorities;
- Over-reliance on technical expertise and consultants; and
- Inconsistent and onerous processes for funding from other levels of government.

Lack of financial and staff resources and limited expertise were identified as key barriers to implementing SCD initiatives. There is a different set of skills required for planning than for implementation, and the people associated with each have different ways of doing things and are concerned with different issues. Related to these issues is the difficulty in maintaining momentum, engagement and interest with planning initiatives. There is a long lead-time between planning

and implementation and often resources are no longer available to actively engage with community. Closely tied to the lack of resources is the difficulty in setting priorities. Poor linkages among various plans within their communities were another barrier identified by respondents, which made it difficult to prioritize scarce resources and established competition between departments during the budgeting processes. There also tends to be an over-emphasis on accuracy and technical proficiency, which leads to paralysis over searching for the right answer and the added expense of external consultants. Rural communities often rely on consultants to prepare plans, reports and develop strategies, yet lack the capacity to manage the information overload. First Nation and rural communities expressed frustration with the access to funding from different levels of government, as it often requires considerable time and effort to apply for program funding, plus additional resources to manage and administer the funds once the money starts flowing.

The importance of non-traditional partnerships, regional cooperation, budget processes, planning and engagement and awareness raising were all identified as solutions to bridging the planning – implementation gap. When dealing with resource shortages, it is important to develop non-traditional partnerships as a way to expand and build the capacity and expertise of the community to undertake sustainability initiatives. In all contexts, small, incremental and visible changes were important in establishing, maintaining and building community engagement and awareness around sustainability initiatives. For both rural and First Nation communities, working with surrounding

communities was one approach to overcoming the lack of resources. Working on regional initiatives informally or through formal institutions such as tribal councils, provided a means of tapping into a larger pool of expertise and larger budgets to implement more broadly based initiatives. For all communities, decision-making structures that were focused on "pretty good" solutions or back of the envelope calculations were sufficient in overcoming the paralysis associated with highly technical solutions or the tendency to produce yet another report.

While political and administrative leadership was important in bridging the planning – implementation gap, each community interviewed stressed the role of community stakeholders. Community-based organizations often served as the champion for sustainability initiatives, either by placing issues on the agenda or through active engagement in implementation. Sustainability initiatives often challenge the traditional way of doing things within local government and therefore require enormous amounts of consultation. However, communities need to balance the relative effort and work required to get people involved with the contributions they can make. At some point in time decision-makers have to acknowledge that they have engaged with enough people and get on with doing things.

The best practice review confirmed that community mobilization processes (as defined by the inter-relationships between actors, motivations, decision-making arrangements and outcomes) are based on a dynamic relationship between challenging existing decision-making structures and using

those structures creatively to advance sustainability. The interview respondents recognized that existing decision-making structures and processes were not equipped to address sustainability. They limited those involved in decision-making and the criteria upon which priorities and decisions were made did not reflect long-term sustainability needs. However, it was also recognized that existing decision-making structures could be used creatively to promote change. Van Buren and ten Heuvelhof (2005) refer to these challenges as the conflicting choice for institutional change between radical and incremental change for sustainability.

In the majority of instances, the motivation for engaging in sustainability issues was to engage citizens, NGOs and businesses in the development of collective activities designed to address a particular local concern. The review further suggests that tensions related to implementing sustainability initiatives are based on perceived or actual risks and the related capacity to manage those risks. Key leadership actors were instrumental in the development of partnerships and networks that were able to increase collective capacity for addressing project challenges. Often, demonstration projects served as a risk management strategy, where isolated projects were used to test changes in decision-making processes and outcomes and then used as the basis for implementing more comprehensive sustainability initiatives.

The best practices illustrate that we know enough about sustainability planning and implementation and that there are proven solutions and tangible alternatives to business as usual – for all types of communities. In each case,

the planning – implementation gap was narrowed by integrating specific community priorities and capacity to undertake change with sustainability principles in a strategic manner. They sought to integrate their planning systems with their implementation systems and they relied on more than just the planning process and planning documents to bridge the gap between the two.

Conclusion

The best practice examples were reviewed based on the guiding interview questions. To conclude this chapter, it is useful to return briefly to the major divides identified in the sustainable community development, governance and community mobilization literature (e.g. strong vs. weak sustainability, participatory vs. elite development, thick vs. thin community). What can we learn about how the best practice examples navigate these divides in practice?

In terms of sustainable community development, the literature was characterized as being divided along a spectrum from weak to strong sustainability. The way sustainability was approached in the various best practice examples reflects the limitations of local government as the leading actor in implementing sustainability initiatives. Respondents suggested that for issues that are clearly seen as win-win in terms of the environment and economy (such as energy efficiency) or for sustainability issues for which there is a technological solution, it is relatively easy to move forward. Some of the initiatives began with an explicit environmental focus that would limit further development (i.e. carrying capacity or growth management), while others saw sustainability as an economic development strategy. In either case, addressing sustainability is possible

provided it does not pose an additional financial burden on an over-stretched municipality.

To address sustainability in a more comprehensive manner, by dealing with social issues, challenging the status quo and addressing the fundamental values of society, local governments are limited by their established roles and responsibilities. For example, one senior municipal official described the challenge in this way:

It is tough to get people to think beyond the traditional role of local government (infrastructure and service provision). How do you get people to understand that investments in the environment are not a cost to government but are an investment in the community? The usual mandate of local government can't deal with the softer social and environmental issues.

In terms of the strong vs. weak sustainability divide, local government responses certainly begin on the weak side of the spectrum and rely on bridging with the broader community through partnerships to move towards a stronger sustainability approach.

The literature on governance for sustainability was presented as a divide between elite-led vs. participatory approaches and views of the community and as a divide between institutional and social capacity for action. Much of the debates around governance relate to the character of development and the role of participatory processes in shaping communities. On one side of the divide, communities are viewed primarily as economic spaces where elites and property interests shape development and society. Participatory views have developed in direct opposition to this approach to community-building, based on the

assumption that broader participation by citizens in decision-making can result in development that addresses quality of life concerns that are ignored by elite-led politics. The best practice review provides evidence that these debates are real and un-resolved. Interview respondents recognized the importance of participation and engagement with civil society, yet at the same time struggled with how to ensure that citizen engagement could be managed to ensure that participation does not get in the way of getting things done. One respondent (planner in rural town), when asked to describe the process used to advance a particular project, illustrates this dilemma clearly:

There is a sense that grassroots initiatives are crucial, all things start from there and the challenge is to actively engage these groups in decision-making without getting bogged down with too many people taking decisions.

In this sense, there is recognition that participation is critical, but concerns remain around defining who participates, whose participation is legitimate and who sets the agenda.

This issue relates directly to the recognition that governance for sustainability requires both institutional and social capacity (and support). The review of best practices clearly demonstrate that there is recognition that the institutional structures and processes within local government need to change to advance sustainability, that institutional leadership is critical and that effective partnerships with community groups are needed to move from planning to implementation. When asked to describe the planning framework used to guide a particular initiative, a city official described it as a much more emergent

process, yet at the same time also recognized the critical need for institutional support from upper management.

It is much more of an organic, messy process than a planning framework... [but] corporate plans are critical. Once the CAO and the executive management lists sustainability as a top priority then it is easier to make the case that it should have a budget item.

One approach to address the issue was through developing partnerships that bridge the institutional and social divide and build the capacity to address the complexity associated with SCD. In this regard, there seemed to be a conscious effort to incorporate government for sustainability, governance for sustainability and governing for sustainability as discussed by Evans (2005).

It was important to develop non-traditional partnerships to really build the capacity of community. Originally, people questioned why the municipality was engaging in something that the business community was responsible for? Why the focus on job creation activities when that is what the province and federal governments were for? We had to get the support of Bay St. and the trade unions and it really demonstrated and generated a growing acceptance and internal capacity that municipal responsibilities were beyond infrastructure and service provision (Better Building Partnership staff member).

In terms of approaches to community, the results from the best practice review confirm the findings in the literature review that sustainable community development is dependent on the explicit or implicit assumption that an active community is a pre-requisite. Discussion of the role of community, participation and citizen engagement are evident in the discussions above regarding sustainability and governance. Strong levels of citizen engagement are critical for engaging in communal politics that result in the development of shared visions, shared goals and consensual decision-making. One respondent

identified the link between stronger citizen engagement and sustainability planning:

The City engaged in a consultative process on the overall planning process – how the city should be conducting planning, what should the overall focus be? There were really two outcomes, focus on the core of the city and the need for more active citizen engagement (City of Saskatoon Planner).

While the need for more active citizen engagement was recognized as being important, it was not clear how it was to be achieved or what was meant by citizen engagement.

The overall strategic plan for the city identifies the values, visions and guiding principles that inform the neighbourhood planning process but it is local residents, in combination with city staff that identify important issues that need to be addressed (City of Saskatoon Planner).

Often, citizen engagement and participation was viewed exclusively in terms of engagement with the planning process. In part, this is to be expected when interviewing municipal staff and planning professionals; however, it was revealing that while the discussion recognized the important role of community and grassroots participation in sustainable community development, there was little discussion of the role of engagement beyond the planning process. It seems that there is agreement that a thick version of community is needed, but it is not clear how the planning process can contribute to its emergence.

To conclude, the best practice review has indicated that the issues surrounding the approach to and meaning of sustainable community development, approaches and views of governance and different views of the role of community are intertwined and tied up in processes of community

mobilization. Moving forward into the case study phase of the research, the goal is to explore community mobilization in more detail. Specifically, the case studies will describe how communities were able to integrate planning and implementation into a community decision-making system. The key elements, processes and strategies that were used to mobilize citizens and their governments will be explored in greater detail as communities move from planning for sustainable community development to actual implementation.

CHAPTER 5: CASE STUDY RESULTS

Four communities (2 urban, 1 rural and 1 First Nations) were selected from among those reviewed above for more detailed case study research. The criteria used to select the final case study communities were based on:

- Evidence of their commitment to SCD,
- Innovative infrastructure outcomes related to their SCD commitment,
- Broad governance and decision-making processes, and
- Multi-sectoral impacts that have resulted from implementation.

The focus of the case study research was on the processes of moving from planning to implementation. The case studies were used to look specifically for the process lessons related to community mobilization that contributes to bridging the planning – implementation gap that can be applied at a range of scales and contexts. As a result, the impacts of the diversity of scales and context of the case communities in developing lessons and findings that are relevant beyond the cases are minimized.

The success of the initiative was evaluated based on the ability of the case study community to move from planning to implementation, resulting in tangible changes to the community that advance sustainability. While these examples represent a snap-shot in time, it is important to remember transforming our communities towards sustainability is a process that will progress over time. These case studies provide tangible examples of changes to the status quo that,

to a degree, advance sustainability. Whether or not they serve as long-term examples or models for other communities can only be determined through time.

Appendix 2 presents the linkages between community mobilization and the community capital framework by using the *Community Capital Tool* (CCT) for each case study. The CCT was developed as part of the Infrastructure Canada project (www.sfu.ca/ cscd/Strategic_Sustainability) in partnership with Envision Sustainability Tools. The tool is designed to be used in a workshop setting and enables users to quickly assess their capacity in terms of the six community capital types and to integrate that capacity assessment with an evaluation of potential impacts of various initiatives. It is used here to illustrate the relative levels of each type of community capital for each case study community.

The following case study descriptions are drawn from the interviews in each case study and a review of secondary sources such as project websites, planning documents and municipal reports. In total, ten interviews were conducted in each case study. The discussion and analysis of the case studies follows in the subsequent chapter.

Case Study #1: Surrey (BC) East Clayton Neighbourhood

The East Clayton Neighbourhood is located in a rural, agricultural area of the rapidly growing area of Surrey. Surrey is BC's second largest city, with an estimated population of 394,000 (2006). The neighbourhood was designated as an area to accommodate urban development in the Official Community Plan that was last updated in 2002, meaning that the neighbourhood would receive full

urban servicing to accommodate a population density of at least six residential units per acre (Surrey, 2003).

The focus of the Surrey case study is the planning and development of a new neighbourhood, East Clayton, which began with the development of the *East Clayton Neighbourhood Concept Plan* (NCP), a new complete community designed to accommodate 13,000 residents at much higher average density of up to 25 units per acre. A series of design charrettes with a variety of stakeholders created the NCP with the goal of introducing sustainability measures to a new neighbourhood development through site design.

Guided by seven sustainability principles, the main priorities of the project were reductions in urban run-off through on-site infiltration techniques, applying neo-traditional urban design considerations such as rear lanes, higher densities, work-live zoning, integration of commercial and business zones in the neighbourhood, and preserving green space.

Motivation / Rationale

The East Clayton NCP arose from three sets of conditions: the need to develop new urban areas in response to population growth, the need to develop East Clayton while protecting agricultural land and salmon-bearing habitats, and the desire of a University of British Columbia research team to expand their research in Surrey. UBC's James Taylor Chair in Landscape and Liveable Environments design had previously worked with the City of Surrey on the 1994 Surrey Design Charrette. The research team wanted to expand their design

charrette process to a more concrete project. At the same time, the East Clayton NCP was the next neighbourhood on the slate to be developed by the City. This area came with a special set of circumstances that would require that it be developed in a non-conventional manner. East Clayton is located in an area of Surrey that contains farmland and salmon habitat. The City already received threats of lawsuits from farmers who contended that urban run-off from developments would cause damage to their lowland farms.



Figure 5: Example of smaller lot sizes, friendly face to the street in East Clayton

Sustainable Community Planning / Implementation

The central aspect of the East Clayton NCP process was the design charrette. In a charrette, stakeholders gather with the goal of creating a design plan based on mutually agreeable conditions and goals. The idea of the charrette

is to develop a 'pretty good solution', where stakeholders synthesize and collectively come up with solutions. The charrette enabled the search for solutions based on finding synergies and overcoming silo-based decision-making by getting a variety of stakeholders together at once, making decisions about alternative design standards and regulations focused on the built environment. The charrette process was guided by seven sustainability principles that were identified and agreed upon in a previous city-wide design charrette in 1994, as well as by the need to deal with urban-runoff. The seven principles were:

- Increased density and walkable neighbourhoods;
- 2. Provide a mixture of housing types;
- Promote social interaction through dwellings with friendly face to the street;
- 4. Use alleyways for car parking and services at rear of dwellings;
- Provide an interconnected street network and public transit to connect with surrounding region;
- 6. Provide narrow streets to reduce infrastructure burden; and
- 7. Preserve the natural environment and promote natural drainage.

Two charrette sessions were held in late 1999 and early 2000 that brought together the development community, City planners, engineers and staff, environmental stakeholders, community representatives and utility and services interests to collaboratively develop a plan for the new development. In all, over 150 people actively participated in the charrette process and the subsequent

public open houses and information workshops. The outcomes of the charrette process were presented to public forums and modified based on feedback received from the citizen advisory committee that consisted of 15 members of local landowners, developers and real estate representatives.

Outcomes

The outcome of the charrette was the neighbourhood concept plan (NCP) that was approved by council in 2003. The NCP contains design guidelines, policies and performance standards to guide the implementation. With over 70% of the East Clayton now built or under construction, the pace of development has been rapid. Built construction contains higher densities, a neo-traditional grid pattern, rear lanes, coach housing, and many other features that make East Clayton different from the conventional suburb (see figure 5 and 6). Developers were unsure that the public would accept these elements; however, once construction was complete, they found that the units sold as fast as conventional units, and based on the success of sales, have implemented elements of design from East Clayton into their other developments (smaller lots, front porches, grid street network, etc.).

Because some of the alternative drainage measures were unproven, double infrastructure was installed (both traditional and green infrastructure) in East Clayton. The engineering department has been monitoring how measures such as increased topsoil retention, drainage swales and detention ponds are performing. Swale performance has been poorer than anticipated in many areas. The original design guidelines called for curbless streets to allow storm water

run-off to flow freely from the street onto lawns, but developers resisted based on the perception that consumers would be resistant for safety reasons.



Figure 6: Example of Live / Work Unit in East Clayton

The implementation stage involved actors from the City of Surrey Planning Department, Engineering Department, Parks and Recreation Department, several development companies, and Surrey Council, when amendments to the plan needed approval.

Success Factors and Lessons Learned

In this section, five key success factors and lessons are identified based on the interviews with individuals involved in planning and implementing the East Clayton development.

The first success factor is the charrette process as a method of engaging a diverse group of participants in an integrated decision-making process. The charrette was facilitated by design professionals, a process that had proven to be successful in building policy and generating commitment to the seven sustainability principles.

The tendency is to look at things as a set of narrow questions that require a technical answer. Any community design you'd have engineering — a set of engineering questions, and a set of economic questions, transportation questions, aesthetic questions, habitat questions. Typically those are addressed through separate studies.... So the charrette, instead of separating those things, insists on integrating those things (charrette participant).

Interview participants highlighted how the process served to build confidence in new ideas, provide time for reflection and develop consensus for alternative approaches to developing the community. Engaging a diverse group of stakeholders and approving agencies together in a process of problem solving developed a better understanding of the competing issues, concerns and objectives. A Surrey councillor highlighted the frustration of dealing with competing interests at council meetings that was resolved by bringing participants together through the charrette process:

I get tired of 2 o'clock in the morning listening to people calling me idiots, you know? You just get tired of that after a while. You go, "there's surely gotta be a better process here". So, at the time we had a planner -this is years ago - had a planner who sat there and said "Well why don't we just do the whole area at a time?" and let the community come together. The community create a plan. And now certainly they're not doing their own thing. They're working with the planners and that so that I mean, it's proper. (City Councillor)

As a result, the process provided participants the opportunity to articulate their most pressing issues and to collaborate outside of their specialized knowledge base to develop 'pretty good solutions' to competing priorities. The 'pretty good solution' was critical in breaking down the tendency to focus on reductionist thinking. For example, while one of the design principles called for narrower streets to reduce the paved landscape and improve water infiltration, emergency services stakeholders and engineers were fixated on the need for streets of a certain width to provide access and space for emergency vehicles to set up in the case of an emergency. The 'pretty good solution' was to include shorter blocks, based on the grid rather than cul-de-sac system that would provide improved response times and increased number of intersections that provided the necessary space for staging areas in the event of an emergency. While not ideal for any one objective, this solution served to accommodate multiple objectives. The role of a neutral facilitator was crucial in building trust among participants. Trust among participants was critical for reaching consensus throughout the charrette process.

When you bring key groups or stake holders or individuals who are meant to represent a bunch of other people behind the scenes, they've got responsibilities and obligations at that table and they're kind of holding their cards to their chest because they have certain interests to protect, but the [facilitators] for the project were able to get these people to slowly put their cards on the table and have everyone put their cards on the table and recognize that hold on, there is a mutual deck here and it's not about just our interest but it's about levering opportunities by virtue of the other stakeholder that is sitting on the other side of the table, so that is what I took away from it that was key. (Charrette participant)

Another key success factor was the presence of specific actors well positioned to drive the process forward and committed to changing the form and function of residential development in Surrey. These strategically placed agents of change were critical in the planning and in the implementation of the project. First, a large developer had tied up a significant portion of the East Clayton area and therefore had significant interest in ensuring that water management issues be resolved in order for the site to be re-zoned for development. The developer was willing to accept greater risk in developing the residential community under a different set of principles to ensure that development proceeded, and as a result served as the project champion in the local development community.

So we knew from the very start that it's gonna cost more. But we were also told that "look there's no other way you can develop this areas, because the dykes are not capable of holding all the water runoff." So the in a way, you know, they were dangling a carrot saying "well look if you want to do this. This is how you have to do it." (Developer)

Second, the James Taylor Chair in Landscape and Liveable Environments was committed to producing a replicable model for overcoming institutional barriers to change based on sustainability principles and was able to convince the City of Surrey that the charrette process was a valuable model for developing planning policies and objectives based on previous relationships.

The third success factor was the particular context of development in the City of Surrey at the end of the 1990s and early 2000s that forced the planning and engineering departments to be more experimental in how they conducted their affairs. Surrey has experienced rapid population growth rates, averaging

2.6% per year between 2001 and 2006, most of which has been accommodated through new construction.

Well again, depending on the year, we take between one third and one half of all the growth in the Lower Mainland. We take in here in Surrey. So there's a lot going on... And that's what you have here as well. You have the willingness to take risks and to try the unthinkable because there's, there's a set of rewards there that are worth. And, and I think that's a big piece of it, is having people who are willing to take the risk. Calculated risks, however. (City Councillor)

Therefore, the growth pressures, small bureaucracy and chronic understaffing make the City of Surrey more open to new and innovative solutions that shift some of the planning burden from staff to developers and community.

Access to additional funding from other levels of government was another success factor. Funding was provided by federal, provincial and regional agencies to help off-set the additional costs of installing double infrastructure to accommodate the uncertainty of new technologies and approaches to infrastructure provision for the community. This additional funding made it viable for the developer to take on the added risk associated with doing development differently.

Finally, the involvement of the development community in the planning and implementation process was identified as an important factor for success. Developers and real estate professionals involved in the charrette process identified the process as an important learning exercise related to sustainable community development.

It was just a real eye-opener - I did not realize, you know, what's involved in sustainability. I'm just a typical realtor out there. This is a product, you know, you want to buy it or don't you? And how do you make it... more attractive to the buyer. OK? Umm... so I had to wrap my head around that during the process. I think I had the same concerns as the developers in the sense that...the developers are very hard to change the way they do things because they've been doing it that way for so many years and its profitable for them. (Realtor)

While this learning was critical in generating the buy-in to advance the development along sustainability principles, problems arose when smaller parcels of land were sold off for development to smaller development companies that were not involved with the process and therefore did not have the same understanding of the principles and objectives of the development. City bureaucrats recognized that it would have been beneficial to involve the development community more broadly in the charrette process to create more of an understanding of the goal to create a model sustainable community.

Challenges

The interviews also identified a series of key challenges that limited the success of the project. The first challenge related to managing the risk associated with departing from the status quo for a residential development in Surrey. The main risks were related to the performance of the new infrastructure technology and the financial risks associated with a new form of development. Untested new technologies for storm water management required the installation of conventional back-up infrastructure to offset the risk of failure, resulting in double infrastructure.

In East Clayton we had to build both systems and monitor both systems in order to actually do it. So it's, you know, at one point you've got to be willing to take a risks and in other places you can't afford to because you can't afford the error. And so in this case, it was the, the risk adverseness was you're paying for both systems. You're going to put both systems in the ground. (Surrey Councillor)

The City of Surrey operates with a 'developer pay principle' for servicing through development cost charges and therefore the developers had to absorb the costs of the double infrastructure. The major developer of the East Clayton neighbourhood was able to benefit from funding from the FCM Green Municipal Fund to offset the costs of the green infrastructure, but the subsequent developers did not. In addition to the risk associated with new infrastructure, there was the more general financial risk to developers who were concerned about the real estate market's willingness to respond to a new product based on sustainability principles.

Changing the mind-set of the development community was another significant challenge for the East Clayton development. Developers were described as extremely conservative and reluctant to deviate from the types of development that had been successful in the past. Most of the developers were concerned that the units would not sell as well since they did not have the conventional suburban look. As a result, there was significant 'push-back', as many developers sought out amendments to the plans and zoning in terms of rear lanes, curbs and other aesthetic considerations.

Well they [developers] said the lane lots will not be popular. People will not buy into them... they will not be able to sell them, at the same price as the other lots. They also didn't want to put in any commercial areas because they say "Well, we don't know when

there'll be the population to support it. And we don't want really to, to hold the land now for future local commercial". So in the end, you know, we had to compromise. The City sort of said OK, we'll look at maybe reducing the number of rear lanes that you have to build. And local store, you know, maybe, we'll live without it. But, you know, in the future maybe you will be able to get it somewhere else. So, you know, they provided lanes in up to sixty percent of the lots, that was what we agreed on. So it was not hundred percent, it was sixty percent. I guess city thought that, you know, that's a step in the right direction. But then eventually when the lots were subdivided and built, the developer found that lane lots were selling about at the same price as the other lots. And people were buying them at the same rate as other lots. (City Planner)

In addition, the developers did not have experience with mixed-use developments and therefore were unwilling to hold onto commercially zoned land until residential areas became established and therefore were re-zoning applications that scaled back the commercial and retail areas of the development.

Part of the reason that developers were successful in their re-zoning applications was a result of the significant turnover of participants involved in the charrette process. In principle, the charrette is not supposed to disband until the project is completed. However, many City planning staff moved on to other positions, property was sold to new developers that were not engaged in the original design session and many of the other actors engaged in the design and planning process (citizens advisory committee, UBC, CMHC, BC Hydro) were not involved in the decision-making related to implementation.

The charrette is more efficacious if you can set it up in a way that you force [people to commit] in principle that you don't disband the charrette until the first project is built. So even though there might be consensus in terms of design exercise, that group has to reconvene until the first project is built. Hopefully by that point you

will have overcome resistance to people that say "Oh, that's a stupid idea." (Charrette participant)

Therefore, when decisions were made about re-zoning land from mixeduse commercial to residential or business park uses, there was little organizational knowledge around the rationale, purpose or principles associated with maintaining a mixture of land uses in the development.

While the charrette process was successful in engaging a broad cross-section of City staff, developers and community members, senior staff or politicians were not involved in the process. Therefore, commitments made in the Neighbourhood Concept Plan (NCP) were not treated as firm commitments and the lack of top-level support from the City and council gave the signal to developers that the NCP was open to negotiation.

At that time, under certain circumstances, we had to back off in order to put something the ground. The City at that time was eager to put something in the ground. But if [the City] was less eager maybe less concessions would be made. The decision-making is dynamic over time. You have to consider all the different dynamics and changing contexts. (City Planner)

Finally, the existing regulatory framework was a challenge that limited the level of success of East Clayton representing a model sustainable community. In some cases, unresolved issues of design in the charrette process were left to the Engineering department to resolve under existing by-laws. Limited time and resources in the Engineering department limited their ability to carry out monitoring and evaluation of the performance of the innovative green infrastructure and they were not equipped to address the competing goals of increased water infiltration (natural areas) and increased densities.

It [East Clayton Development] happened to hit at the same time as the building boom that has lasted 5 years. We started monitoring for the first phase and I thought I would have 3 years to monitor and then come back with: "This works really well and is cost-effective. This works OK, but is not very cost-effective. This doesn't work at all." Well, in 3 years 75% of East Clayton was under application and basically built up. Wow. And also because it was going so fast, the issue was getting the approvals. So [developers would do] whatever it would take to get an approval. If it meant showing a squiggly line was a swale, then, then that's what they showed. So they got their approvals. Everybody's saying: "They must have read the NCP. They must know what they're doing. They've implemented it right." So, from a land-use perspective it looked pretty close. But from the drainage perspective, it's like... well. I'm just now sort of saying: "OK. Show me your drainage test, because you're not taking this seriously." And as time's gone by I think they've taken it less seriously. (City Engineer)

The green infrastructure innovations need further study and evaluation to determine if they perform up to standards that would eliminate the need for the double infrastructure investments in East Clayton and the lack of monitoring and evaluation has limited the transferability of the green infrastructure innovations.

Conclusion

Despite these challenges, the charrette process used to develop the East Clayton Neighbourhood Concept Plan and the subsequent development of the community has been successful in transforming the development of new residential communities in Surrey to accommodate certain sustainability principles. To a degree, the lessons learned from East Clayton, the innovative infrastructure and the neighbourhood design have all been applied to new developments throughout the city. The East Clayton development has raised the bar in terms of what can be expected from developers and the market has

responded favourably to the mixture of housing types and affordability. While much of the success relates to the physical design of the neighbourhood, the development has also contributed to an increased awareness of sustainability more broadly in Surrey as the City has recently adopted a sustainability charter that is intended to set long-term guidelines for future development based on sustainability principles.

Case Study #2: Toronto (ON) Better Building Partnership

Toronto's Better Buildings Partnership (BBP) has been called the best example of the "practical implementation" of the city's CO² emission reduction goals. This program aims to decrease greenhouse gas emissions and improve urban air quality through energy-efficiency retrofits to buildings in the industrial-commercial-institutional building sector. The program, launched in 1996, provides comprehensive energy retrofits to private and public buildings through lending schemes that allow building owners to payback retrofit costs through efficiency gains. BBP has 'survived' 11 years within constitutional constraints of municipal financing and has made improvement to over 400 buildings, resulting in a reduction of 132,000 tonnes of CO² annually, as well as \$19 million in savings to building owners.

Figure 7: Cooling Centre in Downtown core



Motivation / Rationale

The initial motivation for the BBP can be traced back to 1988, when the city hosted a conference on air quality and cities. At the time, Toronto was experiencing air quality problems such as smog. This spurred the city to commit to a 20% reduction in greenhouse gas emissions from 1988 levels, making it the first city to make such commitments. This goal served as the "defining moment" that spurred future commitment from the city.

In order to achieve air quality goals, the City established a Special

Advisory Committee on the environment that came up with several
recommendations, among others, the establishment of the Energy Efficiency

Office. This was approved in 1990, and started operation in 1991. Staff of the Energy Efficiency Office conducted studies to see where they could make the 'biggest hits' in efficiency. They concluded that targeting buildings was one of the best ways to intervene (at the time stationary sources contributed 50% of emissions). The Industrial / Commercial / Institutional building sector specifically contributed 80% of the stationary emissions. The BBP program was established as the means to target this sector.

Along with the Energy Efficiency Office, the City's establishment of the Toronto Atmospheric Fund has also been crucial in reaching emissions targets, and in assisting the BBP. In the early 1990s, the City received a windfall of \$23 million from the sale of a large city property (Langstaff Jail Farm). A city councillor actively advocated that the windfall go to creating an endowment for the Toronto Atmospheric Fund. There were other competing interests for the use of the money, but air quality was a big issue, and Toronto, a relatively wealthy city at the time, did not have pressing needs for the money.

Sustainable Community Planning / Implementation

BBP knew they had to develop a 'flagship' program so they looked for the 'big hits' and found the industrial/commercial/institutional sector to be the largest source of stationary CO2 emissions. BBP was piloted between 1996 and 1998.

The pilot stage far exceeded targets and was fully launched in 1999.

BBP stared with one employee and a consultant, yet with careful planning eventually involved the contributions of over 200 people contributed via

charrettes and consultation. The three major pillars that got BBP going were 1) financial studies, 2) investigation into program design (evaluating similar existing programs elsewhere), and 3) assessment of internal capacity within the City.

The BBP solicits the participation of targeted building owners. BBP provides two basic services to building owners: 1) determines the buildings specific retrofitting needs and connects the owner with energy management firms, and 2) provides the owners with financing options. Depending on the project BBP offers a range of funding mechanisms. For larger projects, lending may occur through the firms or through conventional commercial banks. For smaller projects, funding is available through the city's Loan Recourse Fund Credit Enhancement Facility. Public and non-profit sector building owners may use the Loan Repayment Reserve Account, which was created from the Canada/Ontario Infrastructure Works Program.

BBP had to be made easy for the private sector in order to secure interest and involvement, and thus has emphasized partnership. BBP does not sell based on the benefits to the environment, but rather highlights the profit gains that can be achieved by implementing efficiency measures.

The BBP experience got City of Toronto and the Energy Efficiency Office to understand new ways of going about decision-making process, funding mechanisms and partnerships. This knowledge informs other municipal environmental initiatives such as the Green Development Plan (aimed at energy efficiency in new buildings).

Exhibition Place, operated by a committee at arms-length from the City of Toronto, has been one of the most innovative and risk-taking actors with regards to energy-efficiency (see figure 8). They set their own targets for energy self-sufficiency and are undertaking increasingly innovative efficiency technologies such as a tri-generation plant, a hydrogen-fuelled fleet, photovoltaics, and LED street lighting.





Success Factors and Lessons Learned

Five success factors were identified that contributed to creating the BBP and allowed the City of Toronto to move from setting CO² targets to implementing programmes to address those targets.

The most important success factor was the timing and context of the development of the BBP. The origins of the Better Building Partnership were contextually sensitive. In the early 1990s, there was a recession that resulted in a reduction in large construction projects. The labour community was looking for new opportunities and new skills and became actively engaged in the development of the BBP. It was recognized that building retrofits were labour intensive activity and provided significant job creation potential from technical design, to trades and construction and even sourcing of materials at the local level.

Because that program [BBP] was so concrete, it allowed us to encourage local colleges to train people in the skills that were needed to do energy retrofits. Because I think it was also a skill-shift kind of result as well, that a lot of electricians, people who had other skills, who were attracted to the idea of applying them to meeting environmental objectives, did so. And that has also allowed a lot of our other projects to be more successful as well, because we've built up the people-power to be able to do it. (Staff member from Mayor's Office)

At the same time, there was increasing public awareness of air pollution, the vision of "smog free days" and that pushed City leadership to take action in setting GHG reduction targets of 20%. These two factors, public concern for the

environment and an economic recession, provided the foundation for an unlikely partnership between the City, the business community and labour.

The whole activity of retrofitting a building is very labour intensive, and it's local labour intensive. And so as we were looking at the early 90s recession, we recognized that it would also be very significant job creation potential there, from the technical design-side of it, through, obviously the construction that physically happens there, and even sourcing many of the materials required. We found that a large proportion of the materials were available in Canada, a large proportion were available in Ontario, and a significant proportion were available virtually within a 100 or virtually a 50-kilometre radius of the centre of Toronto. (BBP staff member)

The partnership approach is another key factor in the success of the BBP. When the Better Building Partnership was established, the first step was to get out into the community and talk to people. The program was set up as a partnership between the city, labour groups and large commercial property owners which provided a multi-faceted perspective on the project. Due to the integrated nature of the project participants, it was much easier to persuade people, both within the City and in the larger community of the value of the project.

It's always been a really good partnership, like it's the city, plus labour, plus financial institutions...it's that sort of fluidity, or resiliency that's in the way that it's set up. And I think it's sort of those three things together. Like the partnership that they're, like the skill of the team, and the educational component. Now of course, in more recent years, it's the issue itself. It's the climate change issue. (BBP staff member)

The BBP operates as a voluntary partnership between the City,

Environmental Management Firms (EMFs), the business community and building

owners. From the very beginning, the BBP was established based on

consultations with the business and labour communities to establish new economic opportunities through retro-fitting buildings. With labour and the business community involved from the start, they have become key proponents of the programme and actively promoted the multiple benefits of CO₂ reduction to other stakeholders. The BBP serves as an honest broker in these relationships and is an actor that has developed a great deal of trust and provides credibility to initiatives that are designed to reduce CO₂ emissions.

Highlighting the financial pay-off of emission reductions and energy efficiency was critical in the development of the partnership model. The city was successful in making the business case for CO₂ reductions to the private sector. City staff highlighted the economic benefits of improved energy efficiency and CO₂ reductions were secondary.

Nobody does energy efficiency just so that they can say they're energy efficient. They do it because they need to address either financial implications of the bottom line, or replace equipment, or they have other issues in the building, such as indoor air quality, that they need to address. And energy efficiency is the way to do that. (BBP staff member)

Likewise, in developing partnerships in the trade and union sectors, the economic benefits, jobs and re-training opportunities of the BBP were highlighted. Focussing on the economic rather than environmental benefits provided an explicit rationale for various partners to become engaged in the programme. In addition, BBP staff recognized that in order to have any meaningful impact on GHG emissions, the private sector building owners and trade unions had to be involved. As a municipal programme, the BBP is able to

access additional funding such as revolving loans and grants dedicated directly to local air quality issues and to use these mechanisms to offer bridge financing to a building operator in order to reduce the pay-back period of energy efficiency investments.

We used the Canada-Ontario Infrastructure Works Program. The idea was that for upgrades for municipal infrastructure and to create jobs, the federal government would pay one third of any project cost, the province of Ontario would pay another third, and the municipalities were to pay the third instalment. We were able to modify that, and get approval for that, by first of all, providing the money not as a grant, but as an interest-free loan. And in fact, first by persuading the COIW program that buildings themselves are part of a city's infrastructure, not just bridges and sewers and roads. Because the city was also cash-strapped, we then put the burden of providing our third, namely the city's share, through our energy management firms. (BBP staff member)

The City of Toronto benefited from its "big city advantage" of having a highly skilled and knowledgeable bureaucracy that served as another success factor in the development of the BBP. Getting around financial, legal and attitudinal hurdles took a lot of research on what other communities were doing, looking at best practices, understanding options and communicating those results. The Energy Efficiency Office conducted studies to see where they could make the 'biggest hits' in terms of efficiency. They concluded that targeting buildings (50% of stationary emissions) was the most effective approach. This information was provided to key champions (staff and political) of the project who were able to use the information gathered both internally and through the experience of other cities to overcome barriers to implementation. Information and awareness of options were critical in managing the risks associated with the City reaching beyond their normal mandate to address GHG emissions and

provided critical support to the visionary leaders in the community, on council and staff to push innovation through a risk-averse decision-making process.

Well, I had the concept and I articulated it in a report, and that report went to Committee, and that report made its way through the council, certainly there's a bureaucracy above me that, you know, I have to sell to. It's my job, I sell to them, if they understand it, they'll buy it. But once it gets to the political level, to the Committees, we [the bureaucracy] are silenced. Because only the politicians, speak. And if they want your opinion, they'll ask for it. But if they don't ask for your opinion, you can't say anything. And so really, at the end of the day, what happened is that the political champion then will go around, they have their connections, they have their meetings, and they know that when they see this report, they're going to support it for these reasons. And they'll get others to support it. And that's what the reports go through. So you have to have the political support. (BBP staff member)

Finally, BBP was able to rely on broad political support to take action in the area of emission reductions. The Toronto Atmospheric Fund was established through the proceeds from the sale of the Langstaff Jail land. Without strong political support for GHG reductions, those proceeds could have been directed for other uses. The continued high level political support from across council for environmental initiatives has also been demonstrated through the Environmental Roundtables, the Toronto Environmental Plan and Sustainability roundtables that give a policy push to environmental issues in the City.

The need for innovation was something that, you need to have key individuals committed to it, who are basically there supporting it first out of conviction, and then as a force of knowing all the facts and being persuasive. So we had leadership from right-wing and left-wing members of council, building bridges if you will, that brought the support, because you can't make it singular in terms of your political orientation. (City Councillor)

Challenges

The key challenges of implementing the BBP were mostly related to changing the status quo and thinking about buildings and energy use differently. In terms of financing building retrofit projects, conventional financing programs were ill suited. Banks are a key source of funding for commercial building development, but they tend not to fund things like energy savings that they cannot repossess. Therefore, the project had to create and rely on innovative financial mechanisms (e.g. revolving loans up to 20% of project costs) to bridge the gap between conventional financing and project implementation.

In addition, the conventional methods of managing and operating buildings based on year-to-year budget cycles that do not differentiate between regular repairs or retrofits was a challenge. Budgeting processes needed to change to account for building retrofits as a capital investment into the building rather than as an expense. Related to this problem is the strict separation between operating and capital budgets in government and large firms that make accounting for building retrofits difficult. It is hard to separate the expenses related to building retrofits that relate to daily operation of the building and those that are related to capital improvements. The two need to be budgeted together.

Conventional timelines for building investments and pay-back periods was another significant challenge. Most building owners and lenders were not comfortable with payback periods longer than three years and therefore it was difficult to engage in systematic retrofits of buildings. Such a short payback period is well suited for simple changes like moving to more energy efficient light

bulbs, but makes it impossible for more capital intensive investments such as heating and cooling systems that have a longer payback period.

Financial challenges are driven by the fact that the financial support for the whole building industry, whether it's new construction, or whether it's maintaining and operating existing buildings, it's really still fundamentally governed by conventional economics. And these conventional economics really don't take full life-cycle accounting, and don't monetize the full environmental impacts of failing to do these retrofits. (BBP staff member)

The solution was to think of building retrofits comprehensively, blending short and long payback initiatives together, resulting in a medium payback period that was more acceptable to building owners and lenders.

Another challenge was changing the conventional thinking of a range of actors about the role, purpose and operation of buildings. For example, it was difficult to engage building managers – those responsible for the day-to-day operation of buildings, to see the value of adding new duties around building efficiency to their job descriptions. It was hard to sell them on an unknown, something they had little previous experience when they were already "too busy".

Often it's "well, I'm too busy to do things". There are even cases where the building manager doesn't want to flag the fact that there are savings to be had, in case senior management say, "Well, why haven't you gone after those savings to begin with?" Or people say, "I'm here to make widgets" or whatever, and you know, energy efficiency is not a high priority. (BBP staff member)

Another challenge was convincing the federal and provincial actors involved with the Canada-Ontario Infrastructure Works Program to see buildings as infrastructure, and therefore allowing the BBP to qualify for infrastructure investment funding.

The BBP relies on pre-approved private sector Energy Management Firms (EMFs) to conduct assessments, recommend, design and implement building retrofit measures and generate energy and cost savings. However, the EMFs tend to use conservative estimates to preserve their performance guarantees and therefore tend not to be as innovative in the use of new or unproven technologies.

Especially when the EMF is on the hook for their guarantee, they tend to be very conservative, which sometimes works against us. Because now they're so conservative that it's difficult to get them to look at new technologies. (BBP staff member)

It is a challenge to use and implement cutting-edge technologies for building retrofits and the competition between EMFs results in a lack of information sharing and constant improvement.

Finally, the need for integrated decision-making for sustainability within a large and complex bureaucracy was something that has challenged the BBP and the City as a whole.

There is an 80-person large staff group, that works around climate change. It includes the people from the Better Buildings Partnership, it includes people from forestry and social development, and the list goes on, you know, transportation and solid waste, water, finance. So they are working to make decisions around climate change in general, in an integrated way. It's just a little tough because we're so early, you know, it's just the early stages. So what they're doing is having a lot of meetings, and trying to find those programs where they can all contribute in their own way...It's difficult though... when you ask people from Toronto Water or Solid Waste or Forestry to start thinking about new initiatives, where the role is undefined, it is challenging. And it's not like they exactly resist, it's just that it's not what they do most of the time...it takes away from what they have to do. (Toronto Environmental Office staff member)

While the 1998 amalgamation of the metropolitan Toronto area allowed for better integrated decision-making across the urban system and pushed 'progressive' thinking from the old City of Toronto into other areas, it also produced financial strain and jurisdictional overlap between the City of Toronto and Metro Toronto. As the dissolution of the Environmental / Sustainability Roundtables suggest, the large size of the bureaucracy (over 40 divisions), the presence of two municipal governments make integrated decision-making difficult. For example, the Toronto Office of the Environment has started an interdepartmental renewable energy working group, but staff has little time to commit to it and the required knowledge base is huge. Integrated decision-making occurs more informally through personal networks between departments.

Conclusion

Toronto's BBP serves as an example of a city addressing community problems in an innovative manner. The leadership within the City was able to successfully link specific community concerns over air quality and more broad concerns about economic development during an economic recession through a building retrofit program that has improved the environmental and financial performance of buildings, created jobs in the "green" economy and contributed to more efficient resource use in the city. While the BBP has worked with Toronto Community Housing Corporation (the agency responsible for social housing in Toronto) to initiate building retrofits that protect low-income residents from rising energy costs and engage residents in job training opportunities, the linkages to social sustainability aspects are still weak. The BBP has been successful at

shifting the thinking around buildings and energy uses and has used its institutional capacity in this area to drive innovation and promote uptake of city demonstration projects more widely.

Case Study #3: Craik (SK) Sustainable Living Project

The Town of Craik, incorporated in 1907, is located halfway between Saskatoon and Regina on the Louis Riel Trail (Hwy 11). The Town has a population of 400 (2006), with 288 people residing in the surrounding Rural Municipality (RM). In 2000, the Town of Craik and the Rural Municipality of Craik joined forces to help establish a community-based sustainability project that would bring attention to the town and provide a model for sustainable living for other rural communities. There are four components to the project: 1) the Eco-Centre demonstration building, 2) Community outreach and education, 3) Community Action and 4) Eco-village development. Each of these components is community driven and was designed to provide employment opportunities, demonstrate energy efficiency in buildings and transform and promote Craik as a sustainable community.

From the time construction began for the Eco-Centre in 2003, it has served as a focal point for outreach, education and community action activities such as seminar series and local ecological footprint campaigns. The Eco-centre served as the original focal point to demonstrate the viability of energy efficient and alternative approaches to construction (e.g. straw bale construction, alternative energy sources and integrated environmental design) in the Saskatchewan context in order to spur interest in the Eco-village development.

Motivation / Rationale

The motivation for the Craik Sustainable Living Project (CSLP) was crisis regarding the viability of the town. Faced with the decline of rural Saskatchewan in general, the community of Craik realized that something had to be done that would draw attention to the town in a positive sense and raise its profile. Rather than embarking on traditional economic development initiatives in competition with surrounding towns (e.g. free land, town marketing, and highway oriented development), leaders in the community were convinced that sustainable community development provided the key to long-term stability and rural revitalization. Sustainability was seen as a necessity because the Town or the Rural Municipality could not afford to expand services.

There was a desire for a project that demonstrated tangible results, viable solutions and provided the basis for the broader community's transformation towards sustainability. The group was also keen to demonstrate the viability of a community that could build their own homes, create their own energy, handle their own waste and link economic development initiatives to environmental stewardship.

Figure 9: Main St. Craik



The goals of the CSLP are to raise awareness about climate change and sustainable living options, advance the local use of ecologically sound technologies and ways of living and assist the community of Craik to become an "eco-community" that can inspire change in other communities.

Sustainable Community Planning / Implementation

Craik has a long history of community support and mobilization around a variety of issues. They had successfully operated their own health centre, recruited their own doctor and run their own cable TV system in order to maintain services in the town. Faced with a declining population that threatened the viability of the town, Craik and the Rural Municipality (RM) were put in touch with Lynn Oliphant who presented the vision of an Eco-village to the town and RM councils as a way to transform the community towards sustainability and improve

the image of the town. Community leaders decided to embark on a 5-year plan to construct the Eco-village as a joint community project. A volunteer steering committee was formed to guide the project.

In order to demonstrate the viability of an eco-village and to reduce the perceived risks involved, CSLP decided to develop the Eco-centre first as a tangible demonstration project (see figure 10). During this time, they relied on local workers, volunteer resources and were successful in fundraising (local fundraising campaigns such as 'Buy a Bale' and the 'Green Lottery', corporate, foundation and organizational sponsorship and in-kind contributions and volunteer service). In addition, a grant and loan from the Federation of Canadian Municipalities' Green Municipal Funds program was obtained. External expertise was brought in as needed, but reliance on external consultants was kept to a minimum.

The primary focus was on building local expertise through a 'learning by doing' approach to problem solving. Faced with limited human resources, there was a conscious choice made by members of the CSLP between planning and implementation. For example, Craik was successful in obtaining a grant to use the Natural Step to guide local action planning, but there was the sense that the CSLP could either do the action plan or build the eco-centre; they did not have the financial or human resources for both.

Figure 10: Craik Eco-Centre



While the Eco-centre was being constructed, CSLP established a resource centre at the local library and outreach and education projects (seminar series, workshops, school tours, etc.) and community action projects (one-tonne challenge, eco-footprint, anti-idling campaigns) that had the effect of raising awareness of sustainability issues in the community.

Outcomes

The Eco-centre features innovative energy efficient building design and integrated heating, cooling and electrical systems. Passive solar design, use of heat sinks and ground source heat exchange provide for most of the heating and cooling needs. Water and wastewater are collected and treated on site and

composting toilets are used for human waste. Building materials consisted of recycled local materials such as the straw bale construction and timbers and bricks from local demolitions.

The Eco-centre serves as a restaurant, meeting space, local product gift shop and clubhouse for the municipal golf course. The golf course has been certified by Audubon Society in recognition of environmental management initiatives that include use of compost material from the restaurant and toilet as a source of organic fertilizer, habitat restoration and natural pest management. Awareness of sustainability issues in the larger community can also be traced to the efforts of the CSLP. For example, the Town replaced the roof of the historic town hall with tiles made from recycled tires and has decided to adopt biological water treatment system based on the one use at the Eco-centre to replace the existing water supply system. In addition, individual behaviour towards the environment has changed (e.g. solar hot water heaters have been installed by residents, recycling and compost programs have been developed, anti-idling campaigns).

The eco-village has been laid out and all 14 plots have been sold, with three families starting construction of their homes. The residential plots were provided un-serviced for \$1 with the expectation that families would provide their own heat, power and water and handle sewage and wastewater on site. In addition, 5 acre parcels of land have been made available for each plot to be used for economic activities that conform to sustainability principles.

Overall, the CSLP has been successful in raising the profile of the town.

Craik is part of the United Nations Saskatchewan Regional Centre for Expertise for sustainability. Hemptown Clothing is in negotiation to build a hemp fibre processing plant just outside town that would create 11 full-time jobs and a local market for area farmers. There is new business interest in town and the population of the town is once again growing. Craik has received external attention regionally, nationally and internationally (Regional Centre of Excellence, FCM awards, media stories).

Success Factors and Lessons Learned

Four key factors contributed to the success of the CSLP project and the development of the Eco-centre. First, community leaders were able to place sustainability on the agenda and motivate other actors to become involved in the project.

There was a feeling that something had to be done, luckily we were able to put our issues in a sustainability context, and then the local councils, and others as well, bought in and took a leadership role, and we have what we have currently. (CSLP member)

Mayor and council received continued support from residents that went beyond typical election timelines, providing the political leadership with the security that enables them to take more risks and be innovative. Additionally, members of the CSLP were able to build on early successes to build trust among community leaders that shifted the perception of sustainability from a risky "wingnut" idea to gradual acceptance. The CSLP benefited from having the right

people involved at the right time and in leadership positions with a "learn as we go" mentality.

The second success factor was the ability of leadership figures to mobilize community interest and commitment to the CSLP and Eco-centre more broadly. Having the Eco-centre as a tangible demonstration project provided an opportunity for all community members with a diversity of skills (planning, finance, construction, etc.) to engage with the project. While a unique collection of individuals drove the process, they were able to pull the rest of the community along and were able to draw on an understanding of the community context, the people, the history and the do it yourself mentality that exists in the town.

It raised the awareness of the rest of the people, even the people on the committee. Because when it all started, it was being driven by Lynn Oliphant, basically, because he is the guy that had the passion, and understood the environmental swing of it, and being involved in it now, it's spread out into our community. I would say, over 50% of our population, anyway, have an environmental slant to their thoughts now, that they never had before. (CSLP member)

They were able to rely on local volunteer labour, a sense of community responsibility and initiative and local resources to get the Eco-centre built.

Obviously there's a lot of volunteer help, a lot of people have come out and worked on the building. Which is what you get in a small community, you know, you're not going to be getting large sums of capital. We do a lot of tours on the building and people say "that just wouldn't happen in another community", nobody would work for nothing, you know, you have to pay them, and it just gets out of hand, the cost of it. (CSLP member)

The use of the Eco-centre as a demonstration project was another key factor of success. Having a tangible and visible outcome that people could point to as an example made the longer term vision and goals of the CSLP concrete.

So that was a major decision, to look at, number one, to get something on the ground for people to come and see, and experience, to show we were serious, to inspire other communities and the community. (CSLP member)

Having a visible demonstration of sustainability alternatives provided the opportunity to scale up the project and to link it to broader activities in the town and in the region. Rather than having a planning document that outlined sustainability goals, they had a building.

Finally, the CSLP relied on cooperation, trust and good relationships within the community. There was excellent cooperation and coordination between the Town and the RM that was facilitated by having to share offices and having joint council meetings.

"If communities don't hang together, they'll hang apart." And I think there's a lot of meaning in that. And so he's [the Mayor] really been trying to get the communities to work at a regional approach to problem-solving and decision-making, and facility development, you know, waste management is a great example. You know, why not collaborate on something there, that, you know, whether it's a plan to go toward an objective of zero waste, which is a great objective, in my judgment, or how to manage it in some kind of more environmentally friendly way than we do now. There's a great between of how collaboration example once competing communities would be good for a region. (Town Councillor)

The relationships and trust created a sense that success or failure of the project did not rest on any one person's shoulders and therefore participants could use problem solving as a way to engage people with the project.

Challenges

The interviews identified five main challenges that limited the success of the project. The first was related to balancing the need for innovation for sustainability initiatives and the risk associated with changing the status quo. There were financial risks (using Town reserves and a bank loan to help finance the project) risks of perception (being viewed as a radical in a small town), risks of volunteer burn out and technological risks (using innovative and untried technology).

So it was not like he [the builder] had any professional training in building, architecture, sustainability or anything like that, it was just a matter of self-taught, had done enough buildings to know what worked and what didn't, we just had to take the risk that that was going to be enough. So the way to move from vision to implementation is to take risks. And you have to take lots of risks. You just want to make sure that you take risks with people you have confidence in. (CSLP member)

The key to managing those risks was to understand the range of options, recognize opportunities to innovate and to manage the complexity associated with the project, which was difficult under the conditions of an ad-hoc process / back of envelope planning model that made it more difficult to coordinate activities.

Avoiding volunteer burn-out and managing the need for specific skills and human resource capacity for the project was another challenge that had to be addressed. The CSLP is a volunteer organization that can only undertake projects for which there is volunteer capacity.

For every person that worked [for pay] on that building, there's hundreds of hours of volunteerism out there, you know. For every piece of material that went into that building, there's thousands of dollars worth of building materials that were donated or at a reduced cost or whatever. So I guess, in essence we take a reduced risk by doing things like that. But it's a challenge, you can only expect people to do so much. (Member of Town Council)

Therefore, some aspects of the project are only half-done and it was sometimes difficult to link individual projects together to maintain the long-term vision. Relying on volunteer labour also necessitated individual experts to learn new skills, to innovate and to become experts in areas where they had previously little experience.

The existing regulatory and funding frameworks were another barrier that had to be addressed and limited the success of the project. The Eco-Centre was an innovative building, and therefore challenged existing institutional, financial and regulatory frameworks. For example, it was a challenge to get the Health department to approve the restaurant because grey water recycling and composting toilets did not match their standard approvals. It was equally difficult to find an engineer to approve the structural integrity of the building, a banker to agree to loan-financing terms, an insurer to insure the building and a building inspector to approve the building - all of which required additional time and resources because the building did not fit into standard approval forms. In each case, it took an individual who was willing to actually look at the project and step outside the traditional regulatory framework to get things approved.

Communication and public engagement was another challenge faced by the CSLP. The project required constant communication and engagement to

hold the interest of volunteers and the broader community and to maintain their support. There was concern from some residents in Craik about the costs to the Town for the Eco-centre and Eco-village and whether the Town was facing too much financial risk. This concern culminated in a petition for a special Town hall meeting to clarify the finances and the project. CSLP members recognized that they had been caught up in promoting the project externally and had not done a good enough job communicating with people locally.

That, in fact, is one lesson that we have learned, and that is, for something like this, particularly this kind of project, because of the risk, the perception, and just the nature of it, you've really got to educate your public about it right from the get-go. And we probably didn't do enough of that. We've learnt that lesson. And we tell everybody else, we have a lot of communities coming to us and asking "how did this happen?" We always tell them, you make sure that you get your ducks lined up right at the start, and get as much public input as you can right at the very start. And we didn't do that. And we paid a bit of a price. But as I said, I'm glad that it happened, because it cleared the air, and I think the ranks of the detractors out there are going down pretty constantly. (CSLP member)

In the end, the meeting generated additional support for the project, but also served to remind CSLP of the importance of public engagement about the project.

Finally, regional cooperation was a challenge for Craik and for surrounding communities. There is a history of regional competition between various towns that has intensified with declining rural populations and a desire to maintain existing services in the face of consolidation. However, cooperation is occurring informally around economic development opportunities. For example, the opportunity exists for development along the corridor between Saskatoon and

Regina (much like Red Deer in Alberta), yet that vision does not match the sustainability vision of Craik. The challenge remains to encourage and convince the surrounding communities of the value of a sustainability approach to regional development and to collaborate on defining criteria that lays out what is and is not acceptable for the region.

So that we don't get pitted against each other by companies or, you know, are we going to allow intensive livestock operations, if so, where? What will be the rules? And the whole region, are we going to allow new subdivisions, if so, where, what are going to be the rules, so that everybody has the same ones. So if you go to Craik, if you go to Davidson or Kenniston or whatever. So we want to bring in people that will help the whole region, and I think that the popularity of Craik and the publicity we've gotten for our project, has helped the entire region too. You know, now Davidson is doing, I think along with the Natural Step, they're doing this, a complete set of projections on their community or whatever, so they're now getting on board, and it's spreading out. (Town Councillor)

The degree to which Craik is successful in guiding regional development along sustainability principles will depend on their ability to work collaboratively with other Towns.

Conclusion

Craik's CSLP is an example of a small rural town using the framework of sustainability to address rural decline and to ensure the continued viability of the Town. Rather than embarking on conventional economic development initiatives, the leadership of the Town was convinced that sustainable community development offered a way to differentiate themselves from other towns, to draw attention to the town and to reduce their ecological footprint. While the CSLP is quided by a long-term vision of sustainable living on the prairies, it was

recognized that a tangible demonstration of what that entails was needed to engage residents. Craik has been successful in building the Eco-centre, establishing an Eco-village, both of which have contributed to an increased awareness of sustainability among existing residents and has led to an increase in population and new business interests in the Town.

Case Study #4: Rolling River (MB) Comprehensive Community Plan

Rolling River First Nation is located 250 km Northwest of Winnipeg, near Riding Mountain National Park. The community has an on reserve population of 500 (2009), with approximately another 400 members living off reserve. Rolling River FN comprises 7,500 hectares of land that includes the main settlement area near the Town of Erickson, agricultural land and natural areas. The focus of the Rolling River case study is on the comprehensive community plan that was created in 1998. The 10-year plan is treated as a living-document, constantly being modified to reflect changes in the community, new challenges and new opportunities. The main priorities of the community plan are economic development initiatives designed to create employment within the community, generate revenue for the community and reduce the reliance of the community on funding from Indian and Northern Affairs Canada (INAC).

Some of the initiatives from the community plan that have been successfully implemented include the new health centre, gas bar, restaurant, Video Lottery Terminal (VLT) centre and new farms. Projects that are still

underway include the modular home plant, community sawmill and local wind energy project.



Figure 11: New health centre in Rolling River FN

Motivation / Rationale

The primary focus of the community plan was to improve the socioeconomic conditions of community members. Members of Chief and Council felt
that the key to local development was to increase self-reliance and decrease
dependency on the Federal government for funding. In 1998, Rolling River
signed a Treaty Entitlement Agreement that provided Rolling River with an
additional 47,112 acres of reserve land that was a result of previous unfulfilled
treaty obligations. As part of the agreement, Rolling River has been allocated

over \$8.5 M to purchase up to 44,745 acres of land from private landowners any where in the province, which provides the foundation for multiple development opportunities.

Therefore, the challenge was to identify what type of economic development initiatives to engage in and how to link existing capacity for economic development with the opportunities presented with acquiring new reserve status land.

The overall long-term goals of the community are to achieve 95% employment through economic development initiatives that reflect the community values, protect cultural and ecological integrity and involve community review and approval.

The goal of the 10-year economic development plan and the capacity assessment was to meet the basic needs of community members through local self-reliance that linked traditional culture and holistic way of thinking to the realities of the modern world.

Sustainable Community Planning / Implementation

The first step in creating the community plan was to generate community interest and engagement. Chief and Council announced that they were unveiling the community plan at a special meeting, knowing that their members would react with criticisms if they were presented with a Plan that was already completed. In fact, they did not have a plan, but community members were so concerned about not having any input that the turnout was good. People came

with the intention of criticizing whatever was going to be presented but ended up having a community meeting to establish the vision and goals for the community and it was a constructive meeting. From that meeting, the Community Development plan was created that identified the vision and goals of the community and the economic development projects and strategies to accomplish them. Next, they took an inventory of the community's human resources. First, the community focused on opportunities that could be carried out with existing resources and those connected to available funding programs.



Figure 12: Cutting logs as part of community log-home construction initiative

As a result of the community planning process, Rolling River purchased additional reserve land by the highway, where increased traffic provides for future business opportunities. The comprehensive community planning process also recognized that the VLT centre was an important source of funding for the

community, yet at the same time was only being used by community members who least could afford it. Therefore, the goal was to move the VLT centre to the highway location to capture revenue from non-community members.

The Gas Bar was moved to the highway site for the same reason. At its previous location in the centre of the reserve, the Band had to subsidize its operations because it was not generating enough revenue to meet the quota requirements of the fuel supplier. Since it has been moved to the highway, it has been an increasing source of revenue and has provided employment opportunities for band members. In addition, the band decided to switch to a First Nation fuel supplier that would provide direct dividends from the sale of fuel to the community.

A new health centre was built to replace an overcrowded facility that was unable to offer all of the required programs. Healthy communities is one of the key priorities in Rolling River and the new health centre is able to offer a range of community health programs including the Aboriginal Headstart program, Aboriginal Diabetes program, Fetal Alcohol Syndrome Mentoring program, Prenatal care program and health and addiction services programs. The Health Centre was the first building in the community to be built with concerns for energy efficiency incorporated into the design, with a ground source heat system and energy efficient lighting as a demonstration for future institutional buildings in the community.

The wind Energy Project, a joint venture with Sky Power, is expected to create 100MW of green energy for sale to surrounding communities, with a

portion of the proceeds used to offer subsidized power to community residents.

Rolling River received funding to install an anemometer to assess the feasibility of wind power.

A youth business camp program was established to build the capacity of youths to engage in business creation in the community, reducing the flow of young, educated band members to other communities. A wide range of projects were explored through the program and the 20 youths who participated gained skills in the development and analysis of business plans and making proposals to funders. Proposed projects included computer assembly business, a pawnshop and water bottling.

The forestry management and capacity building project provided training, support and employment for community members in the management of a renewable resource. As a result of the program, 14 hectares of land were reforested as part of a tree farm that would provide resources for a community log-building program. The modular home plant project is also designed to capitalize on the local forestry resources and address the housing shortage faced by numerous First Nation communities.

Community Roundtables:

Community roundtables were developed to ensure greater participation from community members in a productive manner. The roundtables identified key issues, proposed projects, addressed challenges and discussed solutions, values, ideologies and decision-making structures. Each family group was able to nominate one person that would represent that family in the community

roundtable process. The community roundtables began in 1998 with seven families participating and have since grown to over twenty. The community roundtables were instrumental in laying the foundation for the 10-year community development plan that was refined by the community economic development officer and approved by Chief and Council.

In order to begin to implement the 10-year plan, an assessment of the capacity of the community was conducted. The community capacity assessment sought to identify those items included in the 10-year plan that could be tackled immediately with existing resources from the community (financial, human and natural). Its purpose was to identify the skills that existed within the community and how they needed to be enhanced to implement the ideas from the 10-year plan.

The criteria used to identify which economic development initiatives to pursue included:

- Economic benefits to the community in terms of revenue and job creation,
- Able to implement with existing resources,
- Build capacity of community members,
- Contribute to financial self-sufficiency of the community,
- Be supported by elders, and
- Link to the land base of the community.

Success Factors and Lessons Learned:

Leadership, decision-making processes, community engagement and capacity building are four factors identified by interview respondents that contributed to the success of the comprehensive community plan. Chief and council were committed to economic development as the foundation for future activities in the community. This political leadership and the financial support associated with it served to support individual initiatives that had the potential to become self-sustaining businesses, where the viability of the business over the long-term was the key to making strategic decisions between initiatives. Chief and council were able to rely on a strong commitment and mandate from residents over a prolonged period (beyond election cycles) that allowed for a longer-term view of success of economic development initiatives to ensure that activities are integrated.

For example, land acquisition decisions were made based on economic development opportunities and capacity building programs were established to drive economic development. The political leadership in Rolling River was able to obtain long-term support from residents through decision-making processes such as the community roundtables that ensured that the activities of the leadership were open, transparent and accountable.

The continuity of governance is very, very important factor because if you are changing leadership every 2 years you are not going to get a lot done because what you are doing is having a competition within your own community. But if everyone can work together and you can come up with a plan. I said give me 10 years and that's good. And I've done my ten years and now I'm going to move on as much as I'd like to stay. (Member of Chief and Council)

When the Chief was first elected, he asked specifically for a mandate for a community plan that would take ten years to implement. He made it clear that there would be no quick fixes, but that incremental progress would be made over time for the plan to be fully implemented and that a longer time frame was required to take a more comprehensive approach. This provided the leadership with the security to take more risks, to innovate and to plan for the longer term.

Decision-making processes were critical for engaging the community around economic development opportunities that could improve the socio-economic status of all residents. The community roundtables directly engaged the youth, elders and the broader community.

This table were deemed as our consultation table, people get to report back to their families and bring it back to the table. The youth, we were still meeting with them, and you'd go do a power talk with them and encourage them and they'd clap when you left and say right on chief. The adult table on the other hand were practically booing you when you walked in. But now things are going better and there is capacity development money available at INAC we're going to apply for to make sure the round table knows good negotiation practices and good terms of development. (Member of Chief and Council)

Decision-making structures were based on a model of self-government that starts in the home and works out to the community.

A lot of the information you guys are looking for it's in the heads of the elders. So it's a holistic thing for us, looking at it from all angles. That's why it's so important to talk to the elders because they might know it. Somebody might know it... they might remember it. (Band staff)

The roundtables were based on a community history of consultation that uses the collective wisdom of the community. That is why the role of elders in the community is so critical.

The high level of community engagement contributed to the success of the comprehensive community plan and subsequent economic development initiatives and provided the necessary support to the political leadership.

Including community members in the decision-making process and structures ensured broad community ownership of activities.

The round table deals directly with families and the band meeting that's basically the reps from the round table and they hash it out there. So there are 2 levels of compromise before a decision is made. And if there's counter opponents it will go back and forth until they reach a compromise. Particularly for buying new land through the TLE [Treaty Land Entitlement Agreement] where we select people voted from our community to represent our trust. So there's lots of different levels of support. (Band staff)

This sense of ownership of activities contributed to a positive sense of the future, nurtured a "can-do attitude" and created a positive vision for the future. In the early stages, the community focused on initiatives that could be implemented immediately to demonstrate success and to engage residents in community change.

Finally, capacity building contributed to the success of the planning initiative and subsequent economic development activities. The starting point for the planning process was recognizing the linkages between economic development opportunities with the existing capacity to implement. Prioritizing

options was based on a clear understanding of the difference between visioning and capacity to implement.

So what we had to do was after we had all the wish list packaged together we had to bring in our council and human resources person and say lets see which ones of these we can tackle immediately and start seeing results. I got 2 years here and I asked for 10. How are we going to do this as a council? We always talk about youth and say youth are our future leaders but what are we actually doing for them? So we developed a gym for them to hang out and people using key words to keep in their mind like business. How are we going to pay for that gym? Who's going to cover the expenses, he lights the hydro everything. We have to start putting a fee to these things so they can look after themselves. So the bingo looks after that and the youth look after that. (Member of Chief and Council)

The land base provided the foundation for economic development opportunities and the importance of the land base and knowledge of local natural resources was a strong point for the community and therefore served as the foundation for economic development.

Yeah, it's going to take a good community plan, to really look at that land to really plan out what we can do with it. I don't want to say that it's haphazard planning but we've got to look at the viability of the land, for our dollar, what can we put there, what kind of revenues can be seen as a result. One project I'm really intrigued by is the wind energy project. I really like the idea of wind energy; I believe we are headed in the right direction. It will create some jobs, some employment and it will also create some revenues for our community. And it is also self-sustaining, being off the grid and using our land. (Member of Chief and Council)

Challenges

Self-awareness and a lack of resources and capacity were two key challenges that limited the success of community economic development

initiatives. The residential school legacy was a barrier to developing a positive image of the community, both internally and externally.

We looked at our traditional ways on how we lived. And one of them was leader selection. It was the women a long time ago that selected our leaders because the men would have long days where they would have to be providers for the community and the women naturally stayed back and kept homes and the camp, and they watched the children. So they knew exactly how every child acted, they knew which ones were going to be the little scrapper guys, which ones were the good speakers, and helped create those friendships that kept the community in tact. And a long time ago it used to be the women who said that's who's going to lead us. Today we use this democratic system that's really screwed up and it creates in-fighting, it creates division on the reserve. So I'd like to get back to that old style where our women can actually come together, but again because of residential school some of our old people can't even look at each other let alone say hi. And when you decipher everything and take everything apart you realize we are still carrying this on from a family feud between your grandfather and my grandfather. But that's how it is... (Community Elder)

For example, the societal conditions in the community created a sense of dependency that made it difficult to move beyond day-to-day survival and address the visionary change that many in the community thought was necessary.

Some people come to a band meeting just to be negative and just to say no to it. And then I ask why would you turn down such an idea? And they say it's just not going to work... because we got so used to things not going to work. (Community Elder)

There was also the perception that recognition of traditions and cultural heritage and pursuing economic growth were not compatible, a perception that was closely related to the generation gap between elders and youth. The challenge was finding opportunities that intersect both and creating further opportunities for interaction and learning between youth and elders. For

example, the log-home building project employs youths in the community and is supervised by an elder who educates the youths about traditional heritage broadly and more specifically about traditional approaches to forestry. A final challenge related to self-awareness was the difficulty of integrating multiple worldviews, frameworks and ways of thinking and economic development.

Community members make claims to a holistic and comprehensive approach to community problems, but at the same time prioritize economic development and growth above all else and find difficulty in incorporating holistic views with INAC management requirements and broader economic and social systems.

The lack of resources and capacity was in part related to the socioeconomic conditions in the community. Graduates from high school, trades and
universities do not come back to the community because of a lack of opportunity,
which makes it difficult to cultivate leadership and leadership qualities among the
next generation when opportunities (jobs or housing) for them in the community
do not exist.

I guess it's up to us to make the youth aware of what exactly is needed in our community. Because right now, some of our youth that are in school, they want to come home but they don't have anything to come home for. And if they do come home, they end up sitting at home waiting for a job that they are over qualified for, you know, pumping gas. So, those are some of the economic things that we have to address. We have to start creating jobs that our youth can do. (Member of Chief and Council)

Professional training, skills and trades are needed that can be put to use within the community. Despite the attempt to prioritize economic development initiatives for which capacity for implementation exists, the reality is that

implementation is much more opportunistic. The lack of capacity for planning limits the outcomes of comprehensive planning processes to a wish list for the community. Prioritizing is difficult, the community struggles with saying no to an economic development idea that does not contribute directly to improving housing conditions, employment opportunities, health or education of community members, particularly when making a long-term investment in new reserve land. The lack of training and capacity building fosters a sense of the community being dependent on government hand outs, something that is reflected in the relationships between the band and federal government agencies.

Maybe we do go about it the wrong way, Maybe we shouldn't be so head on, maybe we should learn to negotiate, to do better planning. But when you really go into these meetings with our local MP's, with people in power they still see us as a 3rd rate nation who can't take care of themselves and that's sad because I know in my heart, in my mind, this community could flourish if they'd just give us a chance but they don't. (Community Youth)

In addition, that lack of financial resources forces the community to rely on government grants for implementation and therefore the community is placed in a position where funding from external sources directs the planning outcomes rather than having the planning outcomes come from the community.

And a lot of times we end up trying to embarrass them [Government agencies] first before they release any funding. It's not a good way to live. We had said we wanted to set one of these homes as a model home built from our forest and cut from our logs. And we asked the department does this qualify for funding under your special homes funding and they said well it's a log home, it's not special. We said wait a minute it's made from logs from our reserve, from our own land that we cut and harvested. What do you mean that doesn't qualify?...The department used to set us up for things that aren't going to work... they'd take a \$10-\$20,000 dollar business proposal and look at it and say oh great... here's \$5,000.

They set you up for failure right away. (Member of Chief and Council)

Chasing government funding results in decision-making based on short-term opportunities and makes it more difficult to recognize the long-term synergistic initiatives that could result in transformative change for the community.

Conclusion

The Rolling River comprehensive community plan served to catalyze community engagement around economic development opportunities that could address existing socio-economic conditions in the community. The planning process and decision-making structures established for implementation reflect a commitment to consensual decision-making, cultural values and holistic way of thinking that has served to improve the self-awareness of both individuals and the community. Rolling River engaged in a broad visioning exercise, yet they were conscious of needing to provide tangible results and were successful in identifying specific priorities for action based on evaluating their capacity for implementation over the short term. The outcomes of the planning process served to reinforce the need for local self-reliance, to build community capacity and to create a sense of community ownership over the various projects and ensured that the risks associated with going forward were not placed on any one person's shoulders.

CHAPTER 6: ANALYSIS

Case Study Analysis

In this chapter, two levels of analysis are performed. First, the case studies are analyzed in relation to the community decision-making framework to identify the key strategies that were effective in bridging the gap between planning and implementation. The purpose of the second level of analysis is to determine how this research framework helps to better understand how the key concepts related to sustainability, governance and community are applied in practice.

By drawing on the lessons from each of the case studies, the analysis based on the community decision-making framework suggests that the critical components of mobilization are leadership, and knowledge and awareness of sustainability issues. Leadership is important in providing the motivation for change, using local crisis as a catalyst for SCD and managing the risks associated with innovation and change. Knowledge and awareness are critical in identifying options, making linkages between issues and connecting local concerns to broader scales at regional and national levels. Both are critical for community mobilization for sustainability.

Regardless of the specific context, scale or focus of the individual case studies, there were considerable similarities across the cases in terms of barriers to implementing sustainability and approaches for overcoming those barriers.

This finding is particularly important given the reliance on best practices as a form of cross-community leaning. The literature review and best practice review suggested that communities of all types are experiencing barriers to implementing sustainability initiatives at each stage of the planning process. In this chapter, the lessons from the case studies at bridging the planning — implementation gap are presented as examples of community mobilization that enabled changes to the status quo in terms of how to advance sustainability in their respective communities.

The approach to conceptually understanding the planning — implementation gap was to think of planning and implementation processes in an integrated way — what has been referred to as an integrated community decision-making system — made up of community actors, community values and vision, governance and decision-making structures, policy design and signals, actions and outcomes. The key to thinking of the planning — implementation gap in terms of an integrated community decision-making system is that it highlights the multiple opportunities for community mobilization that can strategically bridge the gap, depending on the context, issues and capacity of a given community. This chapter presents summaries of the strengths and challenges from the case studies and categorizes them in terms of the elements of the research framework for community mobilization. The chapter concludes by identifying the key aspects of mobilization that connect planning and implementation activities.

⁹ For more details and examples of the individual strategies, see Appendix 1 or the project website: www.sfu.ca/cscd/strategic sustainability

Table 8 presents the strengths and challenges in terms of community actors for each of the case study communities.

Table 8: Case Study Results: Community Actors

	Community Actors					
Craik,	Strengths:					
SK	Worked with a small group of committed actors in the early stages –					
	through demonstration project were able to expand.					
	External actor served as the catalyst.					
	Volunteers					
	Unique collection of individuals who "get it".					
	Cooperation between Town and Regional Municipality.					
	Challenges:					
	 Perception of core group as a bunch of wing-nuts and stereotypes of 					
	environmental concern = "hippies."					
	Rely on individuals to innovate and take risks.					
	Reliance on volunteers requires constant engagement to hold interest,					
	can only take on projects for which there is volunteer capacity.					
Rolling	Strengths:					
River,	Community members were engaged through family roundtables that					
MB	allowed each family group to ensure that the overall process reflected					
	their values.					
	Focus on capacity building initiatives so greater proportion of					
	community could be engaged in economic development initiatives.					
	Challenges:					
	Generational disconnect among actors.					
	Harnessing negativity in a manner that shifted community planning from					
	the "Chief's" plan to "our" plan.					
	Working with INAC that does not share similar approach to					
	collaboration, engagement.					
Toronto,	Strengths:					
ON	Partnership approach engages actors of various types on an equal					
	footing.					
	Brings together city, finance, unions, property developers / owners.					
	Political support.					
	Challenges:					
	Getting support of those responsible for actual implementation – would					
	rather skim the low-hanging fruit.					
	Difficulty in getting external actors at other levels of government to					
	engage (Canada – Ontario Infrastructure Works Program).					
Surrey,	Strengths:					
BC	Charrette process included variety of actors, from developers to NGOs					
	to UBC to City in the design of the neighbourhood.					
	Challenges:					
	Ability to engage participants from design to implementation					
	Developers not involved in implementation and design					
	Developers not involved in implementation and design					

In terms of community actors, the following were identified as key strategies for engaging a variety of motivated actors committed to SCD to strategically address the planning – implementation gap:

- Presence of influential community leaders that were able to place sustainability on the agenda and motivate others to become engaged;
- Proactive approach to public engagement by actively seeking out partners and stakeholders;
- Use of catalyzing issues for which there is broad support;
- Management and understanding of engagement cycles the ebbs and flows of levels of participation of individual actors based on perceived importance, ability to take tangible action or access to resources; and
- Use of external actors as neutral 3rd party or to supplement existing knowledge base and awareness or to increase capacity to take action.

Each case study relied on a key leadership figure or a core group that was able to drive the process and engage political leaders and other community actors to participate. Despite the variability of approaches among the case studies, leadership figures emerged who recognized the importance of engagement and worked to build partnerships based on a clear understanding of the motivations, mandates and incentives of stakeholders to become engaged. In each community, a key catalyzing issue was identified out of a myriad of possible issues that served to motivate and engage the broadest possible support and for which there was a sense of crisis. For example, in Craik there was concern about the viability of the town, while in Surrey, they were able to capitalize on storm water management as a "make or break issue" for

development that enabled broader engagement around doing development differently.

The strengths and weaknesses in terms of community values and visions are presented in Table 9.

Table 9: Case Study Results: Community Values and Vision

	Community Values and Vision				
0 '1 014	Community Values and Vision				
Craik, SK	 Strengths: Established attitude of self-determination, willingness to take charge and do things on own. Challenges: 				
	 Some projects only partially complete, difficulty in linking individual projects together that maintain the long-term vision. 				
Rolling	Strengths:				
River, MB	Value-based processes are integral to FN approach.				
	 Everything starts with the land; the land belongs to everyone – no concept of private property, so need to preserve it for future. Challenges: 				
	 Using land as the foundation for economic development, yet limited by legislative barriers in obtaining new land. Making connection between day-to-day survival and visionary 				
	change.				
	 Perception that economic development is one path for community and recognition of tradition and culture is another path that is not compatible. 				
Toronto, ON	Strengths:				
	 Visionary leadership that was able to take advantage of broad public concern over air quality and translate it into tangible projects. Challenges: Difficulty in integration of environmental initiatives in local 				
	government with social issues.				
Surrey, BC	 Strengths: Commitment to preserving the watershed. Smart Growth on the Ground principles through charrette process Challenges: Education and awareness within wider community re: SD principles. 				
	Knowledge of residents / real estate community of design features.				

Community values and vision were expressed formally in planning documents and also informally through the day-to-day interactions between

community members. The strategic "bridges" used to identify and develop a shared vision for the community and the values that motivate action towards sustainability were as follows:

- Community values were able to overcome economic primacy and were cross-sectoral;
- Values and visions were inclusive and were supported across the ideological spectrum;
- Focus was on improvement of local quality of life and of making things better in each community;
- Visions for the future were grounded in existing capacity; and a
- Shared culture of empowerment and community initiative existed.

In each of the case study communities, preserving or improving the economic status quo was a key component to any activity, yet community values were expressed in a manner that was more comprehensive that just an economic approach. Visions for the future were explicitly integrative and were motivated out of concern for and recognition of the linkages between the economy, the environment and society. In Toronto, for example, the vision for "smog free days" and the reality of an economic recession provided the rationale for a building retrofit program that contributed to a reduction in emissions and created jobs.

In each case, broad support stretched across ideological lines and allowed for initiatives to survive beyond election cycles. While the motivations and associated values for taking action reflected a need for change in the community, in each case study visions were grounded to existing resources, capacity and

understanding of the degree of change the community was willing to accept.

Rolling River undertook a broad visioning exercise, yet also identified specific priorities for action from that process based on an evaluation of their capacity to implement over the short term.

The culture of empowerment and community initiative that enabled either the local government or the community to take the action in implementing sustainability in response to local issues beyond their normal mandates was also important. For example, the established culture of volunteerism and community initiative in Craik and the willingness of the City of Toronto to step beyond the normal role of government and become directly involved in energy retrofits enabled both communities to bridge the planning – implementation gap.

Governance and decision-making is the third element of the framework and the strengths and weaknesses for each case study are presented in Table 10.

Table 10: Case Study Results: Governance and Decision-Making

	Governance and Decision-Making		
Craik, SK	 Strengths: "Seat of your pants" planning allows for flexibility and adaptability Regional cooperation occurs in an informal manner. Good relationships between Town and Regional Municipality. Challenges: Risk management was difficult in an ad-hoc process and made coordination difficult at times. 		
Rolling River, MB	 Strengths: Political commitment and support from the community beyond election cycles ensured that economic development activities were integrated. Change has to come from within, cannot be imposed. Need to engage all aspects of community. Decision-making model based on self-government that starts in the 		

	home and works out to the community. Based on collective wisdom of the community.				
	Challenges:				
	Resources and opportunity for educated community members to stay in the community.				
Toronto,	Strengths:				
ON	BBP experience got City and Energy Efficiency Office to understand new ways of going about decision-making, funding processes and partnerships that inform other City initiatives.				
	 Legacy of integrated environmental roundtables as institutions which are perceived as more credible than self-appointed political champion. 				
	Knowledge, communication and cooperation off-sets risk and perceptions of risk.				
	Challenges:				
	Bureaucratic resistance to integrated decision-making.				
Surrey, BC	Strengths: • Smart Growth on the Ground and charrette process.				
	•				
	Integrated implementation teams within the City. Challenges:				
	Challenges:				
	Too flexible with implementation. (i.e. rezoning of commercial area into residential and tendency to accommodate current developer concerns at the expense of the longer term vision).				

A strategic approach to governance and decision-making contributed to the success of the case communities in bridging the planning – implementation gap. The key cross-case bridges are identified below:

- Project based demonstration projects transformed the concept of sustainability into tangible actions that provided support to decisionmakers;
- Decision-making processes and structures acknowledged the risks associated with doing thing differently, yet addressed those risks in an open and transparent manner;
- Engagement of multiple departments and multiple stakeholders in the decision-making processes established linkages and ownership of sustainability initiatives.
- Decision-making processes were used to raise awareness and build capacity to address sustainability issues; and

 Decision-making did not get bogged down with the need for technical knowledge; rather they relied on a "pretty good" solution.

The key to governance and decision-making processes was integration, engagement and involvement of a cross-section of actors. The key bridge between planning and implementation was information, knowledge and awareness. Regardless of whether an initiative was project-based or had its origins in a planning process, in each case, communities were able to use knowledge and information generated externally or through internal demonstration projects to give sustainability initiatives tangible meaning. Information and awareness was also important in managing the risks associated with doing things differently. Decision-makers identified the importance of risk – both perceived and actual - and the ability to account for it as being critical in the decision-making process. One way that risk was managed effectively across the cases was through cross-departmental involvement or multi-stakeholder engagement in the decision-making process. This engagement had the effect of creating a sense of joint ownership over sustainability initiatives and reduced the risks to any one department, group or individual, raised awareness and built capacity to address complex SCD projects. Finally, decision-makers did not get bogged down with the complexity of sustainability, the technical details or gathering all the required information. Instead, in each case projects were able to proceed based on a pretty good, rather than perfect solution.

Table 11 presents the key factors and challenges faced by the case study communities in terms of the fourth element of the framework – policy design.

Table 11: Case Study Results: Policy Design

	Policy Design - Strategies, Actors and Instruments						
Craik, SK	Strengths:						
	Learn by doing problem solving and decision-making.						
	Challenges:						
	 Limited human resources to manage risks (financial, volunteer, an technological). 						
	Reliance on individuals to become experts and to innovate.						
	Existing regulatory frameworks						
Rolling	Strengths:						
River, MB	Had a designated hole-poker, who would try and poke holes in any idea, testing its feasibility.						
	Challenges:						
	Lack of human and financial resources to develop local policies.						
	Have to rely on policies made in Ottawa to govern the way things						
	are done. Without planning resources and tools, it is difficult to						
Toronto, ON	translate outcomes of planning process beyond a simple wish list. Strengths:						
Toronto, ON	Being arms length from City enables innovation and risk-taking.						
	 Importance of targets to provide motivation. 						
	Good information as risk management – financial, legal, attitudinal						
	hurdles took research and understanding of options and the need to						
	communicate with gatekeepers in bureaucracy.						
	Challenges:						
	Need new instruments that go beyond conventional financing and						
	conventional timelines. Thinking of buildings as systems allows for						
	blending of capital and operation budgets with retrofits that allow for blended pay-backs.						
Surrey, BC	Strengths:						
,	City-wide changes in terms of acceptance of density.						
	Changes to Neighbourhood Concept Plan processes.						
	Challenges:						
	Too flexible in implementation – push back.						

The key bridges in terms of policy design for strategically overcoming the planning – implementation gap were as follows:

- Information, best practices and learning from others;
- Complexity management and innovation;

- 'Back of envelop' non-technical or informal plan to deal with complexity;
- Institutionalize best practices into regular way of doing things; and
- Performance based strategies.

No specific policies, strategies or instruments were effective across all case study communities. Particularly for Craik and Rolling River, capacity and resources within local government or band administration limited the degree to which specific policies were considered. However, each community looked to best practices from elsewhere as a means to learn and transfer knowledge to their respective communities. This information transfer was essential in managing complexity associated with policy innovation and learning was focused on the processes for managing complexity in other communities rather than on the technical aspects of how initiatives were implemented. Related to findings on decision-making above, non-technical approaches to strategy design such as simple "back of envelope" calculations provided enough rationale to support to decision-makers. A key challenge across all case studies was with institutionalizing best practices and demonstration projects into the regular dayto-day operations of the local government or band. In both Surrey and Toronto, there was a shift towards performance-based standards as a way to spur innovation in implementing sustainability initiatives.

Finally, the strengths and challenges in terms of community outcomes are presented in Table 12.

Table 12: Case Study Results: Community Signals, Actions and Outcomes

	Community Signals, Actions and Outcomes		
Craik, SK	Strengths: Symbols of success include adoption of biological water treatment for the Town, individual changes in behaviour based on awareness		
	 of SCD, raising the profile of the Town. Focus on tangible results to provide the basis for broader community's transformation to SCD. 		
	Challenges:A lot of risk was involved, were never certain that it would work		
Rolling	Strengths:		
River, MB	Focus on business development to improve economic self-reliance.		
	Challenges:		
	 Identifying how to put the community in a position where it is able to say no to an economic development idea that does not contribute directly to the improvement of housing conditions, employment, health, education, etc. 		
Toronto, ON	Strengths:		
	Demonstration projects such as at Exhibition Place provide signals to wider community of what is possible.		
	Voluntary programs ensure that developers are involved and engaged at their comfort level, allowing for faster roll-out.		
	Challenges:		
	Voluntary program limits the ability of City to legislate; the community decides their own risk threshold.		
Surrey, BC	Strengths:		
	Charrette process		
	Density sold out		
	Challenges:		
	Conflicts with other policies		

The last category explores the link between decision-making and community outcomes. To overcome external and internal barriers related to community signals, actions and outcomes, the following aspects were relevant for all the case studies:

- Costing SCD as an investment rather than a cost;
- Integratin demonstration projects with other activities;
- Adaptable / flexible;
- Institutionalizing outcomes; and
- Accepting some pushback but using results to leverage further changes.

The key challenge for the case study communities in the category of community signals and outcomes was how to maintain consistency and commitment towards sustainability within the context of complex, interdependent and conflicting policy signals externally (from other levels of government) and internally (policies and actions within the community). Thinking of SCD as an investment rather than a cost was instrumental in overcoming this challenge. It allowed the case communities to leverage change in one aspect of their community and to link it to other activities and with other issues. Surrey, for example, used concern over storm water management to not only leverage investment in innovative green infrastructure for East Clayton, but also provided the opportunity to address the form and function of an entire new neighbourhood. In each case, demonstration projects were used to spur other activities, to raise awareness of SCD and to maintain momentum and interest among broader stakeholders. The case study communities were all able to implement incremental changes to their communities through their planning and implementation activities, but struggled with institutionalizing the outcomes. In part, this was a pragmatic response to sustainability, based on the assumption that a series of incremental changes will continue to raise the bar and leverage further change, but it does not address the more revolutionary reform to local government that some are calling for.

The key findings from the research that enabled the case study communities to bridge the planning – implementation gap have been analyzed and presented in relation to the research framework. The research identifies

aspects of community mobilization that were effective in overcoming challenges and barriers to sustainable community development across all of the case study communities. The key factors were organized based on the five elements of an integrated community decision-making system that consists of the actors engaged in SCD, the shared community values and vision, the governance and decision-making processes, the policies and strategies and the community signals and outcomes. Rather than thinking strategically about decision-making on a case-by-case basis or based on individual decisions, the case communities were thinking strategically about the process. Sustainable community development will not result from one key decision; it requires a whole series of decisions, actions and actors that are unique for each community. How communities think strategically about the process, the people engaged, their values and decision-making structures will determine how successful they can be at mobilizing citizens and their governments in changing the form and function of communities in a more sustainable manner.

How do these findings advance our understanding of community mobilization for sustainable community planning and development? Of the key factors identified above, which are most critical? Does the research framework help in understanding how communities navigate between the divides identified in the literature (strong vs. weak sustainability, participatory vs. elite, thick vs. thin community)? In the next section, these questions are addressed and the key factors for community mobilization are presented with the intent of advancing our

knowledge and understanding of strategic opportunities for implementing sustainable community development.

Framework Analysis

The literature on sustainable community development, governance and development and community mobilization served as the theoretical foundations for the research. Each body of literature was presented conceptually as two opposing ends of a spectrum (e.g. strong vs. weak sustainability, participatory vs. elite development, thick vs. thin community). The opposing ends of the spectrum represent major differences in approaches and ways of thinking within a given body of literature. However, it is also suggested that there are considerable similarities between literatures (e.g. participatory approaches to development have much in common with thick versions of community and strong sustainability or conversely, that thin versions of community are similar to elite led development and weak sustainability). In order to understand community mobilization for sustainable community development, elements from each of the different literatures and from along the spectrum within a given literature are needed. In this section, it is argued that looking at the case studies through a framework of mobilization that consists of actors, values, decision-making, policy and outcomes, contributes to a better understanding of the connections between the literatures and can help in the development of theoretical foundations for community mobilization for sustainable community development.

The theoretical foundations for sustainable community development have been criticized as being underdeveloped (Portney, 2003; Saha, 2009). The focus

of much sustainability research is on the relationships between environment and economy. Linkages between economic and social justice issues are usually ignored and linkages between environmental and social justice issues are often non-existent. Making linkages to the considerable literature that exists in the areas of governance and community mobilization and the commons can help in this area. Much of the research on local government response to sustainability is based on exploring the extent to which sustainability initiatives have been adopted and institutionalized through planning processes and policies. FCM award winners and other collections of best practices illustrate this point. The tendency is to rely on submissions from local governments that provide them the opportunity to showcase their innovative planning policies, strategies and technological innovations and they fail to account for actual social, environmental and economic impacts in the community more broadly. Looking at the adoption of policies does not necessarily translate into actual movement towards sustainability; it is implementation that is critical (Saha, 2009). Do the case study communities provide examples of approaches to sustainability that can be characterized as weak or strong? Are the case study initiatives based on eliteled or participatory approaches? Do they rely on thick or thin versions of community? The short answer is neither. In each case, multiple conflicting versions and approaches are promoted and advanced. The key is in understanding how specific sustainability initiatives draw on the disparate views and approaches that exist in a community in order to advance a broader sustainability agenda.

In the following section, the case studies are examined in relation to how the case study framework relates to the divides in the literature in terms of sustainability, development and community.

Craik Sustainable Living Project

The process used in the planning and development of the Craik Eco-Centre and related projects were based a wide range of approaches to sustainability, view and approaches to development and view of community intersecting (see table 13 for summary).

Table 13: Craik Framework Analysis

Craik		Examples
Sustainable	Strong	 Key leadership figures were able to put forward strong sustainability approach to counteract prevailing view of simply maintaining viability of the town. Meaning of sustainability incorporated economic issues, but went beyond and was more broadly based. Used of a catalyst project as tangible example of sustainability to spur further action around notion of self-sufficiency.
	Weak	 Original view of sustainability was viability, purely an economic focus. Regulatory hurdles slowed innovation. Focus on technological innovation to reduce environmental impacts.
Development	Top- down	 Values were identified by those associated with CSLP, not broader community. CSLP were decision-makers without enough engagement with the broader community. Property-led growth, although not by developers.
	Bottom- up	 Cross-section of actors, volunteer based, consensus and participatory decision-making among CSLP. Open to engagement and discussion around values Demonstration projects trickled up to the rest of community
Community	Thick	 Communities of interest and communities of place intersect "Can-do" attitude, history of cooperation, collective action
	Thin	 Difficulty engaging with broader community. Version of community as a passive force in the face of economic restructuring.

Analysis of Approaches to Sustainability, Development and Community

In Craik, the response to implementation of sustainable community development initiatives drew from across the spectrum of weak vs. strong. The original approach of revitalizing the town was based purely on standard economic development initiatives. One respondent described the early approaches to sustainability in this way:

Most of them were talking about, 'oh, you've got a lot of traffic going up and down the highway between Saskatoon and Regina, and you've just got to find a way to get them off the road and spend some money'. That was their idea of sustainability. (CSLP participant)

However, there were also early suggestions that a strong sustainability approach was needed. Key leadership figures from the community were introduced to a strong version of sustainable community development based on values that were largely based on concerns about the environmental impact of society. The focus of the Craik Sustainable Living Project was to:

Essentially trying to encompass everything to make living on the Prairies a reasonable thing to do and sustainable into the future. So, we weren't exporting our soil, contaminating our water supplies, we weren't, you know, utilizing energy other than our renewable energy. That's where I'd like to see the project go, eventually. (CSLP member)

Despite this strong environmental focus, the motivation for engaging in any initiative always remained one of ensuring that the town remained viable, and drawing new residents into the town to end the gradual population decline. For Craik, the key to navigating different views and approaches to sustainability was key leadership actors that were able to articulate values that resonated with

the broader community and that were made tangible through the use of demonstration projects.

What we need is a physical demonstration of sustainability. I didn't think that most people in Southern Saskatchewan could get it if you just wrote out a plan, if you just wrote out a vision. If they just read it, it wouldn't make any sense. If they could come in and see it, it would make sense. Why not let Craik have a physical demonstration of sustainability? And our idea initially was to have a demonstration building, it would be the initial stage. And the second stage was to have an Eco Village, where instead of having a commercial building, which is the Eco Centre, it would be actual people living in houses and obtaining at least some of their income off the land based there. And, you know, they bought into everything. (External adviser to the CSLP)

In terms of views and approaches to development, aspects of both a top-down approach and a bottom-up approach were used. For example, the values for the project were identified by a select group of actors engaged in the CSLP with limited consultation with the broader community. As such, this approach fits with a top-down approach to development where the interests of an elite segment are presented to be in congruence with the interests of wider society. As a result, certain members of the community were not informed of the CSLP and the relationship to the Town and the Rural Municipality and as a result were not supportive. Members of the CSLP recognized that they had not done a good enough job engaging with the community and realized they had to actively engage community members by raising awareness of the project and generating greater interest.

So it ended up, we had to have a community meeting, to bring people up to speed on what was actually happening. And it's easy to forget about the people that are not involved, because you know what's going on and two thirds of the community knows what's

going on, but one third don't know. And they're the ones that are doing all the talking...We had a couple of disgruntled people that thought they didn't know what was going on, and so petitioned for a public meeting... And the town had a public meeting and really what it did was the best thing that could have happened. Because when people left, they said "well", they were just really happy, it was a real vote of confidence: "I like what you're doing, I'm happy you're doing it, I'm glad we had the meeting because I understand it better." (Member of Craik town council)

Despite the involvement of a select group of actors in the community, they were always open to engagement with the broader community and made concerted efforts to engage additional community members in both the activities of the CSLP and in the actual construction of the Eco-centre. In part due to the lack of institutional capacity and support for the project, the CSLP was forced to rely on the social capacity of residents, on their individual skills and knowledge to move the project from an idea to action. The approach to development also relied heavily on the social capacity of the community to respond to sustainability. However, it was difficult to engage community members with the concept of sustainability, in part because the prevailing approach to development was largely based on property-based growth and a sense of downward spiral within the community due to a declining population, reduced retail options and overall lack of control.

You know, we're located about mid-way between Saskatchewan's two largest cities, and I would suggest that the majority of the retail dollars which are generated in this community end up in, you know, the larger centres. So, people's mobility, etc., it's an easy trip, you know. So there was that sense that the economic base of the community was being eroded by factors that really we had no control over. And it became clear to any local retailers that it was going to be very difficult to keep going. (member of Craik town council)

The real strength of the Craik Sustainable Living Project is that it was able to draw on the strength of the community and the culture that exists in a small town. In terms of views and approaches to community, Craik has a history of being independent and not reliant on various levels of government to provide support in times of crisis. This shared history and "can-do" attitude contributes to a sense of a shared future in the community that creates conditions where communities of interest and communities of place intersect, contributing to a thick version of community.

Craik has been that way for three or four generations, though. It's a community where, if we feel we need it, we go get it. And we're not tied to government, like a lot of communities, if they don't get the government backing and the grants and the financing, it doesn't go anywhere. This community, if they feel they need it, they go ahead and they do it. And a lot of the time, government stands and watches it happen. And even tries to slip in under the umbrella afterwards to take some of the credit for it. But it's been that way with our rinks, with our hospitals, with everything. You know, Craik has always been an aggressive community. (Town of Craik staff member)

The success of the Eco-centre as a tangible demonstration project of sustainable community development further reinforces the sense of community. The CSLP relied almost exclusively on the social capacity and sweat equity of the community to get the project completed, and the sense of accomplishment reinforces the "can-do" culture that exists. Despite this strong sense of community, it has been difficult to get community members to look outwards and to recognize the interconnections of sustainability beyond the local scale.

But it's been hard to get the average person in the community directly involved in changing their lifestyle. For me that's a major thing, to get the town of Craik, at least a good percentage of them, shifted over so that they're aware of how they're impacting on the land, and the effect they're having on other places around the world, and doing something about it. (Craik resident)

Craik Mobilization for Sustainable Community Development

In many ways, mobilization for sustainable community development in Craik can be characterised as the development of a "rural" regime focused on sustainability as revitalization. The concept of sustainability was introduced to key leadership figures in the community who bought into the idea and were willing to push for the development of the Eco-centre and Eco-village as a community project that would revitalize the Town. Using the language of urban regime analysis (e.g. Stoker, 1995), elite members of the community with access to power and resources were able to take the concept and vision of sustainability and use it to recruit additional regime members and gain access to additional capacity and resources. These additional resources and regime participants contributed to implementing the project and institutionalizing the regime, so that members of the CSLP are looked upon as community leaders. Community mobilization for sustainability in Craik was also tied closely to the strength of community, which in turn strengthened regime formation. Principles of commitment, trust, reciprocity and cooperation that have developed over time as Craik addressed issues such as preserving health services, schools and other amenities served to strengthen the sense of collective identity that prevents the development of competing regimes. These community resources (or community capitals) were thought of and talked about as collective resources that were

critical for the resilience of the community and for which residents had a collective responsibility to maintain.

The outcomes of initiatives were critical in generating community mobilization for sustainability. If at any time the Eco-Centre had failed in demonstrating the potential of sustainability or had not been successful in drawing attention to the town, the CSLP would not have been able to draw on the resources of volunteers and it is likely that the regime focused on sustainability would diminish, as would the sense of collective action. To conclude, community mobilization for sustainable community development in Craik was not materially different from what community mobilization might have been to invest in a gas station by the highway. The difference was that respected community leaders were able to galvanize interest around alternative approaches to addressing economic decline. The CSLP, while open to participation from all residents, did not rely on participatory planning processes to get sustainability on the agenda and to implement initiatives. Rather, community mobilization relied on elite leadership that was able to guide, direct and access the sense of community pride and resources to get things done.

Rolling River Comprehensive Community Plan

The experience of developing and implementing the comprehensive community plan for Rolling River also drew from diverse approaches and views (see Table 14).

Table 14: Rolling River Framework Analysis

Rolling River		Examples
Sustainable	Strong	 Explicit linkages between social and economic development with focus on qualitative development of community. Based on the land and resources, conservation inherent.
	Weak	 Economic development a priority, no real environmental concerns as eco-footprint is already low. Gas bar and casino revenue potential are key aspects of development opportunities.
Development	Top- down	 Chief and Council have the final say on all decisions. Disconnect between elders and youth in terms of the role of economic development and its relationship to tradition and culture.
	Bottom- up	 Family roundtables provided community members with opportunity to be engaged in community decision-making.
Community	Thick	 Decision-making model that starts in the home and works out to the community. Recognition of the collective wisdom of the community and the importance of cultural development.
	Thin	 Legacy of residential schools that denigrated cultural traditions and ways of doing things.

Approaches to Sustainability, Development and Community

Rolling River was particularly focused on the linkages between economic development and social issues and their relationship to the land. In some ways, their approach to sustainable community development could be considered to be focused along the weak side of the spectrum, giving priority to economic development issues over the environment. However, unlike the other case study communities, there was an explicit focus of the linkages between economic development and improving the social conditions for both individuals and for the broader community, for the elder population and for youths. In that regard, the strong social focus, with strong linkages between the economy and society, moderated by a worldview that placed emphasis on the importance of the land base could also be considered a strong sustainability approach.

So basically, as aboriginal people, we think of everything as a circle, so that's how I basically drew the plan that day of the

meeting. I started out with the community in the centre, coupled with the Chief and council and then we had branches, we had sections of the circle sectioned off of what we wanted to see. (member of Band Administration)

The turtle is knowledge, the beaver is wisdom, you need both to be effective. Knowledge without wisdom or wisdom without knowledge is incomplete understanding. The relationship between people, the land and resources are important. It is through working on the land that you can understand yourself and your place in the world. (community elder)

We had talked about creating a self-sustaining eco-village. Something that was all green, cabins would be made from natural resources or local materials using solar panels, geothermal heat. We have that in our health building right now. So that was the whole concept, and we talked about even looking at wind energy back then. Just being a couple of native guys talking about this stuff without really knowing what was going on or involved in it. (member of Band administration)

As for the approach to development, at first glance, decision-making around economic development opportunities seems to take a top-down approach, with the focus of economic development opportunities based on economic growth and trickle-down through the development of a gaming centre with video lottery terminals and a gas bar. Governance and decision-making related to economic development activities also appeared to be top-down, particularly in the expression of values and this resulted in a degree of conflict between elders and youth in the community based on the emphasis placed on economic development. However, community economic development was also very much a bottom-up process. There was an explicit focus on trying to define and moderate the economic growth imperative with a focus on improvement of the quality of life for community members. For example:

Well yeah it is because when we look at economic development we look at well what's the cultural impact. Is it negative or positive and we try to make it positive. Like yeah, we're going to make money but we're going to be putting that into language classes, hiring an elder in the evening to come in and sit with the youth or anybody that wants it. (youth member)

Decision-making processes were also based on extensive consultation, participation and consensus. With the creation of the comprehensive community plan, Chief and Council at the time were concerned about generating engagement with the community about ideas, opportunities and capacity for engaging in specific economic development opportunities. This was particularly important with relation to the Treaty Land Entitlement (TLE) agreements that allowed the community to purchase land anywhere in the province and obtain reserve status for it.

As a community member, I know that before land is bought it's approached at a roundtable meeting and then at a band meeting and approval is reached through consensus and then back to the TLE guys and they buy it. If there's not quorum in the band meeting the land doesn't get passed. (youth member)

Community roundtables were established to provide a forum to all of the families in the community to be engaged in the decision-making process.

Go ahead, here is your chance, come sit at the roundtable. We had 33 members that eventually sat on the roundtable, and for a while it was used as a bitch session... you're not doing this you're not doing that. Well now you have a chance to participate. And this table will be deemed as our consultation table, they get to report back to their families and bring it back to the table. (member of Chief and Council)

Despite the fact that it was acknowledged that the Chief and Council have broad decision-making authority, their initiatives are still moderated by the

consensus in the community. One example related to an initiative of the Chief to create a recreational lake as a tourism draw to the reserve.

This piece of land that we own down here, I talked to the community and said we should dam it. We should build a man made lake here. You should have seen how many people opposed it. They said 'one day you come to us and talk about the environment and how we should protect it, and now your trying to dam the lake.' I said well what are the damages? You'd be surprised how many people were aware. If you block it now you just got a lake like this, all the algae will form because it won't be able to cleanse itself. (member of Chief and Council)

Rolling River also had a strong sense of community. The community drew on strong cultural beliefs and traditional ways of doing things based on consultation and deliberation with all community members.

And our leader at that time said no [to moving the reservation]. I imagine that he consulted his people. I imagine he sat the women down in his community and said what do you think, should we move? And I imagine he would have asked the young people too... what do you young people think should we move this territory and go over to this area where they are trying to put us. And then I imagine he would have asked his men, the providers of the community. And right after that I imagine he went to his spiritual people and conducted ceremonies. What do the ceremonies say, should we move? The end result was the chief said no. (member of Chief and Council)

Despite the strong cultural traditions that reinforce common views, values and approaches to community, the legacy of residential schools has eroded some of the ties that link individuals to their community. Cultural traditions, languages and shared values were all disrupted with the removal of children from the community and that has had a lasting legacy on the strength of community ties.

It is important to know where you come from, your ancestors, your traditions to understand who you are and how you fit in. Cultural context is very important. This is why the impact of the residential schools has contributed to the problems for First Nations. They taught us that who we are, our traditions and values were useless and we were sinners. Those lessons stay with you and it is hard to have pride over self-identity. (community elder)

The culture of the community was viewed as a particular strength. There were strong cultural linkages between social and economic development and the relationship to the land. Residents recognized that the key to sustainable community development was to strengthen community ties, to bridge the gap between youths and elders and to provide opportunities for community members living off-reserve to return home.

Cultural development was equally as important as economic development, because it was cultural development that provided the ties to bind the community together based on shared history.

Those ceremonies told us what we were going to do with the land and to pursue wind energy. Tradition has to be a part of it. That's core. It keeps us ethically there on our goals of what we want to achieve. (member of Band Administration)

They say you're not a nation unless you have your language, your culture and your own land base. That's the way I look at it. That's why all land is important to me. (member of Chief and Council)

It's pride, and they [leaders] thought about the earth first. Like how are we going to create a business that benefits our community and also the other communities that are around us. Sort of being role models to youth in other communities because eventually we are going to have to work with each other you know. And it's just working with the youth they have to understand they are a strong piece in the puzzle to make our community stronger. And sometimes there is a lot of stigmas on the reserve like it's a nowhere place but it's what you make of it you know. (youth member)

Rolling River Mobilization for Sustainable Community Development

Mobilization in Rolling River was not explicitly focused on sustainability.

Unlike the other case study examples, sustainability was not the focus of the comprehensive community planning process. Rather the focus was on community building and it was assumed that existing community values towards the environment and the land base would ensure that any community development initiative would result in sustainable community development. This approach to sustainability fits with the way community mobilization and participatory processes are presented in the literature. The SCD literature suggests that it is through participatory processes that sustainability solutions to community problems can be identified and implemented. The Rolling River case focused on establishing those processes for community decision-making. In contrast, the other cases were more focused on using sustainability as a means to engage with community members in participatory processes.

Despite the reliance on community roundtables and consensual decisionmaking, members of the community with access to power and resources led the
comprehensive community planning process and implementation. Much like
Stoker's analysis of urban regime formation, these elites were able to form a
long-term stable governing regime that persisted beyond election cycles based
on engaging with community members to access political support. However,
much like the Craik case above, there were no potential competing regimes and
therefore community engagement could also be viewed not as a means of
accessing additional resources and capacity to get things done (and preserve the

regime in face of competition), but rather as the historical and cultural approach to the way community leadership should make decisions. Unlike urban regimes, the rural / First Nations manifestation is subject to greater modification by the broader community, as it is easier for any community member to engage directly with regime participants. The approach to sustainability and the decision-making processes used to address community problems were closely tied to the strength of community.

The communal decision-making and communal resources that are at the foundation of the Rolling River First Nation contributed to a strong sense of place that has been reinforced through cultures and traditions that emphasize collective responsibility. The land base and cultural traditions were identified as the community's greatest strength, and both are collective resources that contribute to and reinforce the strength of community and shared sense of place. To conclude, community mobilization in Rolling River was based on a strong sense of community, cultural traditions and principles that have developed over time. However, community mobilization had to be activated and focused around a planning process developed by elites in the community who were able to overcome community conflict and fragmentation that were related to the residential school legacy. In that sense, elites were able to access traditional community resources to get the comprehensive plan implemented that contributed to addressing social, environmental and economic concerns in the community.

Toronto's Better Building Partnership

Toronto's Better Building Partnership is an example of an initiative that had to draw on all aspects of the spectrums between weak and strong sustainability, top-down and participatory development and thick and thin versions of community (see Table 15).

Table 15: Toronto Framework Analysis

Toronto		Examples
Sustainable	Strong	Attempts to link building retrofits to social sustainability.
		Concern with equity issues.
		Focus on demand reduction.
	Weak	SCD had to make business sense.
		Focus on efficiency, no challenge to growth paradigm.
Development	Тор-	Elite-led process with City, developers and union leadership.
	down	Property-led economic growth.
	Bottom-	Roundtables focus on bottom-up initiatives and ideas and to
	up	link to broader issues in community.
		Attempt to link institutional decision-making processes of the
		city with social institutions from the community.
Community	Thick	Broader engagement at neighbourhood scale – solar
		neighbourhoods, making the linkage to poverty, etc.
		Idea that residents can play an active role in energy efficiency.
Thin •		Community is seen as a constituent body that needs to be
		educated.
		Community as a passive force in terms of BBP.
		Communities of interest – business, government and
		developers.
		Largely staff-led / government led initiative

Approaches to Sustainability, Development and Community

The approaches to sustainable community development in Toronto varied across the spectrum from weak to strong. The Better Building Partnership was established with a specific focus on retrofitting buildings to be more energy efficient, based on both the economic rationale for efficiency and on the environmental impacts. The BBP did not challenge the status quo in terms of growth – sustainability was possible if the business case supported it.

We always put a business case together, and if there's a payback scenario that makes it all worthwhile, then that's the direction we'll put some money in. (CEO – Exhibition Place)

However, the Toronto Atmospheric Fund, an endowment created by the city from which the BBP emerged, was at the time a radical intervention by a municipal government to address air quality issues. Both city staff and political leaders recognized that there was a need to intervene in society to advance SCD concerns and that the city had a mandate to intervene. In that sense, the BBP could represent a major shift in the role and mandate of municipalities that challenged the status quo, as the \$23 million that made up the endowment fund could have been used to reduce property taxes, support local business development, invest in roads or other infrastructure – things more typically associated with local government mandates.

The city council of the day, [decided] that there should be an endowment put in, to create the Toronto Atmospheric Fund. And it was a 23 million dollar endowment, which back in those days were significant dollars. And as you can tell from the name, the Toronto Atmospheric Fund, the idea was to deal with the air quality of the atmosphere. And one of the conclusions of the Toronto Atmospheric Fund, which was a separate agency put up by the City of Toronto, was really, how could they intervene in society? And one of the decisions was that you have to intervene in terms of buildings and the energy they consume, and by so doing, obviously you could cut greenhouse gas emissions, and they're more efficient etc. (Toronto Atmospheric Fund staff member)

While the focus of the BBP on the relationship between the environment and the economy fits conceptually with a weak sustainability approach, the social relationships were also recognized. Building retrofits were seen as something in which the city could lead by example and reduce the exposure of residents to

rising energy costs, could provide re-training and jobs for unemployed trade workers, and could serve as an example for the broader community of the linkages between the environment, society and the economy.

In terms of the energy issues, if you just look at that, there's so many social co-benefits, savings, efficiency, better urban design, it's all implied. Better home comfort, you know, insulating low-income people from rising energy costs. I mean, there are so many social benefits that are just, they're already there in the background, they're going to happen, those changes are so positive in so many ways, that I think if we just stick to our knitting, we're going to bring all kinds of extra stuff around. Just like I said with the air quality, with the health implications, they're well served by this core mandate. (BBP staff member)

So what the TCHC [Toronto Community Housing Corporation] is doing, and that's in direct response to the question you raised in terms of you know, getting that [social component] in, they're actually using the people who are renting, living in the units, training them, and deploying them to retrofit the buildings as well. That's a very powerful thing, because it changes the way people view the buildings. And that's what needs to happen. People need to see things in a different way. Not just saying to them, "unscrew a few light bulbs or turn off a few light bulbs," because those ones are convenient and I don't need them, but really think about them, "the ones that I think I really need on, do I need those on?" (BBP member)

A strong sustainability perspective places social equity at the forefront of environmental, economic and societal relationships. However, while the BBP does result in social benefits, those benefits are largely peripheral and possible only if they make economic sense.

I have been involved as the face of the BBP, and I've never met anyone who's said "I'm doing it because of climate change," or "I'm doing it because of energy efficiency." They're doing it because it makes sense to do it, because it improves their asset value when you do it, because it retains their tenants, because of comfort, and because of the money they save overall. Climate change? No. Or, you know, air quality? No. (member of City council) I don't think the equity, the social issues are very strongly highlighted, I think that the economic ones are. And I think people don't talk anymore about environment vs. economy, mostly people see that there is a consonance rather than a dissonance there. So that's a big change. But I don't think the social issues are very, I mean, they're not even peripheral, let alone central, people just have to start talking about them, right. Some people are, but not generally, it's not something that comes up in the media very much, unfortunately. (member of Sustainable Toronto)

The Toronto BBP was very much an institutional program that was designed to target the key commercial properties in the City core that were the source of the majority of GHG emissions. Therefore, the program was based on a view and approach to development that was dependent on the involvement of key actors in the commercial real estate sector. The view of development was based largely on property-led growth, with the assumption that what was good for large-scale property owners was also good for the city at large.

That's what we mean by incubation. We look for opportunities of things that could be replicated and scaled up. If we can show that it works, and build people's confidence, and working with lead partners. Because Tridel's a big company, it's very reputable, you know, they're not doing crazy, greening things for nothing. They are making money. (BBP member)

The thing I think about is this small, little candle trying to stay lit with the wind blowing in different directions around it. That's essentially what the Better Buildings Partnership is doing... it stayed lit, not by talking about climate change, no, it was by talking about triple bottom line. And triple bottom line-thinking has been around for a long time. We talk about the planet, we talk about the people, and we talk about profits. But we always had to highlight profits with a big P, right, and the other two p's were little p's. And that's what kept the BBP going, because we kept showing people how to save money, we saved people... (member of Mayor's task force on climate change)

In conjunction with an approach to development that was based on elite and top-down initiatives, the city established sustainability roundtables designed to promote integrated decision-making amongst various departments of the city and between various community stakeholder groups such as the Board of Trade, United Way and the Toronto Environmental Alliance. However, while the roundtables were designed to promote governance for sustainability, they were bogged down in actual decision-making and implementation. Part of the problem was the broad mandate that encompassed a range of values among the key actors and the inability to identify specific priorities. However, the process of setting up roundtables for sustainability was effective in demonstrating the commitment of council towards sustainability and to raise awareness of sustainability issues in the broader community.

They couldn't deny the [Environmental] plan being developed or whatever, and after a while it became more of a debating group, but it did inform a lot of the decisions, and it did inform a lot of the public awareness, you know, so it was useful. But it didn't achieve the objectives of the Environmental Plan, which go in all directions. (City of Toronto planner)

You know, it [the roundtable] tried to do things, but it was about getting all the people, everyone together. If you're going to be doing something integrated, which we said was a key word. It is, you want to get all the actors around the table to make those decisions, right. And that's a huge task in itself, to decide who is there, it should be everyone. And if everyone is there, there's this whole model, "when you have everyone there, how do you make decisions?" And I think that's why it probably didn't work. (member of Mayor's task force on climate change)

The sustainability roundtables were an attempt by the city to link the institutional decision-making processes among the various city departments with

the social capacity that exists in the broader community. However, the cultures, processes and ways of doing things among the two (city bureaucrats on one hand and members of community organizations on the other) and their different interpretations of their mandates and roles led to problems.

The problem with the Sustainability Roundtable itself was firstly that it was two big; it had about 45 people, which is impossible. Second, half of them thought their role was to implement the actions that were in the environmental plan, and the other half thought their role was to lay the groundwork for integrated sustainable decisionmaking. And I found that split tended to be along the lines of, people with a strong environmental and science background tended to think that their role was to implement the environmental plan. A lot of the community, the social development agencies and the business, the Board of Trade really understood the value of integrated decision-making, and really tried to say, make recommendations and get initiatives going that showed that multidimensional perspective. But the struggle between the two groups kind of meant that it went kaput. In the end they couldn't get quorum and that kind of stuff. (member of Toronto's Atmospheric Fund)

During the establishment of the BBP, there was broad consultation with key stakeholders such as trade unions and commercial property developers, but because the program was geared towards institutional change, the broader public was not aware or involved.

[A major developer] got up and said, "you know, the thing that made the BBP different from anything we had seen previously, is that the BBP staff came in, they listened, they ask questions, they listened, they willingly shared ideas, but they listened to what we told them we wanted the program to look like. And then they went away and surprised us by doing exactly what we told them to do." Now, that's really important. (member of BBP)

The approach to community in the urban case studies is very different given the different context and different scale. In the urban setting, it is much

more difficult to identify a single "community", as there are multiple communities that are fluid and over-lapping. Due to issues of scale in the Toronto case where the institutional resources and structures are more developed, the interviews were conducted primarily with municipal officials and members, resulting in a more institutional rather than community view of the cases. However, the role, approach and view of community in the sustainability initiatives were still revealed. Despite the institutional nature of the BBP, city staff recognized that the programme would be enhanced by building awareness of air quality, climate change and energy issues in the wider community and the linkages between society, the economy and the environment.

They [BBP] sort of move on three fronts at once. One is they do go and talk to people, the whole education part of it up front. But the education part of it is more to persuade people of the value, as opposed to some general "here's some education". Their first step was to go and talk to people. And then the success is the experience of the people doing it, because it has been the same people on the city side for a long, long time. I think the other thing is it's always been a really good partnership, like it's the city, plus labour, plus financial institutions, and again, it means that you keep the multi-faceted perspective on the project. Again, it's that sort of fluidity, or resiliency that's in the way that it's set up. And I think it's sort of those three things together. Like the partnership that they're, like the skill of the team, and the educational component. Now of course, in more recent years, it's the issue itself. It's the climate change issue. (City of Toronto Planner)

So, looking at this as one of the potentially greatest changes we can make in the city, because we take a true sustainability approach, because we use the lever of addressing climate change to enliven neighbourhoods, put in local, you know, local markets to be put in, greening the space, selling off some of the space, potentially, for low-rise residential, so that you get more of a mix. (BBP staff member)

The BBP was designed to demonstrate the leadership of the city in retrofitting buildings for energy efficiency. There was little concern for "community" outside of the target audience of the programme. In that sense, the approach to community could be characterized as being similar to a thin view of community. The City delivered its program to its target audience who were passive recipients of the programme and there few connections between the programme and other activities that were occurring in the broader community. However, as the programme became established, indirect linkages to the other community actors and initiatives were developed. These linkages and initiatives could be explained by looking at community through a "thick" lens, where different communities of interest, place and practice were engaged and proactively used the outcomes of the BBP to advance their specific agendas. For example, solar neighbourhood co-ops were able to gain greater support by making the connections between their activities and citywide energy efficiency targets. Likewise, Toronto Community Housing Corporation was able to make the case for additional investment in social housing through energy retrofits.

Better Buildings Partnership was also a catalyst in, at least in downtown Toronto, for a lot of energy retrofits that weren't directly linked to the program, but through that whole idea of setting an example, which I don't think in the early days was particularly the reason. It also was a place, because that program was so concrete, it allowed us to encourage local colleges to train people in the skills that were needed to do energy retrofits. Because I think it was also a skill-shift kind of result as well, that a lot of electricians, people who had other skills, who were attracted to the idea of applying them to meeting environmental objectives, did so. And that has also allowed Toronto to, a lot of our other projects to be more successful as well, because we've built up the people-power to be able to do it. (BBP staff member)

You know, we also work with the churches, we have a faith-based group that we've incubated, and they're really growing and expanding, using, working through faith communities in the city, they do renovations, energy efficiency renovations in places of worship. And then, at the same time, they educate the congregants about what they need to do in their own homes and businesses to reduce energy use. And it's a group of real activists, and their concerns are highly moral, and if you've got the moral leadership of the city speaking out, you know, around it, it's very powerful. And so I think, you know, the social aspects, they come in, you know, and we work with YWCA now, they're going to do an urban housing program, we're trying to design a financial mechanism, we call it the Green Affordable Loan. (BBP staff member)

Toronto Mobilization for Sustainable Community Development

Mobilization for the BBP relied on emphasizing the economic rationale and the institutional resources of the City to engage key actors around air quality and climate change. Key actors were engaged based on an approach to sustainability that emphasized the technological improvements that would reduce energy consumption and generate financial savings. As such, community mobilization relied on a weak sustainability perspective that provided the opportunity for a diverse group of elite actors to come together and be introduced to the concept of sustainability. Contrary to the strong sustainability perspective, the BBP did not rely on participatory processes or engagement with the broader community to address social, environmental or economic concerns, but rather relied on leadership and the institutional resources of the City.

The approach to governance and decision-making was tied closely to growth machine actors in the City. The BBP was designed to engage those actors (developers, trades, financial institutions) associated with property-led growth during a time of economic recession as a means of contributing to the

local economy. The BBP was developed through the institutions of the City, relied on a top-down approach to development that engaged the educated and well connected city bureaucrats in selling the benefits of the BBP to commercial building clients. However, given the experience with the sustainability roundtables that got bogged down with too many participants and too many interpretations of the focus and mandates of the roundtables, the decision to focus on a select group of influential actors can be seen as a pragmatic response to getting the program implemented. It is questionable whether an approach that relied on more participatory processes and greater engagement with the broader community would have resulted in different or better results.

Multiple overlapping communities exist in Toronto, many connected at much larger scales. Therefore, exploring the role of community strength in community mobilization processes may seem irrelevant. However, if community is confined to within City Hall and the BBP programme, implementation relied on a strong sense of community that developed over time based on common values, strong personal relationships, shared principles and values and a shared commitment to air quality improvement and reducing greenhouse gas emissions at a local level. Outside of the city bureaucracy and the BBP realm of activity, the BBP is just one of many communities in the City competing for attention and resources.

To conclude, community mobilization was not critical in the development and implementation of the BBP, yet the BBP has served as a catalyst for community mobilization around energy efficiency and climate change. The BBP

has served as a focal point for the development of a regime that draws on the institutional resources and capacity of the City, trade and construction industry and the development community that has in turn resulted in a number of other activities by community groups, private sector and other city departments and has kept air quality and climate change on the agenda city-wide.

Surrey's East Clayton Neighbourhood Development

Surrey's East Clayton Neighbourhood development is an example of a new residential development that challenged the existing approaches and assumptions of the traditional suburb. The process for getting the development from planning to implementation engaged actors with a diverse set of values and approaches to sustainability, development and community (see Table 16).

Table 16: Surrey Framework Analysis

Surrey		Examples
Sustainable	Strong	 Create a residential development based on sustainability principles. Attempt to change the pattern, form and function of residential neighbourhood.
	Weak	 Greenfield site. Economic rationale drove the process. Development values take priority.
Development	Top- down	 City and developers drove the process with little engagement with broader community. Decisions around implementation were influenced by property-interests.
	Bottom- up	 Charrette process designed to allow for bottom-up emergence. Commitment to engagement in planning process, engaging public in decision-making in plan development.
Community	Thick	 Intentional physical design to improve thick version of community (e.g. neighbour interactions, friendly face to street, etc.). Expectation that charrette process will generate further sense of community.
	Thin	 Community non-existent. Narrow view of community (e.g. people that show up at public meetings).

Approaches to Sustainability, Development and Community

The approach to sustainable community development in East Clayton was based on a set of sustainability principles developed by the Design Centre for Sustainability at UBC through an earlier charrette process in Surrey. These principles represented a certain level of commitment to sustainability and guided decision-making for the development with the goal of changing the form, pattern and function of a residential neighbourhood in conjunction with a strong sustainability perspective. At the planning stage and throughout the charrette process, these principles were agreed upon by all of the actors. Despite the agreement to the principles of SCD, there remained differences in awareness and understanding of their meanings.

From previous work, we had distilled out those fundamental principles for sustainable communities. Those went to the city council and were authorized and were already there on the first day of the charrette. First conversation we had we said 'OK, here's six principles. Does anybody in this group think that any of these principles are problematic?' Basically people said no they're all OK. And the second questions was 'OK, well as a group do we think that we can collectively achieve all of these things at the highest level?' Of course it was a little bit too easy for them to say 'Yah, sure' because at the end of it, we didn't. But, you know, the, the second part of the question was to set the bar. (UBC charrette participant)

To me sustainability means that, you know, that development you build is there after fifty, sixty years, hundred years, you know, that's sustainability to me. That's some things that sustains for a period of time. And umm... but, you know, to the people actually were heading this, you know. They had different probably , you know, umm... different interpretations of it. (one of the East Clayton developers)

The differing levels of commitment reflect the different interpretations of sustainability along the spectrum from weak to strong that was a source of

conflict throughout the process and resulted in many attempts at re-zoning the neighbourhood towards the status quo. For example, developers recognized the need to do development differently in order to open up the site for residential development and were willing to agree to the principles in the planning stage. Yet when it came time to build the development, there were numerous attempts to revert to 'tried and true' residential developments by removing commercial nodes, removing rear lanes and eliminating the grid street network. As one developer noted, it was clear what purpose the development was supposed to achieve:

The main ingredient was sustainability. You know, they wanted to develop a neighbourhood where they were trying to get people out of cars. They were trying to, you know, provide more green space by doing more cluster housing. So you put lot of houses in one area and you leave lot of green spaces around it. They were trying to control the run-off of the, the water, you know, by way of infiltration in the ground, in the swale, and that that stuff. And provide some little commercial nodes that where people can walk to get their milk and bread and all that kind of stuff – and the coffee. (City planner)

However, when it came time for implementation, economic viability took precedence over the guiding sustainability principles as developers tried and were successful in having parts of the neighbourhood re-zoned to reduce their commitments to SCD. The City was willing to accommodate re-zonings because of a perception that any development is better than no development at all and they were therefore willing to relax adherence to the sustainability principles in certain areas. In addition, the decision to transform a greenfield site into a residential neighbourhood rather than focusing on in-fill and intensification at other locations is indicative of the prevailing weak sustainability approach of

focusing on growth and development while including measures to reduce the environmental impact.

Well they said it's... they lose the space as well as they said the lane lots will not be popular. People will not buy into them. Ah... they will not be able to sell them, you know, at the same price as the other lots. Umm... they also didn't want to put any local store because they say "Well, there's no population now, and we don't know when there'll be the population to support it. And we don't want really to, to hold area now for future local commercial. (City planner)

It was in the late-1990s, before the recent market boom, the market was down. At same time Surrey was trying to encourage [development as much] as possible. So the City didn't want to be seen as putting too much roadblock on development. Therefore, we have to step back a little bit. If developers don't want too many rear lanes, we have to come up with concessions. (member City council)

The way that conflicting views and approaches to SCD were resolved was related to the underlying views of development and the processes involved in city building. The charrette process that was used to develop the plan for the East Clayton development was designed to have all of the key decision-makers together to address challenges and constraints and to collaboratively develop solutions to conflicts in developing a more sustainable neighbourhood. In that sense, the process was designed to allow for bottom-up emergence and a commitment to participatory approaches to development.

You had all the key people together, all of them hearing the pressures, the constraints, the challenges of the other, so that they were able to collaborate, they were able to work together, and ultimately if everybody gets together everybody contributes to this experiment, as long as it doesn't make my housing unaffordable, ah we'll work together on it. (CMHC charrette participant)

The process of engagement through the charrettes was designed to generate a sense of ownership for the neighbourhood plan and to generate an understanding of the benefits and implications of doing development differently.

Having taken the time to work with, for instance, the developers, and the builders who are purchasing the site, having been engaged with them early on and ensuring that they have some sense of ownership in the process. Bringing them into the process is key because if later on you suddenly bring them in and lay it on them, you're going to have their backs up against the wall, but because of the process, there was an awareness. (charrette participant)

However, while the charrette was an example of a participatory process for guiding decision-making around the development for those involved in making the development happen, it was limited by those that participated. Those involved did not question the need for the development in the first place. The charrette can be characterized as an elite driven process where property interests were able to engage with planners and city staff to be innovative in the creation of a new development. Throughout the process, the interests of the wider community were represented by planning staff who drove the process in the interests of the wider community. A citizens advisory council was established, but it was limited to local residents with property interests in the development, indicative of the problems of citizen participation related to representativeness and complacency discussed by Irwin and Stansbury (2004).

A couple of people left, actually by way of protest because, they thought that the planners and, and you know, the authorities so to say, weren't really listening in return. They were telling them what they were planning to do, what they should be doing. So a couple of them had left. The main I think issues, were, were they were planning to put a business park, like a commercial and kind of industrial areas, and realigning the roads, and, you know, stuff like

that. Those were a couple of major issues. (charrette participant – developer)

And then we had preliminary meeting with the landowners and, you know, the people living in the area and most of them were against it. ... So in a way, you know, they were dangling a carrot saying "well look if you want to do this. This is how you have to do it." The people reluctantly agreed to that. And umm... you know, and so it wasn't they- it wasn't the choice or the idea or the land owners. Or, you know, the people living in the area. So all the ideas came from the staff, you know. It was someone from the City of Surrey or from environment or transportation and all these guys. And they were the driving force behind it. And they will come up with a sketch and, you know, present it to Citizen's Advisory Committee. And then Citizen's Advisory Committee will either or not like it. And they will go back and make changes. But they kept the main ingredients and they weren't really willing to change those. (member of Citizen's Advisory Committee)

While there was a certain level of frustration on the part of landowners and developers with regards to the process being driven by City staff, there was an equal amount of frustration by planners as the representatives of the wider community as applications to rezone the area were approved by council at the request of developers. City planners felt that changes to the development plan were being conducted based on an incomplete understanding and awareness of the process and decision-making around re-zoning applications were based on business as usual and not in the spirit of the charrette process.

You've got a hundred acres here. I'm letting you do ninety-eight acres as housing. Don't complain to me about that two acres, that, that I'm making you do commercial. You wanna leave that blank? Fine. But don't come in and ask me to change it to housing. On two acres out of, out of a hundred. The city's been unwilling to, to stand firm on that and it's a matter of conceptually extending the charrette, institutionalizing it. (charrette participant)

For city planners, the charrette process represented an opportunity to do things differently and to engage development proponents, city staff, citizens and council directly in the activities of planning around doing a residential development differently and seeking consensus around a 'pretty good' solution to conflicts.

You know, senior and middle level planners feel like just like you and I: the world is going to hell. And, and from the outside we think well why don't you change it? But from their perspective "Oh I can't change it. You don't understand my job. I have almost no power at all. I have to, you know, let the engineers do their own thing, and developers come in and the Council's breathing down my back. You know, I've got almost no discretion at all. This job sucks. You know. I went to school to make it better and all I do is make it worse. I get a few flowers planted and I feel like it's a good day. But all the rest of it sucks." So from their perspective, they are, they are looking for strategic ways and we found that to be true of ah... well busting free of the constraints of their situation. So they, so they saw it was an opportunity to bust free and do something different. And we had, by that point built up enough credibility with the engineering department and citizens and city council that looked kindly at a proposal to partner with us. (charrette participant)

Issues of representativeness and defining whose participation is a legitimate reflection of the broader community is very closely related to the views, approaches and roles played by community. Defining community and community interests for a new residential development are inherently difficult. There were very few residents in the area prior to the development and most of those residents were in the process of selling their properties for development.

Therefore, it is not surprising that a thin version of community prevailed based on those vocal few who show up at public meetings to voice their concerns or those with direct property interests in the area.

We'll get the people together... to talk about the uniqueness of their community", that sort of thing. But we'll have the planners relatively driving it so that good planning principles will be a part of it. But at the same token there will be the community buy-in. So that hopefully at the end of the day, when we come up with a final plan, that the neighbourhood agrees to, or that the majority of the neighbourhood agrees to, and that Council agrees with, umm... that then it's something that will become a blueprint. And now everybody has bought into it, hopefully we won't have as contentious of public hearings. Which is exactly what happened. (member of City council)

The role that community played was in generating support for the development and for the existing ideas on what a sustainable residential neighbourhood looked like. The community was not a source of shared values or of a collective vision for the neighbourhood, those items came from planning staff and from UBC. In part, this was a result of creating a new neighbourhood and the associated new place-based communities.

You had the community that were being engaged, and you know this was a new area yet to be developed but there were people who lived close by that would have had an interest and a concern and they were definitely proactively going out and seeking input and building this consortium of players. (member of Citizen Advisory Council)

The lack of a strong community was recognized as a limiting factor by charrette participants and was the focus of many of the sustainability principles that guided the development. For example, the principles around increased density and walkable neighbourhoods, inclusion of local commercial nodes and a mixture of housing types were included to meet sustainability goals of reduced energy use, local economic development and housing affordability as well as providing increasing opportunities for neighbourhood interaction on a daily basis.

Creating opportunities for building social capital and the development of shared understandings of community was important in the development of a broader cultural shift towards sustainability in the city. The process of involving a range of stakeholders in community charrettes served as an example of what can be accomplished by a strong community, however, in Surrey the charrette process was a one-off activity during the planning stage and has not been institutionalized either within the City or within communities.

But what, what prevented them from doing that was fear about culture, the cultural capacity to accept the different model. So you see, there's a whole cultural side of this question too. ...there's a cultural shift that is required, too. And not just cultural shift, but also more confidence in the ability of the market to respond. (City engineer)

If you accept the principle that roundtable conversations with stakeholders are the way to bust out of the present paradigm constraints, lead to a new world with different collaborative and performance based-activities. That would lead you to say you have to institutionalize the charrette always. (Charrette participant)

Surrey Mobilization for Sustainable Community Development

Mobilization for the East Clayton development relied on an incremental approach to sustainability that allowed participants to define sustainable community development in terms that were flexible and accommodating to the key actors involved in the process. While there were a set of principles that guided the development through the charrette process, these were high-level principles that were easy to agree to in the planning process and also easy to modify when implementing the development. SCD was defined in terms that would bring the key actors to the charrette process and engage them with an acceptable level of risk associated with creating a new residential community that

was untested versus the status quo. Much like other examples of sustainability initiatives, Surrey's East Clayton Neighbourhood relied on design to drive sustainability. However, it is too early to tell in Surrey if that design has impacts and actually changes individual behaviour towards sustainability. For example, does living in East Clayton result in increased awareness of SCD or changes in consumer behaviour regarding daily consumption?

The approach to governance and decision-making throughout the charrette process relied on the expertise of the research team from UBC and planning staff that set the parameters for the development. The process engaged actors associated with property-led growth machine who were willing to make certain environmental concessions as the price to pay to open up the area for development. In that sense, the charrette process served to develop and solidify a "greener" growth machine in Surrey. It was through the charrette process that competing interests of reducing the environmental footprint of suburban development and providing new suburban development opportunities were resolved. The relationship between the development community and the City was strengthened by involving the resources and capacity of UBC researchers to jointly develop the neighbourhood based on established sustainability principles, which contributed to a more robust and stable governing regime.

The approach to community and collective action was based on a view of the broader community as passive recipients of decisions made by the governing regime. Collective action and decision-making and the development of shared interests and values were all developed through the charrette process and then presented to the wider community. While community mobilization in the charrette processes represented a cultural change in the way development processes worked, with particular focus on creating place-based communities of interest that could move the sustainability agenda forward, these processes were not repeated in East Clayton or City-wide. It is unlikely that new residents in the development would consider any of the community capital resources any differently or would think of them as collective resources, merely as a result of where they live.

To conclude, mobilization for the East Clayton development did not rely on changes to the actors involved in development, but it did engage them in different decision-making processes that has had an influence on the form and function of future developments and has raised broader awareness of sustainability issues in the City.

CHAPTER 7: DISCUSSION AND CONCLUSION

The findings from the research stressed the importance of linking institutional capacity and community-based processes in order to bridge the gap between planning and implementation. Linking institutional and communitybased processes requires a shift in the way things are done, the way options are evaluated and in the engagement with the decision-making process. If communities are to be strategic in their approach to sustainability, they need to think holistically about planning and implementation and to identify the key opportunities, actors and strategies to advance sustainability in a given context. Strategic sustainability, therefore, refers to a strategic approach to planning and implementation that allocates limited available resources with the greatest impact for sustainability. By thinking strategically about sustainability and making the connections between planning and implementation, communities will be able to identify the quick wins for sustainability in the short-term while retaining and building support for more broader and complex solutions in the medium and long term. Analysis of the case study research suggests that understanding mobilization for sustainable community development is critical for the development of these strategies.

In this chapter, the lessons and implications of the findings in terms of the concept of community mobilization for sustainability are discussed. Key factors are identified that are relevant across all categories of the integrated community

decision-making system and at all stages of the planning – implementation process. These key factors in the case studies are summarized in Table 17. They are organized based on the five elements of the integrated community decision-making system.

The literature suggests that getting the process 'right' for implementing SCD depends on managing the complexity associated with SCD, learning from the process and having an understanding of specific capacity to undertake SCD initiatives. The critical question is what enabled the case study communities to identify the key opportunities and how were they able to manage the complexity, learn from their process and build their capacity?

Key Strategies for Community Mobilization

When the collection of strategies are examined together (see Table 17 for list and Appendix 1 for a description of strategies), two key inter-related themes emerged that were relevant across all elements of the community decision-making system and were critical in each stage of the planning – implementation process. These two themes are essential for communities to be able to implement the other best practices or factors identified in the table.

Table 17: Key Factors in Bridging the Planning - Implementation Gap

Community	Community	Proactive	Use of	Management of	Use of External
Actors – Key	Leadership	Approach to	Catalyzing	Engagement	Actors
Bridges		Public	Issue	Cycles	
		Engagement			
Community	Overcome	Values and	Focus on	Grounded in	Culture of
Values and	Economic	Vision	Quality of Life	Existing	Empowerment
Vision – Key	Primacy	Inclusive, not		Capacity	
Bridges		Ideological			

Governance and Decision-Making – Key Bridges	-	Risk Assessment/ Management	Cross Departmental / Stakeholder Engagement	Capacity and Raise Awareness	Non-technical; "Pretty Good" Solution
Policy Design – Strategies, Actors and Instruments – Key Bridges	Information, Best Practices and Learning from Others	Complexity and Innovation	Back of Envelope Planning	Institutionalize Projects	Performance- based Strategies
Community Signals, Actions and Outcomes – Key Bridges		Integration of Demonstration Projects	Adaptable / flexible	Institutionalize Outcomes	Use Incremental Results as Leverage

The first key theme is leadership. Community leadership is identified as critical in obtaining the necessary political commitment to undertake sustainability initiatives (Campbell, 1996; Evans, 2005). However, much of the literature is focused on local government leadership in terms of leading by example, aligning policies and obtaining political and management support (Blair & Evans, 2004). In the case studies, leadership was critical; however, it was also thought of more broadly. Community leadership was critical in setting the sustainability agenda in each of the case studies and it was also recognized as being closely tied to engagement, as community leaders were able to engage non-traditional partners, promote and motivate participation, develop consensus around shared values and proactively engaging broader support. In each case, community leaders were focused on improving the quality of life in their communities and their approaches were seen as being inclusive and non-ideological. This nonideological approach encouraged a broader cross-section of people to become engaged in the respective sustainability initiatives.

Leadership was also particularly important in decision-making, where decision-making processes can be influenced through a willingness to push for

innovation and accept a certain level of risk. A key aspect of being strategic lies in the ability to balance the associated risks and innovation required to do planning, policy-making or development differently and break down the status quo. Within the municipal context, leadership at the senior management level is crucial. In an urban context managers can ensure that sustainability is part of the city's business and can allocate staff resources to it. In a rural setting, managers can ensure that there are sufficient linkages to resources and expertise as needed for implementation.

Again, the ability to manage risk was closely tied to engagement and a sense of shared ownership (and risk) over sustainability initiatives. In this area, the research supports Evan's (2005) concept of governing for sustainability, where there is an attempt to merge institutional processes with social initiatives and specifically address the challenge of integrating formal institutional processes with grassroots initiatives (van Bueren & ten Heuvelhof, 2005).

The second key theme is information, education and awareness. The literature has stressed the ability to manage the complexity associated with sustainability initiatives as a critical factor for success (Bulkeley, 2006; Guy & Marvin, 1999; Morrison, 2006; Wells, 2002). The ability to manage complexity is closely related to leadership and the ability to balance risk and innovation discussed above and is also important in engaging people in sustainability. Leaders in each of the case studies recognized the complexity associated with sustainability and were strategic in their approach to addressing the complexity issue. The case communities recognized their limited capacity for studies related

to their particular contexts and therefore relied heavily on information and best practices from other communities. These best practices served as "pretty good" solutions and provided the foundation for tangible demonstration projects. They recognized that the search for information and producing numerous reports and studies can be a crippling barrier to implementing sustainability and were able to take a more pragmatic approach. In part due to strong community leadership, the case communities were willing to take that "risky" first step towards sustainability based on demonstration projects that served as tangible examples of sustainability in their communities and contributed to raising the awareness, building capacity and engaging a broader cross-section of participants.

As McCay (2002) describes in relation to common property resource systems, the role of social innovation and experimentation are critical in the development of social and institutional processes for resource management. Similarly, Friedmann (1987) describes the role of social learning in planning initiatives where actors learn from their own practice. In the case studies, the role of "muddling through" was equally important in building the trust among participants that enabled them to tackle other issues. These processes and structures can only be developed through practice and are critical in the development of local social and institutional capacity to deal with complex sustainable community development issues.

Knowledge of sustainability was also critical in linking community problems with sustainability solutions. By tackling the pressing issues in their respective communities in an integrated way, the case study communities were

able to use the visibility of real problems to spur changes to the way planning and implementation is done. Overcoming the resistance to different approaches, the inertia of bureaucracy and the primacy of economic considerations is a key barrier to sustainability (Adger et al., 2003), yet the case study communities were able to overcome these barriers by using the incremental results from demonstration projects as leverage to broader change.

The research has demonstrated that there are multiple opportunities to overcome the planning – implementation gap. The key to community mobilization for sustainability is in understanding the specific context of a given community in order to assess which factors will be most effective at a given stage of the planning – implementation process and for which capacity exists. The overarching themes of leadership and knowledge and awareness are interrelated and have multiple linkages to the elements of community decision-making systems and cannot be thought of in isolation. Leadership and awareness allow for strategic decision-making, problem solving and application of the bridges at every stage of the planning – implementation process.

These cross-sectoral linkages, when taken together can result in a shared vision and commitment to "doing development differently" and promote the understanding that SCD is an investment rather than a cost. When communities begin to think of SCD in this manner, citizens and their governments have been mobilized in the pursuit of SCD. Integrating principles, priorities and long-term thinking with community capacity for change was a key gap that was identified in the review of sustainability frameworks and tools. Thinking strategically about

these factors can enable communities to integrate high level SCD principles, specific community contexts and priorities and long-term thinking and allow them to allocate limited resources for the greatest sustainability impact.

Linking Concepts - Community Mobilization

The preceding section discussed the practical implications of the research by identifying a number of different strategies that were useful in moving the case study communities from planning to action in terms of sustainability. These strategies were able to overcome the inevitable tensions between actors and institutions committed to maintaining the status quo and those focused on change, what Friedmann (1987) has referred to in his review of planning traditions as social reform or social mobilization. In this section, the findings from the case study communities are discussed in terms of how they contribute to a better theoretical understanding of mobilization for sustainable community development.

The literature review began by contrasting strong and weak sustainability, participatory and elite-driven approaches to development and discussed thick and thin interpretations of community. The literature suggests that strong sustainability approaches, based on collective action was required for the necessary transformation towards a more sustainable society. A strong sustainability approach is dependent on a participatory view of development processes and approaches to community building that in turn require a proactive community to engage in communal politics, development of shared visions, shared goals and consensual decision-making to advance sustainability.

The research also suggests that there are considerable similarities between concepts in the literature (e.g. participatory approaches to development have much in common with thick versions of community and strong sustainability or conversely, that thin versions of community are similar to elite led development and weak sustainability). In order to understand community mobilization, elements from each of these three concepts and from along the spectrum of views of each concept are needed

To what degree do these concepts, views and approaches resonate with the case studies? In each case study, approaches to sustainability could be characterized as weak or strong, views on development as elite-driven or participatory and versions of community as thick or thin. In each case, it was clear that communities are heterogeneous, with multiple and often competing processes occurring at the same time. These types of conflicts are taken for granted in urban areas, but they apply equally in small rural places such as Craik and Rolling River, where the ability to agree and express a shared vision for the future was fraught with conflict. What happens in reality is that a select group of actors are able to agree on a vision and goal that suits their needs and is able to push it through opposition (or more likely indifference) until it becomes reality.

Findings from the case studies suggest that mobilization is complex and dependent on the particular contexts, motivations, resources, values and actors engaged in a given community. In any community, there are a diversity of approaches and views related to sustainability, development and community that simultaneously exist, overlap, are challenged and are reformulated:

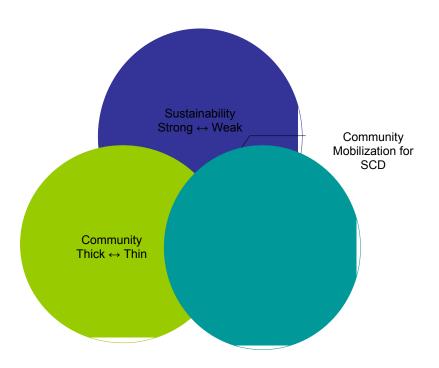
- Approaches to Sustainability exist along a spectrum from strong to weak;
- Approaches to Development exist along a spectrum from elitedriven to participatory; and
- Views on the role of community exist along a spectrum from thick to thin.

Figure 13 demonstrates how each of these aspects in turn overlap and interact with each other and draw on similar principles and approaches. It is suggested that it is where concepts of sustainability, community and development intersect that mobilization for sustainable community development occurs and includes approaches from across the spectrum. For example, within the sustainability circle, multiple approaches exist along the range from weak to strong. Dominant views and approaches will vary as the diversity of approaches are discussed and negotiated within a given community, resulting in specific outcomes. Likewise, the circles for development and community contain the range of approaches from across the spectrum.

The key to being strategic about mobilization for sustainable community development is identifying those areas and issues for which approaches to sustainability, development and community overlap. Ideally, those areas of overlap would consist of approaches that could be described as thick versions of community, strong versions of SCD and participatory approaches to development, but as the case studies demonstrate, it may be necessary to begin the process of mobilization through elite-led politics, thin versions of community

or with a weak sustainability perspective in the short term that builds and catalyzes further action towards sustainability over the longer term.

Figure 13: Community Mobilization for SCD



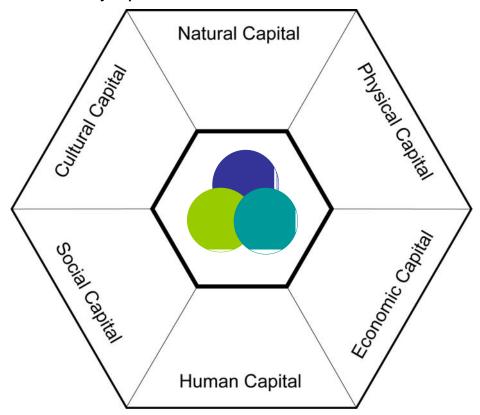
Each of the four case studies demonstrates that there were three key stages that served to catalyze community mobilization for sustainability. The first stage was identifying an issue that had traction in the community and could generate support across actors, mandates and approaches to sustainability, community and development. The second stage was to use that issue as the basis for a tangible demonstration project or action that supporters could point to and give sustainability meaning. This served to build and expand capacity and

support for sustainability. The third stage was to capitalize on successful projects related to that key issue to build broader support and to create connections beyond the specific issue.

As Roseland's (2005) community capital framework suggests, sustainable community development requires mobilizing citizens and their governments to strengthen all forms of community capital. Community mobilization is necessary to coordinate, balance and catalyze community capital. The review of planning frameworks designed to facilitate and manage the complexity of local planning processes revealed a particular gap concerning the ability to integrate sustainability principles, specific community priorities and long-term thinking with a realistic assessment of community capacity. How were the case study communities successful in mobilizing their communities in the advancement of sustainability? How were they able to overcome the complexity of SCD planning and implementation and integrate principles, priorities and capacity?

When the community capital framework is combined with community mobilization for sustainable community development (see figure 14) a more detailed understanding of the processes of community mobilization is advanced. Community mobilization is based not only on integrating institutional and social capacity within a community as suggested by Evans (2005), but also on integrating principles, priorities and capacity in areas of sustainability, community and development that seek to maximize all six types of community capital.

Figure 14: Community Capital Framework



The case studies are all examples of innovative initiatives that seek to advance sustainability, yet they do not directly challenge the role of the economy or underlying worldviews. On the one hand, initiatives such as Toronto's BBP or Surrey's East Clayton development could be considered examples of ecological modernization (Fisher & Freudenburg, 2001). It could be argued that efforts at energy efficiency or increased density are possible simply because they make economic sense and they do not challenge underlying processes and symptoms that create our unsustainable communities. However, such a view neglects the important role that these initiatives play in shifting thinking about the roles and responsibilities of local governments and citizens in advancing sustainability. While efforts at energy efficiency may not appear like major transformation

towards sustainability, the idea that a local government would expand its mandate and take on additional roles and responsibilities in advancing sustainability, particularly in a context of government retrenchment, does represent significant change at the local level.

Attempts at advancing sustainability at the local level are constrained by limited mandates, jurisdictions and sources of revenue. However, in areas such as land use and development, where greater degrees of local control exist, transformative change is possible based on groups of actors articulating a common vision through a collaborative process and identifying strategies and taking collective action. In order for local actions to address broader underlying issues of sustainability, these disparate local initiatives need to be integrated at regional, provincial and national scales so that concerted efforts at transforming worldviews, the role of the economy and developing solutions to social, economic and environmental problems can occur. The challenge is to scale-up mobilization in a particular place through linkages and networks in order to support change at larger scales.

A framework for mobilization for sustainable community development consisting of actors, motivations and values and decision-making structures and processes was developed to explore community mobilization in detail. Lessons from the case studies suggest that governance processes in practice are mostly ad hoc, pragmatic and flexible.

In terms of motivations, actual practice suggests that pragmatism motivates change – the key issue or crisis in a community is a motivating factor

and strong leadership figures that make the connections between a given issue and broader sustainability agendas are able to drive a process forward. Often, planning frameworks assume that there is one community motivation, when in reality there are collections of actors with motivations that are similar or compatible enough for them to work together. Existing sustainability planning frameworks stress the importance of strong leadership in keeping a process on track and generating the political will to implement initiatives but frequently play little attention to the importance and role of coalition building. Lessons from urban regime theory suggest that the management of a network of diverse interests is critical in generating the capacity to act (Stoker, 1995). Coalitions can resolve continual tensions between those interested in maintaining the status quo and those focused on transformative change, and leadership committed to sustainability is required to strategically bridge the gap between social reform and social mobilization. The actual type of actors varies and is not very significant. What is significant is that there is leadership, either from the community or from local government that is credible and able to mobilize action from other community members based on knowledge of alternatives and capacity to take action.

What role does the formal municipal planning process play in community mobilization for sustainable community development? In two of the case studies (Rolling River and Surrey) planning drove the implementation of SCD initiatives. In the others (Toronto and Craik) demonstration projects led to planning. In terms of mobilization, planning processes can contribute when they effectively

link structure and agency through processes that increase the capacity of individuals, organizations and society to think in a more integrated manner (Flyvbjerg, 2001). Planning processes that build community capacity for sustainability are dependent on developing leadership skills and learning from others. These aspects are given little attention in existing planning frameworks (e.g. Local Agenda 21). Monitoring and review of planning initiatives is often only given lip service; no real attention or resources are dedicated to learning from others as planners and community members often move from crisis to crisis. As a result, existing planning processes make it difficult to develop leadership skills, proactive engagement, inclusivity and willingness to take risks. Limited time and resources for on-the-job learning places even greater value on professional development programs based on experiential learning of processes and approaches to SCD.

Conclusion

The purpose of the research was to understand the processes involved in bridging the gap between sustainability planning and implementation.

Community mobilization was identified as a complex process that involved integrating three key areas:

- 1. Integration of institutional and social capacity for change;
- Integration of principles, priorities for local "sustainability","community" and "development" agendas; and
- 3. Integration of the six types of community capital.

Much like a combination lock that requires the alignment of cams and springs in order to release the lock, mobilization for sustainability is dependent on the alignment of these three processes.

The findings from the research stressed the importance of linking institutional capacity and community-based processes in order to bridge the gap between planning and implementation. Linking institutional and community-based processes requires a shift in the way we think about planning and implementation as discrete entities, in the way options are evaluated and in how we engage as citizens and government in the decision-making process. The case studies point to the delicate balance between emphasis on planning processes and project-based approaches to SCD in an already complex planning environment that needs more attention to integrated (Scrase and Sheate, 2002) and context specific approaches (Markey, Halseth and Manson, 2008) and involve a wider range of stakeholders (Burby, 2003). The key to strategic sustainability is to think holistically about planning and implementation and to identify the key opportunities, actors and strategies to advance sustainability in a given context.

Community mobilization begins where capacity exists to bring actors together around a catalyzing issue that is of enough importance to justify the risks associated with innovation, enabling stakeholders to overcome the tensions between preserving the status quo and transformation to a more sustainable community. The research has highlighted the importance of awareness of sustainability options and community leadership as important factors in resolving

these tensions. Mobilizing the institutional and social capacity – the different types of resources and knowledge in communities, is critical for viewing initiatives for sustainability as an investment in the future rather than a cost over the short term. When communities pursue SCD in this manner, citizens and their governments are better able to generate the capacity and knowledge that is required to integrate high level SCD principles, specific community priorities and long-term thinking to actually advance sustainability.

Integrating principles, priorities and agendas in the way we think about the concepts of sustainability, community and development is the second key to unlocking the potential for more sustainable communities. The research has demonstrated the diversity of views and approaches to the concepts of sustainability, community and development. The findings suggest that when issues in a community are identified that overlap common understandings of these concepts, there is greater potential to mobilize engagement of actors. These cross-cutting issues serve as the motivation for actors to work together towards common goals and priorities.

Finally, using areas of existing strengths and concerns as the foundation for building capacity and awareness provided the opportunity to integrate all six forms of community capital was a key factor in community mobilization for SCD. The case studies demonstrated that a key local problem related to a specific capital type served as the motivation for an initiative, but that the ability to link that issue to the other capital types was critical in engaging a broader cross-

section of actors, resources and capacity to move from planning to implementation.

Contribution to Knowledge

Implementing sustainability initiatives in urban, rural and First Nations communities across Canada remains uneven – some communities are more successful than others at bridging the planning – implementation gap. The reasons for the unevenness are not a result of technical issues, a lack of tangible projects or proven alternatives to business as usual. Rather, the barriers and solutions are based in social processes of decision-making and in mobilizing institutional resources of local government and community-based organizations to take action. In this section, the research contributions to practice and to theory will be summarized.

Summary of Practice and Theory

The four case studies were recognized as award-winning examples of communities that have been successful in their sustainability initiatives, and the good news is that there are more like them across Canada. These case studies contribute to a growing body of case study based knowledge of the key factors and circumstances that enable some communities to mobilize around SCD objectives.

Leadership, proactive approach to engagement, inclusive values and visions, willingness to innovate and manage risks, learning from others and building on demonstration projects have been identified as key strategies for

community mobilization for sustainable community development. Decisionmaking processes that integrate these factors are more likely to promote
dialogue and support innovation, risk-taking and problem solving. Awareness of
these factors will enable other communities to use them as catalysts to build
momentum, integrate SCD principles, community priorities and community
capacity to advance their sustainability objectives.

The research has important implications for the role of planning in advancing SCD. The strategies identified above are critical to address what Friedmann (1987) has referred to as the crisis in planning where "action has become divorced from knowledge (p. 311)" and results in a crisis where the "state's ability to satisfy the legitimate needs of the people (p.312)" are jeopardized. The solution, according to Friedmann, lies in "re-centering of political power in civil society, mobilizing from below the countervailing actions of citizens, and recovering the energies for a political community that will transform both the state and corporate economy from within (Friedmann, 1998, p. 314)."

If this is the ideal for mobilization, then the case studies researched here demonstrate that many barriers remain that affect the emergence of strong, proactive communities that can be the source for transformative change towards sustainability.

The research demonstrates that the state can play a role in social mobilization, provided that there are effective linkages between institutions and civil society. The planning process provided tangible opportunities to make this link and governments at all levels have recognized the importance of

incorporating sustainability into their planning and decision-making processes and are beginning to use a SCD lens for public and private investments in their communities.

However, as the case studies demonstrate, a number of these sustainability initiatives are independent of official sustainability planning processes. There is a tendency to view citizen engagement and participation in community decision-making exclusively in terms of the planning process. To advance sustainability, community engagement needs to go beyond planning processes. Communities need more than plans – they need committed leadership, resources and willingness to learn and adapt as they transition to more sustainable communities. The research indicates that planning processes are most effective when the outcome is not a plan, but an increased capacity both of the state and of the community to address the complexity of sustainability implementation. By thinking strategically about sustainability and making the connection between current community problems and sustainability solutions, communities are more likely to contribute to the emergence of a thick version of community that Friedmann is calling for by identifying the quick wins for sustainability in the short term while retaining and building support for broader and more complex solutions in the medium and long term.

The research has also contributed to a greater theoretical understanding of how communities that are recognized as being on the leading edge of sustainability are translating their visions and plans into actionable strategies.

The community mobilization framework serves to bridge the gaps between diverse literatures:

- SCD planning and implementation, decision-making processes, roles and actors required to translate plans into actions and strategies.
- Governance for SCD, integrating grassroots and institutional approaches to SCD through local networks or regimes.
- SCD as a "commons" problem, role of social capacity in strengthening community linkages around collective strategies for addressing SCD issues.

The research presented the diverse approaches to key concepts as opposing ends of a spectrum (e.g. strong vs. weak sustainability, participatory vs. elite development, thick vs. thin community). Despite the degree of diversity in approaches and ways of thinking *within* a body of literature, the considerable similarities *between* literatures that provide an opportunity for more robust theory building (e.g. participatory approaches to development have more in common with thick versions of community and strong sustainability or conversely, that thin versions of community are similar to elite led development and weak sustainability). This finding reinforces the need for transdisciplinarity and speaks to the need for integrated approaches not only in planning practice, but also in teaching and research. Focusing on the relationships between values, structure and agency provides the foundation for theory building for community mobilization (Flyvbjerg, 2001). Greater community empowerment will not, on its own produce more sustainable communities. Evans (2002) is clear on this point:

Mobilized communities are not enough...Only when this constellation of actors function in an interconnected, complementary way does it have a chance of making cities more livable (p. 244).

The framework for community mobilization presented here based on the relationships between actors, values, decision-making processes, policies and outcomes provides a basis for exploring case study research that contributes to theory development in this area. The research has also highlighted a gap between theory and practice related to sustainability. The literature calls for broad community mobilization for SCD based on participatory approaches and strong and engaged communities to transform society and to shift the relationships between the environment, society and the economy. However, this has not yet materialized. The best practices examined have not yet resulted in challenges to existing power structures. In part, this can be explained by relying on sustainability initiatives identified by municipalities as best practices, as it is unlikely that a municipality would advance and publicize initiatives that present direct challenges to their authority and influence and challenge the way they operate. In addition, there is a tendency to focus on the environmental aspects of sustainability at the local government level and to rely on design and technology to drive change. However, transformative change happens as a result of relationships between people, not with technology; therefore, theory and practice of community mobilization for sustainability needs to focus more on shifts in values and shifts in power and processes that are based more on communal responsibility rather than individual consumption decisions.

Much of the sustainability literature makes claims about the importance of community mobilization; however, there is little indication of what community mobilization looks like or what role it plays. Based on the research, it is not possible to claim that community mobilization is a precondition for SCD for local government initiatives, as there are certainly instances of mobilized communities that have not resulted in SCD. However, given that it was present in varying degrees in each of my case studies it is possible to conclude that community mobilization helped to bridge the gap between planning ideals and implementation.

The key to advancing SCD in each of the case studies was pushing for changes to the status quo and innovation up to, but not beyond the level of risk that participants were willing to accept. Community mobilization relied on existing power structures and the strategic use of communities within local power structures, in the development of local regimes for sustainability (Gibbs & Jonas, 2000; Smith & Beazley, 2000). In addition, much like common property regimes, these partnerships were held together based on the similar understandings of community problems and sustainability solutions, the collective resources of regime participants and were based on informal rules, trust and perception that the regime was generating community and individual benefits (Adger et al., 2003; Agrawal, 2002). However, the notion of mobilization as a means of transformative change for sustainability is dependent on access to and shifts in existing power structures at multiple scales from the local to the global. There is much resistance at all levels which confined innovation for sustainability in each

case study to an incremental path for change. This resistance is most clearly illustrated in the Surrey case, where developers were able to obtain concessions from council that reduced the area planned for commercial development based on the argument that commercial space would not sell as easily as residential.

Potential for Future Research

While the research was focused on the planning – implementation gap, other gaps exist and require further research. The gap between implementation and monitoring / evaluation is one important example. The understanding of the role that established sustainability projects have on the planning process and on future projects may be enhanced by further application of the framework of community decision-making based on the community capital model.

Portney (2003) suggests some key community demographic characteristics that could influence the adoption of sustainability initiatives. While these characteristics may play a role, this research demonstrates that factors such as individual leadership, the right conditions and the right timing play a more critical role. The community conditions certainly contribute, but on their own they are insufficient. The challenge is in identifying conditions that support the development of leadership capacity. Do existing planning processes enable capacity building for sustainability in Canadian communities? If not, how can they be improved? The findings from the case studies help in identifying important factors that can help explain the variation in adoption and implementation of sustainable community development initiatives. These factors

need to be explored further before recommendations for the improvement of their effectiveness can be made.

Additionally, the linkage between the strength of community and the level of transformative change towards more sustainable communities warrants further research. Are sustainable community development initiatives limited to making incremental changes to the form and function of our communities precisely because of the lack of strong community ties and the lack of a culture of collective action? If so, should proponents of sustainability and sustainability frameworks be more focused on the development of collective action strategies? Is there any evidence that communities with stronger ties result in stronger approaches to sustainability? The evidence from Craik would suggest so, but it is impossible to draw firm conclusions based on the single case. It would be worthwhile to conduct similar research focused not on sustainability but rather on initiatives that result in changes to social power structures to try and identify the emergence of sustainability. In other words, do social movements that have had success in shifting power structures for change result in outcomes that are more open to sustainability?

While this research approached community mobilization through local government led initiatives, an exploration of the similarities and differences with this approach and initiatives led by community-based organizations would be useful. How does community mobilization for sustainability work without access to governing resources? Does this provide greater opportunity for shifts in power structures, changes in values and strengthened community ties over the long-

term? In addition, this research was limited by trying to examine an on-going process of community mobilization at a particular point in time and ultimately, the success of the case studies that were examined are dependent on their ability to maintain momentum and to continually push the envelope for additional innovations that will contribute to a continual improvement in the levels of community capital and thus create more sustainable communities.

Recognizing the importance and relationship between grassroots and institutional approaches to sustainability is critical for advancing sustainability initiatives beyond a sectoral focus. Linking community mobilization and the community capital framework provides for a better understanding of the contextually sensitive relationships between how conflicts and tensions related to specific principles and priorities for sustainability, community and development and the six community capital types are resolved.

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APPENDIX 1: BEST PRACTICE STRATEGIES

Community Decision-making Element	Key Strategies	Description and Best Practice Example
Community Actors	Presence of influential community leaders	BEST PRACTICES – COMMUNITY ACTORS – PRESENCE OF INFLUENTIAL COMMUNITY LEADERS The presence of influential community leaders that were able to place sustainability on the agenda and to motivate other actors to become involved was critical in all of our case studies. In each case, there was a key leadership figure or a core group that was able to drive the process and engage political leaders and other community actors. ROLLING RIVER EXAMPLE There was continued local support for political leaders beyond election cycles that provided the leadership with the security to take more risks, to innovate and plan for the longer term. When the Chief was first elected, he asked specifically for a mandate for a community plan that would take ten years to implement. It was understood that there would be no quick fixes, but that incremental progress would be made over time for the plan to be fully implemented and that a longer time frame was required to take a more comprehensive approach. SURREY EXAMPLE The James Taylor Chair in Landscape and Liveable Environments played an influential role in getting sustainability issues on the agenda in the early stages of planning for the East Clayton Neighbourhood. They were able to articulate the value of sustainability to a variety of audiences and their multi-stakeholder approach through charrette processes was instrumental in getting the buy-in of other stakeholders.

Community Decision-making Element	Key Strategies	Description and Best Practice Example
Community Actors	Proactive approach to public engagement	BEST PRACTICES – COMMUNITY ACTORS Despite the variability of approaches among the case studies, leadership figures emerged that recognized the importance of engagement and worked to build partnerships based on a clear understanding of the motivations, mandates and incentives of stakeholders to become engaged. SURREY EXAMPLE: Community engagement and partnership was key to the success of the Smart Growth inspired East Clayton neighbourhood design concept in Surrey, BC. The City partnered with UBC to design the process, identified and met with five communities of interest and then created an interdisciplinary Project Team that included representatives from different City departments and each of community of interest. CRAIK EXAMPLE: The Eco-centre project in Craik, SK, began with a small group of committed individuals in the early stages, and through demonstration projects were able to engage with a wider audience. The cooperation between the Town and the Regional Municipality were able to use their different mandates as an advantage in achieving the goal of revitalization through sustainability initiatives.

Community Decision-making Element	Key Strategies	Description and Best Practice Example
Community Actors	Management of engagement cycles	BEST PRACTICES – COMMUNITY ACTORS Engagement with any community initiative ebbs and flows over time. The key in each case community was to identify a key catalyzing issue that served to motivate and engage the broadest possible support and for which there was a sense of crisis. Leaders were able to identify the issues that were of top of mind for the general public and to propose ways of addressing them that were linked to broader sustainability objectives. The key question was how to use concern over a specific issue to galvanize support for broader sustainability initiatives. ROLLING RIVER EXAMPLE: It was acknowledged early on that people were reluctant to participate so Chief and Council announced that they were unveiling the community plan at a special meeting, knowing that their members would react with criticisms if they were presented with a plan that was already completed. In actual fact, they didn't have a plan, but community members were so concerned about not having any input that the turn out was really good. People came with the intention of criticizing whatever was going to be presented but ended up having a community meeting to establish the goals and vision for the community and it was a really constructive meeting. TORONTO EXAMPLE The origins of the Better Building Partnership were contextually sensitive. In the early 1990s, there was a recession that resulted in a reduction in large construction projects. The labour community was looking for new opportunities and new skills and became actively engaged in the development of the BBP. It was recognized that building retrofits were labour intensive activity and provided significant job creation potential from technical design, to trades and construction and even sourcing of materials at the local level.

Community Decision-making Element	Key Strategies	Description and Best Practice Example
Community Actors	Use of neutral 3 rd party actors	BEST PRACTICES – COMMUNITY ACTORS The case studies illustrated the importance of the involvement of a neutral 3 rd party to supplement existing knowledge base and awareness, to build capacity to take action and to overcome any existing conflicts in the community. TORONTO EXAMPLE: When the Better Building Partnership was established, the first step was to get out into the community and talk to people. The program was set up as a partnership between the city, labour groups and large commercial property owners which provided a multi-faceted perspective on the project. Due to the integrated nature of the project participants, it was much easier to persuade people, both within the City and in the larger community of the value of the project. CRAIK EXAMPLE: The Craik Sustainable Living Project was established as an NGO at arms length from the Town and the Regional Municipality. Therefore, they are seen as a kind of neutral 3 rd party that allows them to bring different kinds of people together and act in a convening role with the freedom to address issues that a municipality would not normally address.
Community Values and Vision	Cross sectoral values	BEST PRACTICES – COMMUNITY VALUES AND VISION Community Values and vision were expressed formally in planning documents and also informally through the day-to-day interactions between community members. One example of a strategic approach to community values and vision was to identify visions and values that were able to overcome economic primacy. In each case, preserving or improving the economic status quo was a key component to any activity, yet community values were expressed in a manner that were integrative and were motivated out of concern for and recognition of the linkages between the environment, economy and society. TORONTO EXAMPLE The public awareness of air pollution, the vision of "smog free days" and the reality of an economic recession provided the rationale for a building retrofit program that contributed to a reduction in emissions and created jobs.

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Community Decision-making Element	Key Strategies	Description and Best Practice Example
Community Values and Vision	Values and vision were inclusive	BEST PRACTICES – COMMUNITY VALUES AND VISION Visions for the future were explicitly inclusive and generated broad enough support that stretched across ideological lines and allowed for initiatives to survive beyond election cycles. ROLLING RIVER EXAMPLE Community roundtables were developed to ensure greater participation from community members in a productive manner. They have been used to identify key issues, propose projects, address challenges and discuss solutions, values, ideologies and decision-making structures. Each family group was able to nominate one person that would represent that family in the community roundtable process, ensuring that the values of all members were included.
	Grounded in existing capacity	BEST PRACTICES – COMMUNITY VALUES AND VISION While the motivations and associated values for taking action reflected a need for change in each community, in each case study, visions were grounded to existing resources, capacity and understanding of the degree of change the community was willing to accept. ROLLING RIVER EXAMPLE Rolling River undertook a broad visioning exercise, yet they were conscious of needing to provide tangible results. Therefore, part of their visioning exercise identified specific priorities for action based on an evaluation of their capacity to implement over the short term. TORONTO EXAMPLE The BBP started with one employee and a consultant, yet through careful planning eventually involved the contribution of over 200 people through design charrettes and consultation. The three major pillars that got the project going were 1) financial studies of the business case, 2) evaluation of similar existing programs from elsewhere and 3) an assessment of the internal capacity within the City to undertake the project.
	Shared culture of empowerment	BEST PRACTICES – COMMUNITY VALUES AND VISION The shared culture of empowerment and community initiative can enable either the local government or community to take action in implementing a particular sustainability initiative in response to local issues in an area beyond their normal mandate. CRAIK EXAMPLE In Craik, there was an established culture of volunteerism and a community initiative – what community members referred to as the "Can do" attitude, as a result of successfully securing medical services and keeping the local school open. The CSLP was able to draw on significant volunteer resources, local fundraising and local resources in order to get the EcoCentre built.

Community Decision-making Element	Key Strategies	Description and Best Practice Example
Governance Structures and processes	Project based demonstration projects	BEST PRACTICES – GOVERNANCE STRUCTURES AND DECISION-MAKING Integration of decision-making is commonly referenced as a goal for sustainability. However, there are real challenges in breaking down the "silos" and "stovepipes" between city departments or between various community actors. The importance of integrated project teams that are engaged in both planning and implementation are critical in moving from planning-implementation. These teams can ensure that there is continuity between planning and implementation and team members are useful resources in explaining the motivation and rationale for particular planning initiatives as projects move through various phases of implementation. One key bridge between planning and implementation was information, knowledge and awareness. In each case, communities were able to use knowledge and information generated externally or though internal demonstration project to give sustainability tangible meaning. CRAIK EXAMPLE The long-term goal for the CSLP was to develop an EcoVillage as a way of revitalizing the town. In order to demonstrate the viability of the EcoVIllage and to reduce the perceived risks involved, CSLP decided to develop the EcoCentre first as a tangible demonstration project. The primary focus was on building local expertise through "learning by doing" problem solving. The EcoCentre now serves as a tangible representation of the larger vision for the EcoVillage. TORONTO EXAMPLE Getting around financial, legal and attitudinal hurdles took a lot of research on what other communities were doing, looking at best practices, understanding options and communicating those results. The Energy Efficiency Office conducted studies to see where they could make the 'biggest hits' in terms of efficiency and they concluded that targeting buildings (50% of stationary emissions) was the most effective approach. This information was provided to key champions (staff and political) of the project who were able to use the information gathered both internally and through the

Community Decision-making Element	Key Strategies	Description and Best Practice Example
Governance Structures and processes	Decision- making structures acknowledge risks	BEST PRACTICES – GOVERNANCE STRUCTURES AND DECISION-MAKING Information and awareness of sustainability options was important in managing the risks associated with "doing things differently" – which is at the heart of sustainability. Decision-makers identified the importance of risk – both perceived and actual, and the ability to account for it as being critical in the decision-making process. CRAIK EXAMPLE CSLP participants had to deal with three types of risk. First there was the financial risk of using Town reserves to finance a community project. Second, there were personal risks associated with being associated with a "wing-nut" scheme in a small community. The last risk was of volunteer burn-out. The key to managing the various risks was to be up front about them, to engage with the community and to use actual projects and initiatives as demonstration projects that model the broader outcomes for the community.
	Engagement with multiple departments and stakeholders	BEST PRACTICES – GOVERNANCE STRUCTURES AND DECISION-MAKING One way that risk was managed effectively across all of the case studies was through cross- departmental involvement or multi-stakeholder engagement. This engagement had the effect of creating a sense of joint ownership over sustainability initiatives and reduced the risks to any one department, group or individual. ROLLING RIVER EXAMPLE Bringing community together to identify the key elements of the plan served to create a sense of ownership over the various projects and ensured that the risks associated with going forward were not placed on any one person's shoulders but were shared across the community. The key to the success of the Rolling River community plan was that it was seen as the community's plan and not the Chief and Council's plan.

Community Decision-making Element	Key Strategies	Description and Best Practice Example
Governance Structures and processes	Decision- making processes as awareness building	BEST PRACTICES – GOVERNANCE STRUCTURES AND DECISION-MAKING The decision-making process itself was used as an effective tool to raise awareness and build capacity to address the complexity of sustainability. The decision-making process was used as an opportunity to learn and as a problem solving exercise that broadened the local knowledge-base of sustainability. ROLLING RIVER EXAMPLE Chief and Council announced to the community that they had developed a comprehensive community plan and were going to unveil it at a community meeting. Community members were upset about not being consulted so they turned out in large numbers, however, in reality, Chief and Council did not have a plan. They had some ideas but knew they had to get feedback from the community. The community meeting and subsequent family roundtables were the sites where the active engagement of community in decision-making served to identify key issues and raise broader awareness of the strengths and challenges of the community. SURREY EXAMPLE The charrette process in East Clayton was a short and intensive multi-stakeholder design workshop that uses existing policy as a starting point. The charrette facilitated finding synergies among issues and overcame the "silo" based decision-making by developing and raising awareness of alternative design standards and regulations. For example, one of the principles was narrower streets, but emergency services were reluctant to reduce the standard width of streets due to access. However, the charrette process identified the ramifications of wider streets and creatively developing other options (i.e. interconnected grid network, mid-block access, etc.) to address response time and access beyond across the board standards.

Community Decision-making Element	Key Strategies	Description and Best Practice Example
Governance Structures and processes	Focus on pretty good solution	BEST PRACTICES – GOVERNANCE STRUCTURES AND DECISION-MAKING The demand for absolute certainty regarding innovative outcomes can stall or prevent action for sustainability altogether. Decision-making did not get bogged down with the complexity of sustainability, the technical details or gathering all the required information. Instead, in each case, projects were able to proceed based on a pretty good rather than perfect solution. Non-technical approaches to strategy design such as simple "back of envelope" calculations provided enough rationale to support decision-makers. SURREY EXAMPLE The charrette process is designed to get people with a diversity of backgrounds and to synthesize their knowledge in the development of pretty good, rather than perfect solutions. To put it simply, participants recognized that they could not think of everything at the planning stage and built in some flexibility into the charrette plan to accommodate experimentation, innovation and improvement, recognizing that it was better to move forward on a particular issue based on a "pretty good" solution rather than to gather all the required information for perfection and certainty.
Policy Design	Best practices and learning from others	BEST PRACTICES – POLICY DESIGN There were no specific policies, strategies or instruments that were effective across all of the case study communities. However, each community looked to best practices from elsewhere as a means to learn and transfer knowledge to their respective communities. Particularly for Craik and Rolling River, capacity and resources within local government or band administration limited the degree to which specific policies were considered. TORONTO EXAMPLE The Better Building Partnership started out with some questions like "what should this look like?" and looking at the experience of other municipalities, particularly in the US and the Canadian Federal Buildings Initiative to learn from and improve on their experiences. There was a fair bit of consultation with other cities engaged in energy conservation, where Toronto actually invited people to come to Toronto to share their experiences.

Community Decision-making Element	Key Strategies	Description and Best Practice Example
Policy Design	Complexity management and innovation	BEST PRACTICES – POLICY DESIGN Information transfer was essential in managing complexity associated with policy innovation and a key aspect of learning was not on the technical aspects of how initiatives were implemented in other communities, but rather in the processes involved to manage the complexity and risk involved. CRAIK EXAMPLE For the Ecovillage development, the community relies on a simple set of criteria to evaluate proposals from proponents. Craik does not have access to a formally trained planner to make decisions, so a committee of volunteers are used to assess proposals based on established guidelines. The guidelines require proponents to address how they will heat, power, obtain water and manage sewage and waste water and off-load the technical capacity and decision-making to the proponents.
	Institutionalize best practices	BEST PRACTICES – POLICY DESIGN A key challenge across all case studies was with institutionalizing best practices and demonstration projects into the regular day-to-day operations of local government or band administration. SURREY EXAMPLE The City of Surrey has an innovation fund for staff as a municipal budget item. The fund is designed to encourage staff to apply best practices, innovative ideas and approaches that will improve the management of the City.
	Performance- based strategies	BEST PRACTICES – POLICY DESIGN In both Surrey and in Toronto, there was a shift towards performance-based standards that are based on specific sustainability outcomes as a way to spur innovation in implementing sustainability initiatives. TORONTO EXAMPLE The Better Building Partnership is focused on supporting buildings that perform better in terms of energy efficiency. The program does not rely on rigid guidelines to identify specific actions that are required to improve building performance in order to secure funding from the BBP. Instead, the BBP use performance bonds and performance contracts.

Community Decision-making Element	Key Strategies	Description and Best Practice Example
Community Signals, Actions and Outcomes	SCD as investment rather than cost	BEST PRACTICES – COMMUNITY SIGNALS, ACTIONS AND OUTCOMES The key challenge for our case study communities in the category of community signals and outcomes was how to maintain consistency and commitment towards sustainability within the context of complex, interdependent and conflicting policy signals externally (from other levels of government) and internally (policies and actions within the community). Thinking of SCD as an investment rather than a cost was instrumental in overcoming this challenge. It allowed our case communities to leverage change in one aspect of their community and to link it to other activities and with other issues. SURREY EXAMPLE Concern over storm-water management provided the opportunity to leverage investment in innovative green infrastructure in East Clayton and also provided the opportunity to address the form and function of an entire new neighbourhood. Developers were initially concerned about the added costs of a new design for a residential subdivision based on sustainability principles while being unsure if it would sell to the public. However, it turns out that investments in sustainability principles are amenities that are desired by the public, as evidenced by the rapid sales in East Clayton and surrounding neighbourhoods designed around similar principles.
	Integration of demonstration projects	BEST PRACTICES – COMMUNITY SIGNALS, ACTIONS AND OUTCOMES In each case, demonstration projects were used to spur other activities, to raise awareness of SCD and to maintain momentum and interest among broader stakeholders. The demonstration projects served as tangible examples and were used as signals to the wider community of the realm of the possible. CRAIK EXAMPLE Craik used the EcoCentre project as a tangible demonstration of sustainability in a rural Saskatchewan context and to provide the basis for broader sustainability initiatives. Symbols of success in the Town can be attributed to the construction of the EcoCentre. Examples include the retrofit of the municipal building for energy efficiency, a Town anti-idling campaign, conversion to solar hot water heaters among residents and adoption of biological water treatment for the Town.

Community Decision-making Element	Key Strategies	Description and Best Practice Example
Community Actions, Signals and Outcomes	Accepting pushback and leveraging results	BEST PRACTICES – COMMUNITY SIGNALS, ACTIONS AND OUTCOMES The case study communities were all able to implement incremental changes to their communities through their planning and implementation activities, but struggled institutionalizing the outcomes. In part, this was a pragmatic response to sustainability, based on the assumption that a series of incremental changes will continue to raise the bar and leverage further change, but it does not address the more revolutionary reform to local government that some are calling for. SURREY EXAMPLE The East Clayton development process consistently had to juggle idealistic goals for sustainability with the pragmatic reality of the level of risk and innovation that was acceptable to stakeholders. The approach was to set small, achievable goals that push the boundaries, build capacity and leverage further change. For example the street design called for narrow, curb-less streets oriented on a grid system. This was a dramatic change from wide cul-de-sacs typical in other subdivision and there was considerable push back from a variety of stakeholders. In the end, curbs were installed, but the narrow, grid oriented streets were accepted and have been successfully replicated elsewhere.

APPENDIX 2: CASE STUDIES IN RELATION TO COMMUNITY CAPITAL

Surrey Case Study: Relationship to Community Capital

Surrey's East Clayton Neighbourhood developed as a demonstration of a more sustainable suburban development with reduced impact on the environment. Figure 15 illustrates the relative levels of each type of community capital. The low levels of social capital reflect the tendency for suburban residents in a new development to be engaged in a diversity of communities that do not necessarily correspond to where they live. While residents have a diversity of cultural backgrounds, there is no shared cultural sense of place that has developed. The level of natural capital is also relatively low, as new residential developments on greenfield sites have large ecological footprints, are car dependent and have negative effects on natural ecosystems.

The levels of human, physical and economic capital were relatively higher. In terms of human capital, the City was able to draw not only on the skills and knowledge within the bureaucracy, but was also able to make linkages with researchers from the University of BC as a source of innovative approaches to neighbourhood planning and development. The focus of the East Clayton development was to transform the physical infrastructure and design for the neighbourhood to reduce the environmental impact and to encourage greater interaction among community members. Working with the development industry

brought considerable economic capital resources to the project that served to provide incentives for community mobilization for the project.

Relative Levels of Capital Types

Natural Capital

Portion Relative Levels of Capital Types

Human Capital

Figure 15: Surrey Community Capital Levels

Toronto Case Study: Relationship to Community Capital

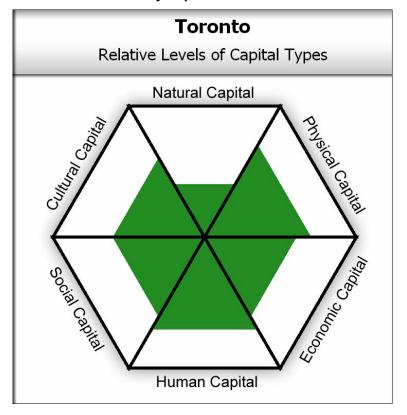
Toronto's Better Building Partnership emerged to address the air quality and climate change concerns in the context of an economic recession. Figure 16 illustrates the relative levels of the different capital types that reflect this need. Levels of natural capital were relatively low, as is evidenced by the number of "bad air" days and the awareness of the implications of energy use, climate change and air pollution. The economic recession had also affected the level of property development and the reduction in construction trade related jobs,

resulting in a relatively low level of economic capital. While the level of cultural capital resources in Toronto is quite high, they were not drawn upon for the Better Building Partnership. Likewise, the network of community organizations is quite diverse, particularly for environmental issues. However, community-based organizations were not relied upon in the establishment of the BBP.

Physical and human capital resources were areas of relative strength.

There were a large number of municipal and commercial buildings that could be focused on to improve the value of the physical infrastructure. The level of skills and knowledge related to energy efficiency and building retrofits, particularly in the municipal bureaucracy was a particular strength that, in combination with the physical capital resources served as the focal point for community mobilization to address the issues of air quality and climate change. Local government leadership was able to overcome the lack of initial direct connections to social and cultural capital resources.

Figure 16: Toronto Community Capital Levels

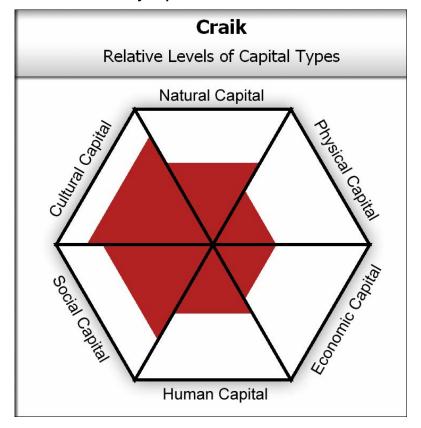


Craik Case Study: Relationship to Community Capital

The Craik Sustainable Living Project was established to address issues related to rural revitalization. Figure 17 serves to illustrate the relative levels of each of the six community capital types. Given the concern related to the viability of the town, the levels of economic and physical capital are low relative to the other capital types. The number of empty homes, abandoned businesses, the condemned Town Hall and the threat of the school and the health centre closing all serve to illustrate the low levels of physical capital in Craik. The levels of natural capital and human capital fall in the mid-range relative to the other types of community capital. In terms of natural capital, the Craik environment is not suffering from large-scale pollution or lack of greenspace as is common in

more urban settings. However, large-scale industrial farming that has a detrimental impact on water quality surrounds the landscape. In addition, with the closure of a number of local businesses, residents are more reliant on the automobile for shopping and service needs. Human capital refers to the knowledge and skills of residents, which were guite diverse. However, the threat of out-migration could erode the skill base, particularly if the school or health centre were to close. The key areas of strength for Craik were in terms of cultural capital and social capital. In Craik, there is a history of people coming together and working on shared goals through strong local networks that are connected at an individual and organizational level. For example, the community came together to hire their own doctor to ensure the continued operation of the health centre and they established their own cable TV company when no one else would provide service. These type of examples contribute to the shared culture, the sense of a shared past and a shared future. Cultural and social capital were areas of strength that served as the basis for community mobilization to address areas of weakness.

Figure 17: Craik Community Capital Levels

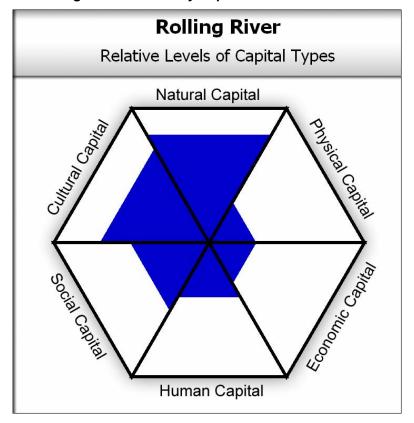


Rolling River Case Study: Relationship to Community Capital

The Rolling River comprehensive community plan was developed to address the lack of physical infrastructure and economic opportunities that were forcing community members to leave the reserve in search of employment. As Figure 18 illustrates, the levels of physical, economic and human capital in the community were low relative to the other types. The lack of employment opportunities in the community had a negative impact on human capital as younger skilled and educated members left the community to pursue employment. In addition, the status of housing and other physical infrastructure in the community had impacts on the social conditions of community members.

While there was a strong tradition of communal activity and cultural traditions around consensual decision-making, levels of social and cultural capital have been negatively impacted by the residential school legacy. As a result, there is a certain level of negativity associated with traditional ways of doing things that needed to be overcome in order to build trust among community members and to re-establish communal decision-making processes. Natural capital was strongest relative to the other capital types and served as the resource base upon which the comprehensive community plan rested and identifying ways of using the natural resource base in a sustainable manner was the focus of community mobilization initiatives, guided by cultural traditions and collective decision-making.

Figure 18: Rolling River Community Capital Levels



The Community Capital Tool can be used for illustrative purposes to compare and contrast the levels of different community capital types for each of the case study communities (see Figure 19). The figure demonstrates that the source of community mobilization builds on the specific capital types that are the strongest. For example, the levels of cultural and social capital in Craik (red) are highest relative to the other types and these served as the foundation for community mobilization. Community members in Craik were able to rely on the strong cultural ties to the community and the high level of social capital as critical resources that were used to overcome the lack of institutional and financial resources. The levels of cultural and social capital provided the basis for convergence of approaches to sustainability, community and development as

was demonstrated by the ability of the Craik Sustainable Living Project to rely on volunteer labour in constructing the Eco-Centre. Likewise, the high level of natural capital in Rolling River (blue) served as the starting point for mobilizing the community in the development of economic development plans and strategies. While Roseland (2005) suggests that community mobilization is critical for integrating priorities related to particular capital types under a common goal, the case studies researched here seem to work from their strengths and use community mobilization processes as a means to build capacity, access resources and raise awareness first related to a narrow sectoral issue and then more broadly as an integrative process.

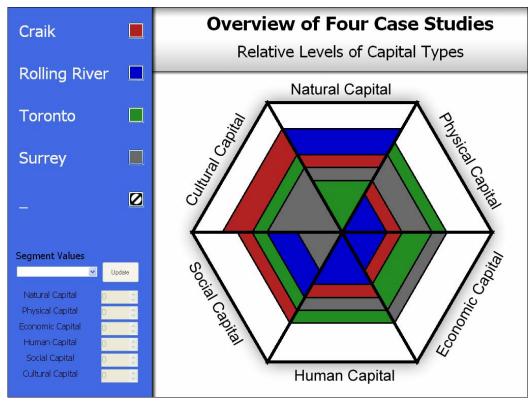


Figure 19: Comparison of Community Capital Levels for Case Study Communities