

# **Sustainability in Communities: conditions and strategies for a new planning paradigm**

Louisa de Heer (3313557)

Supervisor: Frank van Laerhoven  
2<sup>nd</sup> Reader: Carel Dieperink

Master's Thesis, 45 ECTS  
MSc in Sustainable Development – Environmental Policy and Management  
Utrecht University, the Netherlands

August 2010

Contact:  
1372 Sunny Drive  
Eugene, Oregon 97404  
louisa.deheer@gmail.com

## Abstract

Communities are recognizing their crucial role in developing and implementing sustainability policy. Integrated community sustainability planning is an emerging field for both theorists and practitioners, with current emphasis on Canadian mandates for sustainability. This research aimed to improve understanding of the conditions and processes by which communities in Oregon, USA are embedding sustainability ethics and community participation into decision-making and action. The research began with collective action as a premise for sustainability community development and developed a conceptual framework of important community conditions through grounded theory work in Corvallis Oregon. The research goal aimed to address the question, *under what conditions and through what design processes are communities in Oregon, USA initiating integrated community sustainability planning?* Follow up investigations in Ashland and Lincoln City, Oregon supported the initial findings of critical community conditions, which include civic engagement, history of citizen participation in local government, commitment to the community, and sustainability awareness. Results indicate that local capacity, defined as the local government's willingness and ability to engage with the community, is the primary sticking point for comprehensive sustainability planning in Ashland. These communities represent initial case studies into the actions small communities in the US are taking to address sustainability and resiliency at the local level.

Keywords: integrated community sustainability planning, social capital, capacity

Word Count: 44,477

## **Acknowledgements**

I would like to express my heartfelt gratitude to many people whose support has enabled me to complete this research throughout this year. My husband Joe has shown incredible kindness of spirit, generosity and understanding through my tempestuous research and writing periods. Emily Aune and Ben Morley, as the best housemate/landlords one could ask for, thank you for giving my family a home this year. To my family, Cheryl, Nancy and Ralph, and Ian and Rori, thank you for your grown-up wisdom and encouragement throughout this process. To the Dutch side, thanks for the company, dinners, and advice while I was abroad. My colleagues and friends in Utrecht were an endless source of fun, knowledge, and late nights. Thank you all for wonderful memories.

My advisor, Frank van Laerhoven, has been an incredibly valuable resource for feedback and direction. Thank you sincerely for sticking with me through this. All of my interviewees throughout this process have provided me with vital insights and their wisdom, educating me at every turn. A final, special thank you to Annette Mills, The Corvallis Sustainability Coalition's facilitator, whose intelligence, passion, and dedication will continue to inspire my work for years to come.

For Michael, whose work ethic may have slacked in his later years, but his mind never did. And for Joe, with whom I could spend a lifetime.

<b>1 Opening</b>	8
1.1 Catastrophe or Opportunity	8
1.2 Research objective and relevance	10
1.3 Research question	11
1.4 Central Concepts	11
1.5 Research Framework	12
<b>2 Review of literature</b>	14
2.1 Approaches in sustainable community research	14
2.2 Sustainability at the community level	15
2.3 Concepts in sustainable community literature	19
2.3.1 Engaging the community- social capital and the importance of networks	19
2.3.2 Capacity and local government	21
2.3.3 Frameworks and tools	22
2.4 The need for further research	23
<b>3 Conceptual Framework</b>	24
3.1 Research development	24
3.2 Dependent variables under investigation	25
3.3 Independent variables	26
<b>4 Methodology</b>	32
4.1 Research approach	32
4.2 Geographic location	32
4.3 Case study criteria	33
4.4 Case study selection	34
4.5 Data Collection	34
<b>5 Corvallis- A successful ICSP initiative</b>	36
5.1 Introduction	36
5.2 The sustainability initiative- the players and the plan	37
5.3 The strength of the dependent variables	41
5.4 Developing a picture of the community conditions	45
5.5 Categorizing community conditions- the explanatory variables	48

5.5.1	Social capital	49
5.5.2	Capacity	54
5.5.3	Design	59
<b>6</b>	<b>Exploration of ICSP Potential</b>	<b>67</b>
6.1	Introduction	67
6.2	Community background	68
6.3	Research in the communities	69
6.4	Sustainability in Ashland	69
6.4.1	The dependent variables	71
6.5	Community Conditions – The explanatory variables	72
6.5.1	Social capital	73
6.5.2	Capacity	79
6.5.3	Design	82
<b>7</b>	<b>Results and discussion</b>	<b>86</b>
7.1	Categorical findings	86
7.2	Implications of this research	91
7.3	Errors committed in this research	92
7.4	Further research	92
<b>7.5</b>	<b>In closing</b>	<b>93</b>
	References	95
	Appendices	103

## **Abbreviations**

ACUPCC- American Colleges and Universities Partnership on Climate Change

APA – American Planning Association

CLS - Community Livability Survey

CSO – Civil Society Organization

CVC-EVP – Corvallis-Benton County- Economic Vitality Partnership

ICLEI – International Council For Local Environmental Initiatives (now known as Local Governments for Sustainability)

ICSP- Integrated Community Sustainability Plan

IPCC- Intergovernmental Panel on Climate Change

ISO- International Organization for Standardization

NGO- Non-Governmental Organization

TBL- Triple Bottom Lines

TNS- The Natural Step framework

## **Acronyms**

The Action Plan – The Corvallis Sustainability Coalition Community Sustainability Action Plan

The Coalition- Corvallis Sustainability Coalition

The Prosperity That Fits - the City of Corvallis Economic Vitality Plan

## Boxes and Figures

<i>Number</i>	<i>Title</i>	<i>Page</i>
Box 1.1	Research Relevance – An example	10
Figure 1.5	Research Framework	13
Box 2.2	Arnstein’s Ladder of Participation	17
Figure 2.2	Two ways of thinking about sustainability	19
Box 2.3	ISO 14001	23
Figure 3.3	Capacity for sustainability as a conceptual category	30
Figure 4.1	Research timing	34
Figure 4.5a	Total number of interviews conducted	36
Figure 4.5b	Total number of surveys completed	37
Box 5.2a	The Natural Step framework	41
Box 5.2b	Corvallis community action plan example-food	42
Box 5.4	Conflict between the triple bottom line and the Natural Step in Corvallis	46
Figure 5.5	Conceptual Framework	48
Figure 5.5a	Formal participation in associations	50
Figure 5.5b	Perception of trust	52
Figure 5.5c	Acceptance in the community	52
Box 5.5	Energize Corvallis	57
Figure 5.5d	Branding as an element of visibility and legitimacy	59
Figure 5.5e	Degree of connectivity in sustainability leadership	61
Figure 5.5f	Community connections in sustainability leadership	63
Figure 5.5g	Leadership Network in Corvallis	63
Figure 5.5h	Corvallis sustainability coalition vision and mission	66
Box 6.2	Lincoln City community background	68
Box 6.3	Research in Lincoln City	69
Box 6.4a	Transition Town networks	70
Box 6.4b	The state of sustainability in Lincoln City	71
Figure 6.5a	Survey response – weekly formal participation comparison	73
Figure 6.5b	Formal participation in associations	74
Figure 6.5c	Voter turnout- Comparison	75
Figure 6.5d	Educational attainment comparison	75
Figure 6.5e	Age comparison	76
Box 6.5.1a	Civic Engagement in Lincoln City	76
Figure 6.5f	Perceptions of trust	77
Figure 6.5g	Comparison of acceptance rates	77
Box 6.5.1b	Commitment in Lincoln City	78
Box 6.5.1c	Network Strength in Lincoln City	79
Box 6.5.2	Current capacity in Lincoln City	82
Figure 6.5.3	Ashland sustainability network	84
Box 6.5.3	Foundations of an ICSP structure in Lincoln City	85
Figure 7.1a	Findings in social capital	87
Figure 7.1b	Findings in capacity	89
Figure 7.1c	Findings in design	90

# 1 Opening

## *1.1 Catastrophe or opportunity?*

Sustainability is an anthropocentric interest; we want our species to survive, and our behavior is threatening that ability. In order for humanity to exist, the ecosystems that we rely on, as well as the other species that form those ecosystems, need to remain functional (Houghton et al., 1990; Thomas et al, 2004). These climate scientists agree that the speed and severity of degradation to the natural systems that sustain life on the planet have or may soon cross a tipping point, initiating dramatic and irreversible shifts in the planet's natural systems. We are no longer in a position to assume that the social, economic, or environmental systems will look in fifty years as they do today.

If the need for sustainability planning is not in debate, what needs to be sustained, or where the boundaries may fall, remains unclear. A primary argument surrounding sustainability can be categorized simply as weak versus strong sustainability. Proponents of the strong sustainability viewpoint argue that the complexities of the natural systems that sustain life are not well understood, and that as life is completely dependent upon the functioning of these systems, those systems must be preserved (see Daly, 1973; Hueting & Reijnders, 1998). This perspective places the functioning of the environment as a prerequisite to the functioning of the economy. It also argues that stocks of non-renewable resources should remain intact, which is impossible considering the current levels of depletion of oil, as one example (Hueting & Reijnders, 1998). Weak sustainability theorists, on the other hand, argue that environmental elements can be temporarily substituted and restored, or replaced by technological solutions in the longer term (Hueting & Reijnders, 1998). If the total capital stock of human systems is divided into natural and man-made capital, than proponents of weak sustainability assume a measure of substitutability between the two, as long as the total capital stock remains the same (Pearce & Atkinson, 1993). For some, this extends to the argument that science can identify acceptable levels of pollution, or acceptable fish catches, in order to suit our needs without destroying the resource. This, of course, assumes complete understanding of those systems and how they function, which no scientist can currently claim (Latesteijn & Schoonenboom, 1996).

Attempts to define sustainability combine ecological, social, and economic imperatives; however, its exact boundaries depend upon ones definition of sustainability (Portney, 2005). In my approach to this research, I assume that the need for more sustainable 'development' is somewhat of a given. However, how that concept can be, and has been, applied at various levels of government and society is an exploding research field. The most basic premise for sustainability is that human development needs to support basic social, environmental, and economic services without damaging the continued viability of the systems (natural, built, and social) on which the services depend (ICLEI, 1993). One may take a larger view argue that poverty, obesity, unstable food prices, landfills, and SUVs are all symptoms of our collectively unstable, un-sustainable behavior. While sustainability is a subjective concept, it nonetheless implies an objective goal, which is to live without degrading natural systems' abilities to continue to support diverse life. This applies to the intricately linked issues of energy use, pollution, and food security, among the myriad of serious challenges we collectively face.

### *A Tragic Example*

An oil spill generated by the combination of failed gadgetry and shortsighted economics has recently caused the worst ecological disaster the US has ever seen, and will have economic and social impacts for years to come. Few can foresee the full degree of devastation, or the ripple effects it will have on other systems<sup>1</sup>. For many yet unmotivated to act, perhaps this disaster will bring sharply into focus the limits of

---

<sup>1</sup> An interesting social commentary on the ecological, social, and economic debates surrounding the spill can be found on [Wikipedia/deepwater\\_horizon\\_oil\\_spill](http://Wikipedia/deepwater_horizon_oil_spill).

technology to ‘save us’ from self-created catastrophes, and the impossibility of maintaining our current energy trajectory. Is the Deepwater Horizon spill the catalyst to launch concerted action toward federal level action on sustainability in the United States? Unfortunately, this doesn’t seem to be the case. Legislation to improve safety standards and reform policies related to offshore drilling have been met with rebukes for the impact that they might have on the currently weak economy (Doggett & Cowan, 2010), which highlights the short-sightedness of modern economic focus. For many, the acute need for and complexity of the inevitable global shift away from fossil fuels has become the rallying cause for action in sustainability planning at all levels of government (see Hopkins, 2008). As national and international cooperative action stalls, action from NGOs and local governments continues to mount. However, what role do local communities play in these global issues?

### *The Role of Communities*

While there may not be a single definition of sustainable communities, the Brundtland<sup>2</sup> definition of sustainability can be applied to the community level. According to community sustainability scholars in Canada, a sustainable community would optimize “economic opportunity and quality of life within the real ecological limits imposed by the environment” (CRC Research, 2009). Communities have begun to develop integrated goals and actions that focus on long-term ethics; these may include strategies for waste reduction, energy efficiency, support for alternative transportation, and local economic diversity.

The United Nations Summit in 1992 helped to launch a renewed focus on the vitally important role that communities play in global sustainability. Local Agenda 21 is a section of the Rio declaration, which “calls for the local action to achieve global objectives through broadly based community participation in sustainable development decision-making” (Rogers & Ryan, 282). According to the wording of the declaration itself:

Each local authority should enter into a dialogue with its citizens, local organizations and private enterprises and adopt a “local Agenda 21”. Through consultation and consensus-building, local authorities would learn from citizens and from local, civic, community, business and industrial organizations and acquire the information needed for formulating the best strategies. The process of consultation would increase household awareness of sustainable development issues. Local authority programs, policies, laws and regulations to achieve Agenda 21 objectives would be assessed and modified, based on local programs adopted.” – UN Agenda 21, Article 28, 1992.

Local Agenda 21 emphasizes that local governments are a key resource for sustainability; they develop policies and control many of the elements at issue, like land use, resource conservation, energy consumption, and regulations on manufacturing and waste (Glass, 2002). Equally important, local governments play a vital role in awareness and education, and in mobilizing the public towards more sustainable development (UN, 1992). So, even if Americans have so far failed to mobilize federal government action towards reducing fossil fuel consumption and climate change damage, many communities have begun acting at their own levels of jurisdiction.

The US Conference of Mayors Climate Protection Agreement, launched in 2005, commits local leaders to meet or exceed the Kyoto protocol targets for their own communities and to actively lobby states and the federal government to take stronger action on greenhouse gas emissions (The United States Conference of Mayors, 2008). Currently, 1026 mayors around the country have signed on to this agreement. However,

---

<sup>2</sup> Widely cited as the most common definition for sustainable development, the Brundtland report (World Commission on Environment and Development, 1987) stated “sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs”.

what will action on this agreement look like in these communities, and how involved would the local population be in its design and implementation? Communities in this context are geographic regions united by common local government and social norms. I will continue to use the term communities, because while none of my case studies exhibit a genuine shift in the power structure of the community from a governance<sup>3</sup> standpoint, each community is developing a slightly different take on the role of the city and citizens in initiating and implementing sustainability planning.

From the time of the first oil crisis in 1973, communities have made efforts to incorporate environmental issues into everyday decision-making, to reduce car traffic, practice energy conservation, and so on (Roseland, 2000). I argue that today, there are certain vital conditions in place, including a heightened general awareness of environmental and sustainability related issues, that mean current initiatives have the potential to make genuine, lasting impacts in their communities. Proactive approaches from both community groups and local governments to facilitate collective action are succeeding all over the world, but efforts need to be researched, and lessons need to be shared from these experiences.

With these challenges facing sustainability, and the important role of communities as a driver for collective action, I proposed to research methods by which collective action might be institutionalized and legitimated in cross-sectoral issues at the community level through integrated community sustainability planning initiatives.

## **1.2 Research objective and relevance**

In this analysis, I will frame the sustainability challenge as a collective action dilemma of the highest order. Currently, climate change impact on most US citizens remains very low, and the urgency seems far off in the future. Unlike during times of war, famine, or disease, there is no clear antagonist. There will never be a single cause of climate change or ecosystem collapse. Instead, and especially in the United States, high levels of gratuitous consumption, long-distance transport of major goods, and a degraded understanding of our reliance on 'nature' has created a frightening lack of resilience. This research is relevant because it advances the very new field of comprehensive sustainability planning at the local level through examples of how three communities have begun a process that all communities need to address. An example of the connection between global instability and local policy is in food security and sourcing.

### *Box 1.1 Research Relevance – An example*

The structure of the food supply represents a clear example of the relevance of community sustainability research, and the crucial role of local governments in the sustainability conversation. While, according to the mayor of Corvallis (interviewee, 8.5), city staff and councilors are currently ill-equipped to tackle food as a policy issue, the city relies on long-distance transport for 98% of their food supply (Corvallis Sustainability Coalition, Food Action Team, 2009). According to the UN Food and Agriculture Organization (FAO, 2010), food prices are likely to remain volatile in conjunction with the price of oil. Re-localized food production and processing facilities can enhance local food security and facilitate local economic development, but requires support from local policy, as well as business cooperation and innovation.

The objective of this research is twofold: to better understand the necessary background conditions for a community to launch a community sustainability planning initiative, to document the design by which that initiative takes root in a community. In doing so, I would like to add to the research being performed

---

<sup>3</sup> Governance is a term, beyond government, which implies a shift in power, generating 'social coordination' (Jessop, 2000, in Meadowcroft, 2007, 300) through dialogue and cooperative action between existing markets, social networks, and government hierarchies (Meadowcroft, 2007).

throughout Canada by the Centre for Urban Research and Education (CURE), and Community Research Connections (CRC) on sustainable community case studies.

The hope is for this research to be useful and relevant to academics researching the complexities of sustainability planning at the local level. Further, local governments in Oregon and around the US are actively seeking best practices in a new field; examples and case studies remain scarce, and the need for integrated planning solutions for sustainability is acute. By studying the actual process, or timeline, of a community's sustainability plan development, I hoped to gain insight into the roles of multiple categories of variables that are causally connected to emergence, and therefore add to the understanding about necessary conditions for integrated community sustainability plan development.

### **1.3 Research question**

The question that my work attempts to answer is, *under what conditions and through what design processes are communities in Oregon, USA initiating integrated community sustainability planning?*

### **1.4 Central Concepts**

The literature review and the subsequent conceptual framework will explain and pull together many of the concepts that I used in the development of this work. However, my research question introduces two concepts that are fundamental to this research, and so will be introduced immediately.

#### *Integrated Community Sustainability Planning*

An integrated community sustainability plan (ICSP) is an inclusive, unique strategy that addresses resilience, ecological principles, social issues, and economic stability as integral components of a whole system. It makes extensive use of community participation and attempts to address planning from the perspective of a future vision for the community through strategies to achieve those goals. It often encompasses a cooperatively developed vision, involving coalitions of businesses, community groups, and the local government all working together to develop and implement a comprehensive plan for the future. Communities throughout Canada are currently developing community sustainability plans, which were mandated by the federal government in order for municipalities to access specific funding (Ling et al, 2009). This incentive has led to significant opportunities and challenges for communities, as well as ample need for research in the area. Ann Dale, of Royal Roads University, and her colleagues have developed a template, which aims to help to overcome the primary four challenges to achieving sustainable communities (Ling et al, 2009). These challenges refer to the integration of policies into a general planning framework, redesigning governance around a sustainability ethic, determining the scale of community work and connectivity to larger systems, and extensive and timely community engagement with citizens. These scholars further claim that the four pre-requisites for initiation of an ICSP are: the will to do things differently, the knowledge and capacity to develop solutions, social capital, and agency. The authors are less explicit about how these variables interact, and what they look like in real communities. Several of these concepts will be identified and explored in this research.

Integration is a key tenet of the argument for sustainable community development. In his work, which aims to measure the degree that American cities are taking sustainability seriously, Portney (2005, 62) notes that “perhaps the key test of the seriousness of issues of sustainability is the kind of integrated vision the city’s sustainability plan carries, and whether the plan proposes to implement sustainability by incorporating activities and responsibilities of numerous government, nonprofit, and business organizations”. Isolated projects are beneficial; however, without a clear, integrated plan, gaps emerge between plans and action, between unconnected groups performing redundant work, and between those with information and those seeking it (Ling et al., 2009). The degree of impact of policies and actions improves dramatically as communication and coordination develops.

A sustainability plan itself does not necessarily have to include the community, nor does it have to remove the silo mentality of most government structures. However, the argument from most researchers on the topic, myself included, is that sustainability is a collective action dilemma, and to solve it requires the active participation of citizens and a re-conceptualization of business as usual. All sectors of the community, the government, civil society, and market structures, must be tapped, as sustainability is beyond the capacity of any single sector to implement (Dale, 2001). It is fundamental for all systems and activities to steer development in a collectively agreed-upon direction (Roseland, 2000). The difficulty in achieving a new structure to support sustainability at this level should not be understated. It is also true that many communities have made only superficial inroads towards an ICSP. Therefore, it can be assumed that certain crucial factors must be present for an ICSP to launch and to develop into something genuine and lasting.

### *Conditions and design processes*

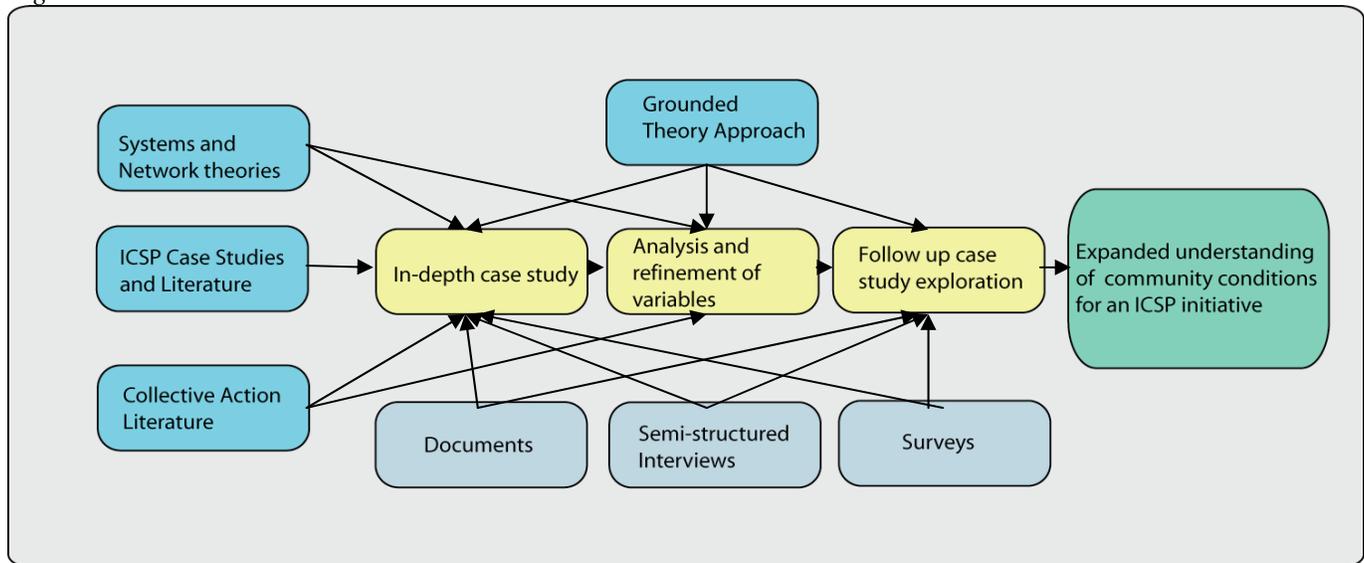
Because each community defines unique goals under the title of ‘sustainability’, my goal was to understand the conditions in those communities and the processes they have undertaken to initiate and create their sustainability plan. Conditions in this research refer to internal characteristics as well as to the outside forces that impact on the structure of the community to act in a concerted manner. From that perspective, I have investigated elements of social capital (which will be thoroughly defined and explored), the capacity of the local government to facilitate cooperation, as well as structural elements in several communities in order to better understand the conditions present that may impact the successful emergence of an ICSP. Some of the conditions that will be further elaborated through the literature review and the conceptual framework include civic engagement, government and institutional support, and the history of community participation in planning.

## **1.5 Research Framework**

Three case studies form the framework for the research study. The first community comprised the largest investment, which guided the establishment of relevant variables for study. In order to draw parallels in historical development and state-level infrastructure, I chose to narrow my case study selection to communities in Oregon, USA. Oregon is an appropriate region, because while often regarded as progressive (within the American context), there are large vested interests in resource extraction (i.e. fishing, mining, timber), as well as an economy very hard hit by the recent recession (Bureau of Labor statistics, 2010). Oregon communities have state level support that may have benefited development of parallel conditions; all communities are mandated to produce comprehensive plans, which require minimum levels of citizen participation, and address land use issues as part of local government jurisdiction (Oregon Department of Land Conservation and Development, 2010). The Oregon Sustainability Act was passed in 2001, which established goals for state government agencies relating to sustainability (Oregon Sustainability Board, 2009).

Because this concept and its implementation at the local level are very new, there are still few case studies from American communities on exactly what they are doing related to sustainability. Therefore, the research model follows that of grounded theory. One in-depth case study in Corvallis, Oregon gave rise to the establishment and validation of vital community conditions, which were then tested in two smaller communities, Ashland and Lincoln City, as shown in the yellow boxes in figure 1.3. By developing the in-depth case study as both a best-case example and a learning opportunity, I was able to better understand what communities in Oregon can do under both the umbrella of state and federal law, and to some extent, parallel historical and cultural contexts.

Figure 1.5: Research Framework



As shown in the blue boxes above, I approached the conceptual design from a grounded theory perspective, largely due to the relative infancy of the field under study. Grounded theory benefits exploratory research as it dictates the researcher enter into the research with an open mind, and few pre-conceived hypotheses. Instead, the research guides its own development organically, with constant reflection and reevaluation from the researcher. According to Verschuren & Dooreward (1999, 147), grounded theory is a “purely qualitative approach”, where the elements need to be compared, “both with each other and with the theoretical starting points”. This approach will be explored further in subsequent chapters and throughout the analysis. Systems theory, ICSP case studies and literature, and collective action literature completed the research fields I drew from in my work.

This exploration of community sustainability will begin with a critical literature review of previous work in this area and relevant theoretical background, followed by the explanation of the conceptual framework and the lens used in the research itself. The technical design for data gathering and analysis will then precede an in-depth analysis of the primary case study and the lessons learned through that experience. The initial case study and literature were used to establish three categories of activity: social capital, capacity, and design. The relative strength of multiple concepts within those categories in the following two, smaller case studies provided indications as to their community conditions to launch an ICSP initiative. Through comparisons of the results from the three communities, I will make several claims regarding the opportunities and challenges in the second and third cases from the relative strength of the three categories of independent variables.

*“... if you can't do it without fossil fuels, by definition, it ain't sustainable. And that includes most of what we do in North America these days” -Richard Heinberg, 2004.*

## 2 Review of Literature

The goal of this chapter is to introduce both the pertinent concepts surrounding this research and the methods by which other researchers have explored those concepts. I hope to introduce the reader to existing research on community sustainability planning, how it has been approached and researched, its fundamental roots, and the results and arguments that have arisen from that work. While research into sustainable community development is still very young, there are several avenues of established thought that parent this field. First, I will introduce the authors whose work has most guided the development of my own research. As I have approached from a grounded theory perspective, openness and reflection have been of primary importance in developing an understanding of the literature, which has continuously been gathered throughout the research phase and refined in conjunction with findings in the field.

### 2.1 Approaches in sustainable community research

My own research developed from the work of three primary authors in sustainable community research. Two of these scholars, Ann Dale and Mark Roseland, work primarily through case studies in Australia and Canada (see Roseland, 1998, 2005; Dale, 2001, 2005, 2008).

Mark Roseland straddles the theoretician/practitioner gap in his work, which I admire. His book *Toward Sustainable Communities* (2005) is an argument for community sustainability and its roots, as well as a reference guide for communities with case study examples of policies, strategies, and tools to support their endeavor. His other work (1998) investigates the role of participatory practices and their importance to new paradigms in governance.

Ann Dale looks at elements of social capital, agency, network formation, and sustainable community development in Canadian cases through CRC Research and Royal Roads University. It is her team that has developed the ICSP template and is actively gathering case study examples. Her work combines case study approaches with digital communication tools, as well as the Community Livability Survey (CRC Research, 2009), which draws from established measures of social capital to gauge its presence in communities around Canada.

The third author, Kent Portney (2005), has focused his work in the United States, and developed a measurement scale for comparing indicators in sustainability planning in large cities. His goal is to understand which communities are *Taking Sustainability Seriously* by defining what constitutes a sustainability initiative and understanding that strides cities in the States are making, based on the strength of their plans. In other research (2003), he addresses civic engagement and sustainability in cities in the US, and what role it plays in the development of sustainability planning.

#### *Introduction to the ICSP- a new planning paradigm*

What is an integrated community sustainability plan (ICSP) and what elements would an effective ICSP contain? Many authors (see Ling et al, 2009; Brugmann, 1996; Rob rt et al, 2002) highlight the critical importance of baseline principles, or a community vision, for sustainability as one component, which would impact day-to-day decision-making based on certain future ideals (see the Natural Step system conditions in 2.2). As Rob rt and his colleagues (2002, 212) artfully point out, “to have a clear view of the goal is a prerequisite for applying the term ‘strategy’”. Rob rt, as of the primary founders of the Natural Step initiative, developed five levels of a comprehensive planning initiative: ecological and social principles for the constitution of the system, principles for sustainability for the desired outcome, principles for the process, action and concrete measures to reach the outcome, and the use of strategic tools to monitor and audit the system (Rob rt et al, 2002, 198). ICSP case study examples can be found through the Association of Municipalities of Ontario (2010).

The development of an ICSP likely requires the presence of certain variables. In their analysis of factors that impact principles of sustainable development, Conroy & Berke, (2004) used regression modeling in forty-two communities around the US to investigate which variables impact support for sustainable development planning. They found three of statistical importance, which were: the presence of a state planning mandate, participation breadth, and percentage population change between 1980-1990. However, this study only addresses elements that were quantitatively measurable. Other authors have approached civic engagement (Portney, 2005), capacity and capacity-building (Burch, in press; Schensul, 2009; Middlemiss & Parrish, in press), social capital (Fukuyama, 2001; Dale, 2005 ; ) and networks (Newman & Dale, 2007) as being crucial variables.

## **2.2 Sustainability at the Community Level**

The community level is a crucial area for engaging people towards solutions of global sustainability, as the Rio summit highlighted. Multitudes of small groups, dedicated to local actions, are achieving greater success than global environmental legislation has in the past ten years (Hawken, 2007). The community is a crucial area for sustainability advocacy, since “the locality is the level of social organization where the consequences of environmental degradation are most keenly felt, and where successful intervention is most noticeable” (Bridger & Luloff, 1999, 380). Further, and as will be explained below, collective consciousness in the form of shifting norms of behavior can be most influenced through friends and neighbors and face-to-face communication. Local government is the level closest to the people, and therefore the most able to be directly influenced and affect change (Agyeman & Angus, 2003).

Both theorists and practitioners have attempted to define sustainable communities, or to at least provide an image of the characteristics one might possess. The Natural Step framework has defined a sustainable community as one that possesses certain ‘system conditions’ (James & Lahti, 2004, 6). These are:

1. In a sustainable society, nature is not subject to systematically increasing concentrations of substances extracted from the Earth’s crust.
2. In a sustainable society, nature is not subject to systematically increasing concentrations of substances produced by society.
3. In a sustainable society, nature is not subject to systematically increasing degradation by physical means.
4. In a sustainable society, human needs are met worldwide. <sup>4</sup>

If, for a community to achieve sustainability, these conditions are to be met, what types of communities are taking the first steps, and what does that transition look like? Incorporating principles of ‘sustainability’ into community goals does not necessarily improve sustainability planning (Conroy & Berke, 2004), but must be reinforced through innovative policy-making, commitment, and a, extensively supported vision. In *Taking Sustainable Cities Seriously* (2003), Portney looks at the actions of eight cities in the US who are making genuine strides towards sustainability through innovative programs that partner the city, citizens, and the local regional governments. Jeb Brugmann has long been an outspoken voice in academia on local sustainability, and according to Portney (2003, 62-63), “Brugmann argues that sustainability plans that lack truly coordinated visions are doomed to be able to perform only public education functions... if the goal of a city’s sustainability initiative is to actually improve the biophysical environment... achieving a high degree of functional integration among local organizations and

---

<sup>4</sup> These system conditions closely resemble Herman Daly’s work in systems thinking and steady state economics. The two authors have published work together, confirming these significant overlaps (Robért et al., 1997).

institutions is necessary”. Achieving a system’s perspective<sup>5</sup> in local planning would serve to de-compartmentalize strategies to take a broader, more holistic perspective in local government. Dale (2001; Newman & Dale, 2008) conceives of current governance as comprised of ‘solitudes, silos, and stovepipes’, where the socio-ecological system is compartmentalized, and isolated into the very reactive nature of government. Thereby, the status quo is maintained through the overwhelming level of inertia present in the systems and the lack of integrated strategies for communication or cooperation. However, is the impetus for change solely on local government, and if so, why is there such an emphasis on public participation in sustainable community literature?

In their investigation of civic environmentalism and sustainable communities, Agyeman & Angus (2003, 347) list several characteristics of a sustainable community. These are characterized under the headings: “protect and enhance the environment”, “meet social needs”, and “promote economic success”. This categorization closely resembles the triple bottom line model. However, when and at what points does one’s importance supercede another’s? The authors emphasize ‘broad focus civic environmentalism, which “stresses the interdependency of contemporary environmental, social, and economic issues that are the focus of sustainable communities”. They call for a renewal of civic engagement and governance, thus reinforcing existing research that claims early and extensive community dialogue about important issues improves support for the resulting policy.

#### *Governance and Citizen Power*

“... the overall reduction of our global ecological footprint requires change in daily behaviors on a mass level. To get the masses to move on this issue requires that concepts of sustainability be brought to them in a way that makes sustainable living relevant to them, their families, and their communities” (Callaghan & Colton, 2008, 932).

According to Dale & Newman (2008), the issues surrounding sustainable development implicate multiple scales of action, renewal of governance, and the active involvement of diverse social actors. In their research on integrated community sustainability plans, Dale and her colleagues make claims regarding the obviousness of the need for much greater community participation in decision-making for sustainability (Dale, 2005; Ling et al, 2009). Further, some see participation is a primary component of sustainability itself (see Portney, 2003). However, where does this connection come from, and is there evidence that greater participation is an integral component of successful ICSP initiatives? Can the sustainability agenda be a vehicle for broader social change, or does citizen participation simply complicate and further politicize an already difficult issue?

Between the choice of expert-driven and citizen-involved decision-making, the argument for participation may boil down to political will. Specifically, some claim that political will and accountability are the fundamental requirement needed to develop an ICSP initiative (Ling et al., 2009) Political will in a democracy comes from educated and active citizens. If solving pollution issues, urban sprawl, and resource degradation were simply a matter of expert decision-making, than why hasn’t it already been taken care of? According to communitarian thought, the answer is political willpower, which is stimulated by uniting community values and raising civil society activity (Portney, 2003, 128). The communitarian argument highlights that public values currently heavily favor ‘rampant individualism’, and that mobilizing the community is a vital step towards creating the values needed to move past the ‘tragedy of

---

<sup>5</sup> Systems thinking stems from physics, chemistry, and the environmental sciences. Briefly, it encompasses the understanding that socio-ecological systems are comprised of interconnected and interdependent elements, and shifts in one part affects others in multiple, and often unpredictable ways. It is often used as a counter-argument to reductionism in science and government, which breaks up a complex system to address its component parts individually (de Vries, 2008; Wikipedia/systems theory).

the commons<sup>6</sup> and the ‘NIMBY effect’<sup>7</sup>, which are two of the three “deadly sins” that impede progress towards sustainability (Portney, 2005).

To what degree does citizen participation in local government create citizen power in local decision-making, and to what degree is it merely ‘tokenism’ to achieve a political goal? Arnstein’s (1969) ‘ladder of participation’, which she created in her work on urban renewal committees, attempts to create a measurement scale to this effect, highlighting the greater success of initiatives in communities where power was genuinely shared.

#### *Box 2.2 Arnstein’s ladder of Participation*

*“participation without redistribution of power is an empty and frustrating process for the powerless” (Arnstein, 1969, 2)*

Arnstein’s ladder is an often-used tool to gauge the degree of citizen power in interactions with local government. From citizen control, where “have-not citizens obtain the majority of decision-making seats”, to manipulation, which “enables power holders to ‘educate’ or ‘cure’ the participants” (Arnstein, 1969, 3, 2), the ladder elevates genuine citizen power as fundamental to successful social policy. The eight ‘rungs’ of the ladder move from “non-participation”, to “tokenism”, up to “citizen power”, by addressing different types of decision-making structures, and the roles and support given to citizen participants.

In his exploration of sustainable community as the integration of the three imperatives (social, ecological, and economic), Roseland (2000) examines several types of tools and instruments that may be used to facilitate the development and implementation of an ICSP. He argues that sustainability is especially difficult because while “the principle of subsidiarity maintains that policy-making should occur at the lowest or most local level possible while maintaining effectiveness” (Roseland, 2000, 117), nevertheless many issues at stake are beyond the jurisdiction of one locality, or else local decision-making is constrained by existing state or even federal policy. Therefore, a supportive government context is a necessary component of the potential for a successful initiative.

#### *Initiatives, Institutionalization, and Sustained Collective Action*

Whether or not it is made explicit by many authors, it is clear local sustainability represents a collective action dilemma. The social imperative and the environmental imperative in sustainable communities are inter-dependant, as socially healthy, engaged communities are needed to protect the environment, which is a public good (Shutkin, 2000; Agyeman & Angus, 2003). Collective action implies a situation “in which many diverse and distributed actors-business, civil society, and the government- seek a collective outcome...through coordinating individual organizational actions and formulating a joint response for allocating a collective good” (Gray, 2008, 3). There is also a simpler definition, which simply states that collective action is “joint activities by a wide group of actors on the basis of mutual interest” (Wijen and Ansari, 2007, 1079). In this case, the improvement in community livability and local ecological and economic resiliency is the mutual interest that we are assumed to share. Collective goods may be products, services, or causes, which create either externalities or benefits from individual action that are then born by others in society (Gray et al, 2008). The complex local agro-ecosystem of a community is thus a collective

---

<sup>6</sup> Briefly, the *Tragedy of the Commons* (see Hardin, 1969) demonstrates individual incentive for consumption of common environmental goods will never align with the societal incentive to conserve those goods. The only solution is “mutual coercion, mutually agreed upon”.

<sup>7</sup> NIMBY means ‘Not In My Back Yard’, which refers to the conflict between the understood need for social infrastructure like waste and water treatment and prisons, and individual opposition to living near those facilities (see Portney, 2005, 139).

good, which “creates interdependencies that can only be adequately governed through concerted collective action” (Gray et al, 2008, 3).

The complexity inherent with common goods is that people can reap benefits of them (clean air and water) while have little personal incentive to protect them, as they have no ‘owner’. Modern economic theory celebrates ‘rational man’, who would always and only make decisions based on personal self-interest and complete knowledge of his options (see Ostrom, 1998). Therefore, “social dilemmas occur whenever individuals in interdependent situations face choices in which the maximization of short-term self-interest yields outcomes leaving all participants worse off” (Ostrom, 1998, 1). This is the fundamental breakdown of the tragedy of the commons, which was previously introduced. However, research has shown that individual self-interest is not the only (and sometimes, not even the primary) basis from which people make decisions. Instead, Ostrom (1998) argues for the concept of bounded rationality, where communication, which requires trust based on reputation and commitment, as well as habit, form the basis for much of our daily lives. Therefore, policies that support the assumption of cooperation and a participatory design of institutions have higher levels of success than those that assume rational choice guides our lives.

Mancur Olsen (1965) was one of the first to discuss collective action concepts, and pointed out that organizations have to develop a common purpose in order to further their collective interests. Communities can be thought of as organizations in some sense, because they involve diverse actions with diverse interests, contained within one overarching legal and social framework. Therefore, in sustainable community initiatives, the agreement on a problem can be the first step to determining the collective interest in that problem, and then determining methods and goals to solve it. However, in situations where uncertainty is inevitable, and the outcome (what constitutes sustainability) is unclear, a Pareto optimal outcome<sup>8</sup> only becomes possible when the target goal for every stakeholder is both known and open to change through discussion (Ostrom, 1998). Consensus in the form of agreement on the existence of a problem with the current level of human destruction of resources, pollution, and degraded relationships is the initial step to cooperation on a strategy for change (Gray et al, 2008).

A success ICSP initiative would mark the creation of a new institution, or regime (see Wijen & Ansari, 2007). According to Gray et al (2008, 2) “Institutionalization refers to the process of creation, diffusion, and perpetuation of enduring social arrangements that jointly regulate behavior over time”. Regimes are “social institutions consisting of agreed-on principles, norms, rules, and decision-making procedures, and programs, around which actors’ experiences converge in specific issue areas within the world system (Young, 1989, in Wijen & Ansari, 2007, 1083). Regime theory usually is used to focus on sovereign states in international cooperation, but can be re-scaled to look at sovereign individuals in community cooperation. In fact, the community level can be easier to induce cooperation given the pre-existence of common norms, history, and the potential acquaintance of the actors involved. Regime theory is attractive for community level purposes because instead of focusing on the exploitation of power relations, theorists can focus on the fact that actors will likely act in regard the norms and values of their society, thus creating common ground and cooperative initiatives based on shared values (Wijen and Ansari, 2007, 1085). Thus, regimes exist where boundedly rational actors coalesce around shared values and norms. Therefore, what have theorists discussed in relation to norms and values in community, and their role in initiating sustainable community development?

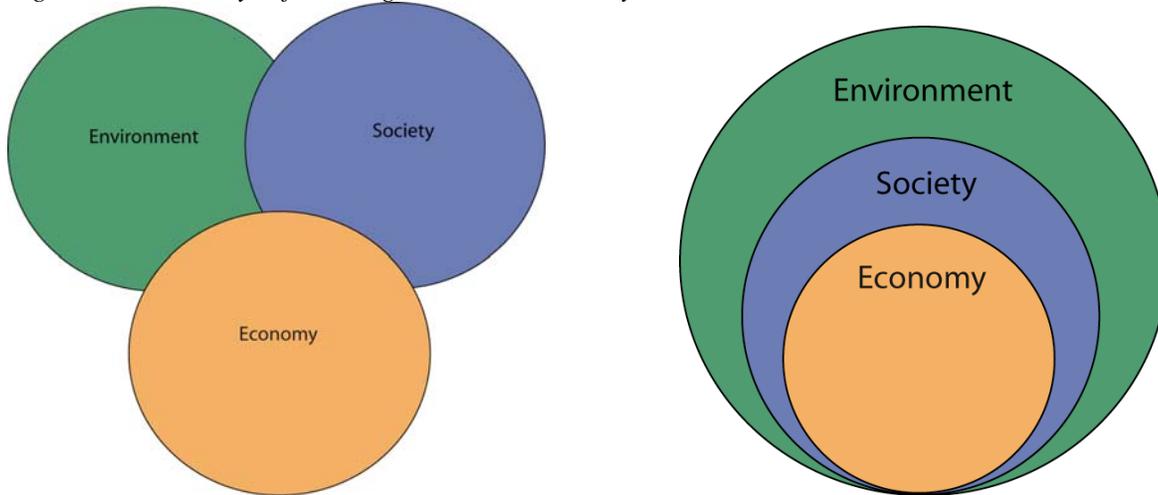
---

<sup>8</sup> Pareto optimal outcomes represent the best possible outcome for all individuals involved in a given situation. It is an element of game theory, showing that when participants can no longer improve their situation, and optimum has been reached.

## *Restructuring Planning Paradigms*

There are two dominant ways of thinking about embedding environment into conceptions of modern society (figure 2.2). The figure on the left is the common “triple-bottom line” model, which will come into play throughout this research. The figure on the right is more of a ‘strong-sustainability’ model, which emphasizes our utter reliance on natural systems for human systems to function (see 1.1).

*Figure 2.2: Two ways of thinking about sustainability*



The illustration above highlights the fundamental difference between worldviews, which are reflected in the tools that are used to develop ICSP initiatives. Arguments against the TBL framework point out that the model does not provide any indication of the three areas’ relative importance to one another (interviewee, 2.24), nor does it give provide a structure for determining priority setting in decision-making. Arguments against the strong sustainability model focus on the assertion that environmental protection is only possible once there is a strong economy, and that environmental-mindedness is a luxury of the wealthy (Roseland, 2000).

## **2.3 Concepts in sustainable community literature**

### ***2.3.1 Engaging the Community- Social capital and the importance of networks***

Some scholars in economics have sought to address ‘externalities’ to the economic system by incorporating elements of society and the natural world into capital value structures as a way of ensuring they are brought into economic equations (see Sen; Fukuyama; Wallerstein, 1974). The most frequently cited forms of capital are natural, social, human, and economic. Dale (2005) emphasizes that reconciling these capitals with one another is a prerequisite for any sort of sustainable development. Each form of capital is created through time and effort in transformation and exchange (Ostrom, 1993, in Roseland, 2000). Therefore, each capital can be said to have a set of stocks and flows, from which value is created and moved. Natural capital seems easy enough to distinguish in that it refers to those elements of the natural world that is useful to human society. But what is social capital, and what role does it play in sustainable community development?

While many authors have attempted to define social capital (Bourdieu, 1980; Coleman, 1988), Robert Putnam’s (1993) definition is both widely cited, and his interests in American community parallel my own. To him “the core idea of social capital theory is that social networks have value.... Social contacts affect the productivity of individuals and groups” (Putnam, 2000, 19). By loosely defining social capital as the “features of social organization, such as networks, norms, and trust that facilitate coordination and cooperation for mutual benefit” (Putnam 1993, 37), Putnam allows for the diversity of connections in

different societies as critical to consider, measure, and validate. Social capital, then, is about relationships (Dale, 2005), and also about “the ability of actors to secure benefits by virtue of membership” (Portes, 1998). It can already be noted that one dilemma that arises in defining social capital is that some authors implicate social capital as the ability to secure resources, and some implicate those resources themselves as being the outcome. However, either way, the presence of these types of resources is said to be indicative of social capital, and the argument is that these resources improves social capital, which supports development of further resources.

According to Dale (2005, 18), “social capital is the key linkage to mobilizing sustainable community development”, but other factors are also vital. These include government alignment, resource availability, and individual effort and leadership (Dale & Newman, 2008). Other vital elements highlighted through a Toronto case study were the strategic support of local government, and adequate funding for the venture to support volunteers and prevent burnout (Newman et al, 2008). Democracy is assumed to be one of the only political structures to support such efforts, and social capital is necessary for democracy to work. “An abundant stock of social capital is presumably what produces a dense civil society, which in turn has been almost universally seen as a necessary condition for modern liberal democracy” (Fukuyama 2001, 11).

If these elements are important to social capital, how have researchers measured social capital? The most general tool has been created to measure social capital is the Onyx & Bullen (2000) scale, which narrowed down eight factors that impact social capital, and assigned questions to measure each factor. This scale, which addresses elements like trust and safety, neighborhood connections, and tolerance of diversity, has been extensively drawn upon for the Community Livability Survey, developed by Dale and her colleagues (CRC, 2009) to investigate social capital and sustainable community planning in Canada.

#### *Cooperation – Networks and the Prisoners Dilemma*

In order to understand social capital, networks and network theory need to be mentioned, as measuring networks is a primary proxy for social capital, and the bridging ties that are so important to successful collective action endeavors. Networks are most often informal or formal groups of people who know each through face-to-face contact (Roseland, 2000). Formal and informal membership in groups is often seen as an appropriate proxy measurement for the type of social capital that facilitates collective action. As members in a network are bound by the ties between them, the characterization of that tie determines the degree of connection and the obligations that result from that connection (Newman & Dale, 2008). For the purpose of collective action, bridging, or weak, ties “facilitate access to resources and opportunities that exist in one network to a member of another” (Newman & Dale, 2008). These types of ties are characterized by participation in a group, like a church or club. Bonding ties, which are stronger, may characterize family and close friends (see Granovetter, 1974). The two different types of ties can be useful for achieving different goals. “Acquaintances, as compared to close friends, are more prone to move in different circles than oneself.” (Granovetter, 1974, 52). The people whom you know best will be able to provide with the least new information, and further, a close group of ties may create exclusionary perspectives from ‘outsiders’. Bonding ties create a higher level of mutual obligation (Fukuyama, 2001), but too few bridging ties to balance out the group may negatively impact the groups’ agency to achieve their goals (Newman & Dale, 2007). Weak, or bridging, ties support collective action by concentrating social capital, thus creating collective agency (Newman & Dale, 2007). Sustainable community development initiatives require large, diverse networks to support them for many reasons; volunteers risk burnout without a flow of new ideas and energy, information needs to be disseminated as widely as possible, and the wider the net of agents involved in the initiative, the greater the skill sets and resources available to the initiative. “A more diverse group will have the resources needed to address the complex nature of ecological and social problems without exhausting itself” (Newman & Dale, 2007, 80).

Some authors have argued that social capital can reduce the cost of social transactions, thus facilitating collective action (Rydin & Holman, 2004, in Dale & Newman, 2008). In a research study on social capital and collective action, Newman et al (2008) showed that the network made positive use of existing social capital, and increased the available social capital, as measured through the inclusion of new bonding and bridging ties in the community. These factors contributed to the success of the initiative. Using an interview structure with several major participants from a pedestrian street initiative in Toronto, the authors concluded that “local network formation is sustained by positive critical feedback from the community...and that a sustained programme campaign led by critical nodes, connectors, or mavens is critical to the long-term viability of the network” (Newman et al, 2008, 138). Therefore, elements of the community and certain pre-existing conditions must be present for a network to achieve the desired effect.

In network theory, social networks are imagined as ‘nodes’ or ‘vertices’, and ‘edges’. Nodes are the actors themselves, and the edges are the connections between those actors. Scale-free networks are those which have a dendritic structure, that is, they look like a snowflake with central nodes and star patterns of connections around them. When those nodes are linked together as the network grows, a pattern forms. “Scale free networks are usually very heterogeneous, dominated by a few highly connected nodes” (de Vries, 2008, ch.11, 13). They are, on the one hand, robust against shocks, but on the other hand, vulnerable to the loss of one of the central nodes (de Vries, 2008). Network theory can be used to better understand the strength, degree of connectivity, and centrality of certain actors within a sustainability initiative. Further, information is shown to spread rapidly through the highly connected nodes out to their peripheral nodes, thus supporting the capacity of the network.

The prisoner’s dilemma is one of the most common analogies for the challenges of collective action. Simply explained, the prisoner’s dilemma is a heuristic used to think about situations where cooperation achieves superior outcomes, but where individuals are instead more tempted to not cooperate<sup>9</sup>. However, collective action theorists have shown that certain conditions dramatically improve the likelihood of cooperation. Communication between actors increases cooperation (Ostrom, 1998), and “exchanging mutual commitment, increasing trust, creating and reinforcing norms, and developing a group identity appear to be the most important processes that make communication efficacious” (Ostrom, 1998, 7).

### ***2.3.2 Capacity and local government***

Local government is a key player in initiatives for sustainability (Fleeger & Becker, 2008; Brugmann, 1996; Conroy & Berke, 2004). However, if local government is to successfully implement important changes for sustainability, then partnering with local groups is critical. While Conroy & Berke (2004) argue convincingly for the improved outcomes from participatory processes, they also believe that “a collaborative approach is fundamental to the sustainability paradigm and is linked with promoting a sense of community, equity, and empowerment”. Capacity, while a vague term in itself, implies an important relationship between local government and citizens, fundamental to sustainability.

As previously mentioned, Dale (2005) argues that knowledge and the capacity for problem solving are vital pre-conditions for ICSP development. While scholars have used capacity under many contexts to mean different things, I have drawn from the research that generally approaches capacity as the power to act (Dale, 2001) through elements that can be deliberately nurtured. Middlemiss & Parrish (in press)

---

<sup>9</sup> The typical prisoner’s dilemma game is told as: two suspects are separated and questioned by the police. If one turns state’s evidence, that one is freed and the other serves a full sentence. If they both turn on each other, they both serve time. If they both remain silent, each receives a light sentence. While the best outcome for both is to cooperate (interdependency), the assumption is that each prisoner will make a self-interested choice to rat to the police (independency). The parallels with the “tragedy of the commons” between individual and collective benefits are clear.

clarify between several types of capacity to conceptualize the factors that impact the ability to act. These are cultural, organizational, infrastructural, and personal capacity. In their framework, the combination of these four capacities comprises the responsibility for a communities' ecological footprint, and therefore, each needs to be approached for its role in generating change. The collaborative capacity between community groups and the local government must be generated, partially through the networks of actors, and partly through positive history and goodwill. Each of these four capacities will impact the success of an initiative, and therefore form the conditions existing in the community.

Proponents of citizen participation in sustainability planning need to take into account the community's relationship with their local government in terms of public process and the government's receptivity to citizen involvement. Assumptions that are inherent in many arguments for citizen participation assume that community groups have government policy support as a goal, and that as groups, they have the capacity to instigate significant changes in their community (Middlemiss & Parrish, 2009). Grassroots movements must have receptive local governments and institutions in order for ICSP collaborative capacity to exist, which is needed to garner financial support. The capacity to attract sources of economic capital has been argued to be crucial for sustained success of a sustainability network (Newman et al, 2008).

### ***2.3.3 Tools and frameworks***

As sustainability represents an ideal goal, communities must determine the specific strategies based on their interpretation of that goal. Researchers and municipal representatives have emphasized the need for long-term planning, public engagement, and balancing economic, social, and ecological imperatives (Brugmann, 1996). However, how does one do that, and what support is available?

Planning frameworks are common decision-making tools, which build a grid of goals, measurement indicators, timeframes and relevant actors (Robért et al, 2002; Brugmann, 1996). By integrating sustainability into planning frameworks, the outcome imparts greater systems thinking into community planning and day-to-day decision-making. This type of long term planning requires an increased cooperation between agencies in government, the integration of policy strategies, and the alignment of incentive program towards a more focused future (Ling et al, 2009). Frameworks and strategic tools are assumed to improve outcomes by focusing attention, and by providing guidelines for important steps and strategies for achieving them. According to Roseland (2000), economic instruments such as taxes, subsidies, and permits have been applied and supported through the environmental economics perspective. However, these are not the only tools available, and the acceptability, previous experience with, and preferred nature of certain tools impacts the outcome of decision-making. He categorizes the different policy instruments available under regulations, voluntary instruments, expenditure, and financial incentives (Roseland, 2000, 116). Moving beyond financial incentives in order to impact public behavior requires education, deliberation, and cooperation between stakeholders.

Local sustainable development initiatives necessitate innovative use of tools, and education on their use with the public to achieve the goals being set. "The application of these ambitious criteria requires distinct tools and methods for assessment and monitoring as well as a planning process the helps to reconcile diverse and often competing local stakeholder interests" (Brugmann, 1996, 365). Brugmann then goes on to highlight establishment of a common vision, assessing existing local conditions, negotiating shared strategies, and establishing a framework as common aims. Strategic tools include any methods, organizational strategies, or participatory exercises, with are aimed at improving communication and creating a stronger, more integrated outcome. One of the most widely known environmental impact tool is the ISO 14001 series, which describes a step-by-step approach to integrating environmental standards into decision-making (see box 2.6).

### *Box 2.3 - ISO 14001*

ISO- The International Organization for Standardization – is an NGO that develops international standards for management, design, manufacturing, and other elements related to international trade. These standards, which can be third party certified, are meant to support equality of standards across national borders. Their 14000 series is designed to help organizations implement, maintain, and improve environmental management systems based on performance metrics and prescriptions of behavior (see iso.org).

Frameworks can be thought of as a specific type of strategic tool because they are presented as a series of steps to be followed. Tools are often more isolated in that they are specific strategies to use at a particular decision-making moment. In a review of applied frameworks for strategic sustainable development Robért et al (2002) conclude that most, if not all, tools showcase different starting points with similar final goals, and include two primary elements. Most highlight the need for attention to the overall system (the ecosphere, or a systems viewpoint), and they also all determine the need to develop principles for sustainability. Some examples of frameworks include The Natural Step, Transition Towns (England), and ICLEI USA. These frameworks will be introduced in chapter 5. While communities are making use of these tools, there is less research on the impact these tools have had on community sustainability initiatives, and the role they have played in the initiatives' emergence and development.

#### **2.4 The need for further research**

The available literature explains quite a bit about collective action, and strategies that can be taken to move towards sustainability. However, significant knowledge gaps remain in terms of what communities actually are doing, with what strategies, and to what ends. Further, the majority of case study investigations in North America focus on large cities, and there is very little empirical data regarding the community conditions and strategies that smaller communities use in developing their own sustainability initiatives.

## 3 Conceptual Framework

### 3.1 Research development

The main objective of my research was to better understand the essential community and contextual factors that enable communities in the US to launch an ICSP initiative. Through improved understanding, I hoped to contribute to practical literature on ICSP initiatives as a new form of collective action, as well as the theoretical literature on the necessary components for communities to address when taking on comprehensive sustainability planning. The goal of this conceptual framework is to establish and defend the concepts and variables that are essential to consider in order to address my research question. The preceding literature review provided validation for many of these concepts, and the research of Ann Dale and her colleagues will guide the development of the variables used to address my own research question.

I am interested in the process of embedding principles of sustainable development into urban planning through community participation. Further, I wanted to know what types of communities have been able to launch this type of project, and which community strengths they draw from. Specifically, the research question addresses the emergence and development of collective sustainability action initiatives as determined by the initial community context, as well as the learning, adaptation, and evolution through the initial stages of the process. Further, for an ICSP to be of value, it must be institutionalized into the day-to-day of local decision-making. The result of an ICSP initiative should be a new institutional structure, one that integrates sustainable development principles, and which values continued community participation in decision-making and implementation.

In grounded theory approach, as presented in Corbin & Strauss (1990, 7), research progresses when “incidents, events, and happenings are taken as, or analyzed as, potential indicators of phenomena, which are thereby given conceptual labels”. Following that, “concepts that pertain to the same phenomenon may be grouped to form categories”. As this research is qualitative in nature, the explanatory variables form my categories for analysis, and the concepts within them are the conceptual labels of the perceived phenomena. The phenomena resulted from background research and confirmed through interviews, surveys and observations.

My understanding of the primary elements of this study can be reduced to a simple analogy. A community has gotten the ball rolling towards a goal of a functioning ICSP. Therefore, several elements must be present. There has to be a ball, which here is the community itself, held together by social capital and a web of network ties. There is a track, which is the institutional and collaborative capacity of the local government to facilitate the movement. Finally, there must be movement, which is the process of designing the plan. However, high levels of friction (barriers to change, inertia), mean that strong leadership and timing are also important factors. Even if “the success of human endeavors is often dependent upon the right place, space, and time (Dale & Newman, 2008, 12), nevertheless through understanding of the vital conditions, perhaps we may better influence them to improve our chances of achieving more sustainable communities.

This research validates itself through one primary assumption, which is that if a community develops and implements a true ICSP, than improvements to the biophysical and social environments will emerge. Therefore, the use of several dependent variables will help to test for the presence of an ICSP in my case study communities.

### **3.2 Dependent Variables under investigation**

Where should one look for evidence of integrated community sustainability plan? What elements must be there to claim that a new institution for sustainability is being created? These elements, the dependent variables in this research, are what the conditions and processes in the community should influence. The selected variables below represent my interpretation of the literature on sustainable community development, and further evolved through contact with the communities themselves. By the fact that literature on integrated planning for sustainability highlights these factors as being vital to the success of an initiative, I will also gauge whether an ICSP is present based on the strength of these variables.

The elements of the dependent variables are to some degree, able to be checked off as either present or not present. However, upon further investigation, it may arise that there is variability within resource commitment, for example. Timing, source, and conditions of the resources are potentially important as independent variables in their own right, but for the purpose of this study, the presence of committed resources will suffice to qualify that variable. Further, because these variables represent real people and events, influence cannot be isolated in an experimental setting to claim that one dependent variable will only be influenced by one or two explanatory variables. Instead, I argue that these six elements of an ICSP initiative would be influenced by the virtually all the conditions under investigation. Further, the ICSP initiative encompasses more than just the plan itself, but its boundaries must also include the organizations tasked with its implementation.

#### ***Principles for sustainability***

Dale (2001) frequently cites the research recognition that failures in policy can be traced back to a lack of central, widely accepted principles, ideas and methods. Therefore, as a primary component of an ICSP, a community vision and principles of sustainability must form “a new planning imperative organized around a sustainability ethic as its guiding principle” (Ling et al, 2009, 230), from which decisions are made. Conroy & Berke (2004) use integration of the concept of sustainable development as an explanatory variable in their analysis of sustainable development plans, expecting greater integration to improve the policies that arise from the plan.

#### ***Commitment language***

What commitments has the city or ICSP initiating group made to implement the plan, once it has been developed? The ICSP template argues that an essential part of the ICSP process is making the plan legally enforceable (Ling et al, 2009, 239). Failing this level of commitment, “the content of the plan will be compromised by day-to-day economic imperatives”. The goal of a successful ICSP is the creation of a new baseline from which community actions and local government are guided. The degree to which this element is present in the language of local government, as well as the ICSP itself, determines the long-term viability of the plan. However, some governments may balk at writing in commitment language, but may have every intention of following through with the plan. Commitment, then, should be measured through personal conversation as well as through investigation of documents. Specifically, the ICSP template (2009) specifies that commitment is determined through defining the following: the necessary resources, from where those resources will be gathered, the time period and scale of plan, and what authority structures need to be utilized. If these structures are identified within the plan, than they will be more likely to be tackled.

#### ***Sustained Participation***

If there is indeed a new institution for sustainability, than participation must be formalized and sustained. Continuous local community involvement is needed to sustain the local networks that were both tapped and created through the emergence of the initiative (Newman et al, 2008). As partners in both the design and implementation of an ICSP, the community needs to be motivated to stay involved with the process

for the long term, which leads to both improved support and efficiency in implementation (Ling et al, 2009). Volunteer participation serves another, more practical, purpose. Local governments likely do not have inexhaustible resources to address community sustainability initiatives, and community volunteers, if they can be counted on, ease the burden upon scarce financial resources. It is argued that broad representation is more important than absolute numbers in community participation, which increases the perspectives and expertise to be drawn from (Conroy & Berke, 2004). However, on the other side, absolute numbers determine the extent to which the plan can be executed in terms of people-power. Therefore, both of these elements are important to consider.

### ***Measurement and feedback processes***

As both a criteria for performing a case study and an element of the ICSP template (2009), measurement and feedback is considered vital to monitor success, and to evaluate needed modifications when progress is stalled. Feedback allows for continuous updating on community conditions, and reinforces the permanence of the plan within the community. Also, by creating measurement strategies, baseline data is gathered, which helps to educate the community and understand the most critical needs. Continuous feedback is also needed to ensure stability, consistency, and accountability in implementation (Brugmann, 1996).

### ***Resource Commitment***

If an ICSP initiative is genuine, than funding represents one measure of staying power. Research has shown that economic capital is vital to the long-term achievement of a sustainability network (Newman et al, 2008). However, something has to spur that economic capital. It doesn't just appear. Therefore, social capital and capacity are a determinant of the commitment of funds. Further, other authors argue that resources are not the determining factor in the success or failure of an ICSP initiative, but are "generally useful in affecting the ability of communities to innovate, and to formulate long-range plans that focus on creating physically and socially healthy places to live (Conroy & Burke, 2004, 1386). Further, by investing funds in innovative forms of local decision-making, different sectors of society (corporations, higher levels of government, NGOs, etc.) validate the importance of local decision-making for sustainability, and invest in the outcome of the planning efforts.

### ***Core of Responsibility***

Having a center of responsibility is one measurement that Roseland (2000) uses to determine whether or not cities are 'taking sustainability seriously'. "A city that purports to operate a sustainability initiative, but where the responsibility for making progress is undefined or dispersed around the city, usually means that sustainability will be subordinated to some other administrative goals" (Roseland, 2000, 68). It is not to say that one single institution has to single-handedly implement the entire plan, but that someone must have final responsibility to ensure that other sectors are fulfilling their tasks, and to act as a coordinating body. This variable determines accountability and for implementation, and for coordination of the plan itself.

The conditions and community factors that may be causally linked to the development of an ICSP in that community are called the independent variables. It is the understanding and development of these categories and concepts that form the meat of this research and its relevance to the academic and practitioner community.

## **3.3 Independent Variables**

The development of the following variables for investigation stemmed from an understanding of the existing literature on sustainable community initiatives and collective action, and from the launching point of the above-mentioned analogy of 'getting a ball rolling'. While my organization of the concepts

and variables is my own, each of those concepts is founded from other's work. I established the following independent, or explanatory, variables to guide my investigation, aiming to discover the extent each are of decisive impact in the emergence and development of an ICSP initiative. The complete set of independent variables and how they are measured is presented visually in Figure 5.5.

### ***Category 1: Social Capital***

“Suffice it to say that the eventual agenda of any sustainability plan is in large part a product of the values and agendas that participants bring to the planning process” (Portney, 2003, 39).

Certain community conditions that should impact the development of an ICSP fall under the conceptual frame of social capital. Many authors who have worked on collective action cite social capital as a determining factor in successful collective action (Ostrom, 1998; Putnam, 2000). Through reflections on other authors, research on community sustainability initiatives, and the work of Dale, I determined that social capital is likely a vital pre-condition for the emergence of an ICSP. However, and as one example of difficulty, is civic engagement a pre-requisite for creating sustainable communities, or is it a beneficial outcome, one of the goals of building sustainability? Because there are positive feedback loops, where the use of social capital facilitates the creation of improved social capital (see Ostrom, 1993, in Roseland, 2000), at some point, means and ends merge. However, for measurement's sake, my perspective argues that it is imperative for a certain degree of community connectivity to exist in order for a successful sustainability initiative to be launched. This should hold true for any initiative; whether run through the local government or a civil society organization (CSO). Local governments handle society's money, and cannot take on initiatives that may cost taxpayer money without the expressed support of the community (theoretically, anyway). The choice of the following specific elements of social capital can be traced back to the primary literature introduced in the preceding chapter. By isolating these concepts, I in no way want to give the impression that they are isolated. Each of these impacts the others, but all of them together form a measurement for social capital. The conceptual labeling is merely that, an aid to discovering tools for measurement.

While social capital is widely cited as critical to the success of collective action, it is also a slippery concept. Efforts to deliberately develop social capital often fail, and have even destroyed existing social capital in the process (Fukuyama, 2001). Further, the “sheer amount of social capital is not likely to be a good indicator of how well a community will be able to engage problems” (Newman & Dale, 2005, 481). However, the structure of this study attempts to overcome this issue by approaching the study subjects themselves for the important phenomena, and then finding which ones plug in to social capital concepts.

### ***Civic Engagement***

I conceive of civic engagement as the degree to which the community comes out to support causes of community advancement, and actively participates in its own governance. Putnam (2000) measured civic engagement through rates of volunteerism, attendance at local meetings, as well as voting trends, for example. Civic engagement frequently included formal elements like participation in team sports, attendance of meetings outside of work, and attendance at church services (Putnam, 2000). All of these face-to-face interactions would raise the degree of network linkages of participants, thus improving access to mutual support, information, and reciprocal exchanges between the different sectors mentioned above. One of the most statistical consistent predictors of civic engagement is education; the more education someone has, the more likely they are to volunteer their time. However, this is only an indirect measurement, is it measures the potential for social capital, not its presence.

### *Trust and reciprocity*

Trust and reciprocity are two of the most common measurements of social capital, and one of the primary 'benefits' resulting from networks. Several social capital definitions, including Putnam's (2000, 19), highlight "social networks and the norms of reciprocity and trustworthiness that arise from them". Therefore, if a community has high levels of social capital, than their general levels of trust would also be high. If a community has high levels of general trust, than their social capital is strong. In terms of measurability, Dale and her colleagues created the *Community Livability Survey* (CRC Research, 2009) to investigate levels of community trust, and their impact on social norms and local sustainability. One statement, which has been posed to Americans for many decades to respond to, is the assertion that "Most people can be trusted". The level of agreement with this statement has changed dramatically in the last forty years, dropping constantly since the 1960s. "If generalized reciprocity and honesty are important social lubricants, Americans today are experiencing more friction in our daily lives than our parents and grandparents did a generation ago" (Putnam, 2000, 140). Would communities who are actively engaged in ICSP development show a reversal of this trend?

### *Commitment to the community*

Putnam (2000) frequently uses community commitment as an integral component of social capital. I also assume that the more committed, or rooted, people are to their community, the greater the likelihood of participating in local governance and groups that support the community. Roseland (2005, 11), highlights community "civiness" as "an important component of sense of place, which is critical for community sustainability". Measurements of community commitment can include homeownership rates and length of time in the community, because longer-term residents and those with a financial commitment to the community may be more inclined to work in support of their community. While Putnam (2000) found that those who maintain formal social connections are disproportionately homeowners and long-term residents, it must be said that this connection may not be equally strong in reverse. However, it is a useful proxy measurement.

### *Network strength*

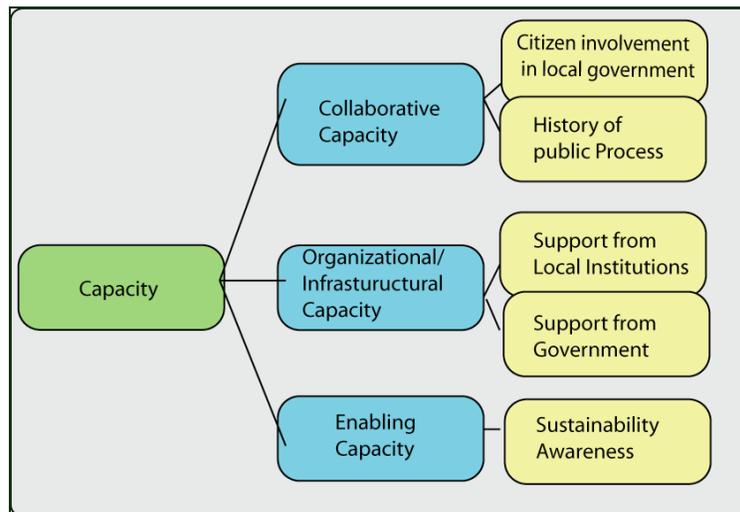
From network theory as well as examples from collective action literature, it has been shown that the presence of networks, their strength, and the degree of connections between important actors is of significant impact in collective action initiatives (Dale, 2005; Dale & Onyx, 2005). Networks, according to Dale (2005, 23), are "sets of interconnected nodes of people, characterized by open structures that are able to expand without limits". The presence of networks impacts the development of an ICSP initiative, as they help to build bridges between people and groups of people, improving communication and the potential for collaboration. "Since by definition sustainable development crosses disciplines, jurisdictions, and sectors of society, its achievement requires the engagement of a diverse variety of community actors... Dialogue and engagement between the business, research, and community nongovernmental organizations, and will all levels of government, are urgently needed..." (Dale, 2005, 25). The extent that strong networks exist is an important measure of social capital.

Two proxy measurements for general network strength are the diversity of the community and the number of local non-profit organizations per capita. While *Bowling Alone* (Putnam, 2000) argues that the number of CSOs does not speak to levels of social capital, I believe that at the local level, the number of local, and locally supported, CSOs does indeed provide evidence of social capital, as these organizations require high levels of local volunteerism and support to function. Examples of this type of organization are little league baseball clubs, historical societies, as well as the Elks and the Masons. Community diversity may also play a role in community network strength. While ethnic and racial pockets themselves are sources of bonding social capital, their ties to other elements in the community are needed for full inclusion in the community, and for collaboration with other networks in other communities.

## Category 2: Capacity

Social capital is the realm of individuals within the community, and their connections with each other. Capacity, then, is the realm of the local government and institutions, and their ability and willingness to engage meaningfully with the community. Regardless of whether an ICSP initiative is launched within city hall or by a civil society organization, governments have a critical role in facilitating the development of coalitions for action and constituencies around the key issues (Dale, 2001). As an explanatory variable, capacity elucidates the foundational groundwork in cooperation, political will and support, as well as contextual elements including support from other levels of government and local institutions. Middlemiss & Parrish (in press, 4) address building capacity for sustainability in communities through four categorizations: cultural, organizational, infrastructural, and personal capacities. They use organizational capacity to mean the “values held by formal organizations that are active in the community, their alignment with the goals of sustainability, and the resources and support from those institutions.” I have taken their understanding of capacity building for low carbon communities, and adapted it in the following figure. Each of these elements will be introduced below.

Figure 3.3: Capacity for Sustainability as a Conceptual Category



- Derived from Middlemiss & Parrish, (in press)

### Collaborative Capacity

#### *Degree of citizen involvement in local government*

This measure of collaborative capacity stems partially from Arnstein (1969), whose was introduced in box 2.2, and partly from the logical conception that if citizens are actively involved with their local government, than certain levels of collaborative infrastructure will exist. Therefore, this will be an element of institutionalized participation that is accessible to the ICSP initiative.

#### *History of public process*

Has the community been gathered for other initiatives like urban renewal, economic development, or a visioning process? How and through what processes has the local government sought out public input and opinions? Previous local government and community experience with extensive input gathering creates a learning process and a backdrop for people to address their own impact on local government processes. Previous experience with specific tools for interactive planning, as well as the institutional knowledge of those processes, could be capitalized for an ICSP process.

## Organizational Capacity

### *Support from local institutions*

If the local employers and the city are supportive of sustainability ideals, or are working internally on elements of sustainability, then there are reduced levels of inertia and few barriers, as well as an improved culture of sustainability in the community. This would also impact community awareness of sustainability issues. Support would include visible financial, marketing, and coalition-building measures that show the organization is signing onto the ICSP ideals and implementation strategies in their own operations.

### *Support from government*

Government policies have been argued to be a “critical, necessary condition” (Dale & Newman, 2008, 6), sustaining momentum, and validating and supporting actions for strategic sustainability. State level action is an important factor in organizational capacity, by “providing information and financial resources for the planning process” Conroy & Burke, 2004, 1384). It has been argued that state level mandates can facilitate the placement of sustainability issues onto the local agenda and shift opposition away from local government by acting as a ‘lightning rod’ (Conroy & Burke, 2004,1387). Actions at the municipal, state, and even federal level that support specific actions towards sustainability would be of positive influence through the resources and expertise being provided.

## Enabling Capacity

Cultural capacity, according to Middlemiss & Parrish (in press, 4), refers to “the legitimacy of sustainability as an objective given a community’s history and values”. This refers back to the ‘will’ that Ling et al (2009) determine to be a primary determinant of the possibility for an ICSP to emerge. “Enabling environment capacity refers to the actionable elements of the broader social, economic, political, legal, and cultural environment that can be shaped by collective action” (Rama et al, 2009, 466). Of primary importance here are the pre-existing levels of awareness about sustainability, and the degree that the environment is a component of the community’s ethics. This capacity would be vital to provide initial understanding of the need for an ICSP initiative, and motivate volunteers to participate in its development. Further, it is an element of capacity, and not social capital, because it can be deliberately improved upon, and in this case, addresses the city’s relationship with the community in terms of pre-existing sustainability related activities, like public transportation and recycling.

### *Sustainability Awareness*

Sustainability awareness is what I am calling the overall level of understanding and knowledge about issues of conservation and connections between sustainability issues in the community. To what extent is there evidence of an ecological ethic in the community? Measurements for this can include the number of environmentally related groups, the degree to which environmentally friendly individual behaviors are the norm (recycling, home gardening, alternative transportation etc), and the presence of local businesses who actively pursue sustainability-related practices, for example. This is an important measure of capacity because it relates to issues of cooperation between local government and people (i.e. in funding appropriate public transit for example), and because awareness can be directly influenced and supported, as with the other elements of capacity.

### ***Category 3: Design Processes***

Taking process as an incredibly important determinant of success in a community’s ICSP development, this research will address community sustainability to ask simply, what are communities doing? Perhaps those processes, trajectories, and choices may inform and influence other communities, who are struggling down similarly complicated paths. Therefore, process as an independent variable should look at leadership for the ICSP initiative, and then address the unique institutional structure as elementary

guidelines to the success of the ICSP launch. In research on a social empowerment program in Vancouver, Dale & Newman found that the evolution of the program from social capital formation to successful program design “was dependent on an infusion of key external resources at critical points.” (2008, 11). Obviously then, the process, timing, and specific people are of as much importance for success as the initial conditions facilitated its launch. It would be nearly impossible to generalize a community’s processes into universally applicable terms; however, how groups were able to create movement, and through what means they did that, would be useful to add to the practical literature on ICSP formation. Therefore, of prime importance are the processes for building legitimacy of the movement, the structure itself, and the use of frameworks and tools.

### *Legitimacy*

A legitimate movement would have to be visible, have strong leaders, build strategic partnerships, and create a community network around the ICSP. In general, the personality, level of connectedness, dedication, and public perception of a leader would greatly impact the groups’ agency, or ability to succeed in developing an ICSP. Further, from network theory we see that ‘connectors’, or ‘hubs’ are the people who have the most bridging ties and “often the most instrumental in creating group agency” (Newman & Dale, 2005). Therefore, effective leaders need to be hubs in the community in order to create bridges between groups of stakeholders. Measurement of leadership would come from social network analysis, as well as the perceptions of the group participants and the larger community.

### *Structure*

Only very general elements of a community’s design structure might be comparable, considering the strong contextual influences. According to the ICSP template (2009), an ICSP must be broadly bounded enough to include the range of diverse, interconnected services like culture, water, soil, and the infrastructure and government needed to support these elements. Visioning processes are called for in multiple sustainability planning tools, including The Natural Step (James & Lahti, 2004) and Agenda 21 (chapter 28, 1992). How that vision is arrived at, and the inclusivity of the people involved in the design of the vision and goals, will greatly impact the ICSP overall. While every community structure is unique, Dale (Ling et al., 2009) and others argue for several primary elements: it must be inclusive, it must create a vision process, and it must link to other work being done at different scales. The structure would also have to address how participants are gathered into decision-making, and ensure that boundaries are appropriate to for a systems perspective.

### *Frameworks and Tools*

In a practitioner publication by the International Society of Sustainability Professionals (Hitchcock & Willard, 2010), the authors attempt to bring together multiple different frameworks under ‘one tent’. They note that in the field, people find the multiplicity, overlap, and contention of and between various frameworks confusing. They may indeed lead to different outcomes for the community. Therefore, the choice of a framework will impact the resulting ICSP. Further, some frameworks are prescriptive, whereas others are not, which inherently returns the conversation to values and whether or not sustainability can be voluntary. Overall, while results would be speculative, a major part of a community’s design process is its choice of sustainability framework, and the tensions that may arise from that choice.

## 4 Methodology

The goal of this methodology is to move from the conceptual exploration of certain concepts to concrete actions and measurements. This research progressed iteratively, which means that only a few of the concepts and measurements were worked through prior to the beginning of the empirical research, as will be explained below.

### 4.1 Research Approach

The qualitative and contextually unique nature of my research question necessitated multiple case studies. The first case study was both the most in-depth, and was developed so that I, as an untested field researcher, could gain insight into the most important elements facilitating that community's ICSP initiative through direct communication with that community. I then investigated two other communities with similar community characteristics, but which are in earlier stages of their community sustainability planning.

Figure 4.1 Research Timing

<i>Case study communities</i>	<i>Length of time</i>
Corvallis, Oregon	3.5 months
Ashland, Oregon	1 month
Lincoln City, Oregon	.5 month

After gathering perspectives from key participants in the Corvallis sustainability initiative, I developed the set of concepts from the perceived phenomena. These concepts were then triangulated with findings from other community case studies in the literature on their importance for collective action and local sustainability. I then performed a similarly structured, but shorter study on the initial conditions present in Ashland, OR. Ashland has many cultural and economic parallels with Corvallis, but their sustainability initiative is far less evolved. Therefore, my research could take on somewhat of a predictive perspective in terms of looking at the relative presence of explanatory variables in order to make inferences about the missing pieces that is currently impeding their progress. This exercise was also performed in Lincoln City, OR, where efforts at embedding sustainability have been progressing for the past few years, but through a markedly different institutional design.

### 4.2 Geographic location

The United States has an enormous need for culturally relevant research about community sustainability, considering the role that US consumption patterns play in global un-sustainability<sup>10</sup>. In order to draw the greatest historical, cultural, and legal parallels, I determined all three of my case studies should be performed in the same US state. As Portney noted in his research on sustainable city initiatives in the US (2005), current 'serious' communities are clustered on the west coast. However, while I was not trying to prove or disprove the idea that "sustainable cities is largely a west coast phenomenon", it made most sense my own research to zoom in on the US west coast, as it was there I was most likely to locate a successful case study.

---

<sup>10</sup> As but one example, statistics often cite the fact that with only 4% of the global population, the United States is credited with over 24% of the consumption of the world's oil supply annually (worldwatch.org).

The state of Oregon is often thought of as rather progressive<sup>11</sup>, and has several factors that will be of positive influence on its sustainability planning. Portland is the largest city in Oregon, and is also widely cited as a leader in comprehensive sustainability planning<sup>12</sup>. Its guidance and the presence of leadership and resources have been of great import to efforts made throughout the state. In the same vein, volunteerism in general is very high, with Oregonians rating 7<sup>th</sup> nationally in terms of volunteer hours per capita (Corporation for National and Community Service, 2008). However, like most states in the US, political and social viewpoints run the full spectrum. The formal economy remains tied to large vested interests in resource extraction, specifically timber, hunting, and mining, which have provided the bulk of the development dollars for the state<sup>13</sup>. While Oregon has voted democratic since 1988, it does have a strong, very conservative minority (wikipedia.org/Oregon). Further, Oregon is currently one US states hardest hit by the economic crisis, with unemployment remaining over 10% of the eligible population since February 2009 (Bureau of Labor Statistics, 2010). One of the most important contextual factors that has positively affected Oregon's outlook on sustainability is their land use planning legislation, which has fundamentally impacted the way all communities develop.

Oregon remains one of the most advanced states in the nation on land use planning (Institute for business and home safety, 2010). In 1969, Oregon state lawmakers passed legislation directing all communities to complete local comprehensive plans (Oregon Department of Land Conservation and Development, 2010). In 1973, that legislation was expanded to direct communities to achieve specific goals through their comprehensive plans; these goals relate to coastal planning, land use, resource use, and citizen participation. Currently, there are nineteen 'planning goals', overseen by the Land Conservation and Development Commission. Every local comprehensive plan must be consistent with the statewide planning goals<sup>14</sup>. From *Oregon's Statewide Planning Goals and Guidelines*- "It's no coincidence that *Citizen Involvement* is the first among Oregon's 19 statewide planning goals. Extensive citizen participation has been the hallmark of the state's planning program from the outset." The first eight planning goals relate to the use of space, conservation, and citizen involvement. Economic development comes in at goal #9.

To summarize, Oregon was chosen for the potential advancement of sustainability planning due to the following factors: the presence of a strong state planning mandate and land use planning legislation, its location on the west coast of the US and relatively strong democratic history, and Portland being an international leader in integrating sustainability into planning policy. However, the level of political polarization and the entrenched interests of extractive industries mean that there will be challenges to the success of movements, and that examples from this region may be applicable to other communities in the nation.

### 4.3 Case Study Criteria

In determining the first, in-depth case study, I followed Dale & Ling's case study criteria that use for their own research (see appendix 4.4). These criteria overlap with the first two dependent variables that I determined at the outset of the research.

- Commitment language to sustainability outcomes, which Dale terms "outcomes".
- Sustained community participation, which Dale terms "Enthusiasm".

---

<sup>11</sup> Oregon has consistently voted democratic since 1984, and Portland and Eugene have been strongholds of the hippie counterculture movement for many decades. The state motto is "She flies with her own wings", which represents the state's pioneering, fiercely independent populace.

<sup>12</sup> For an investigation of sustainability planning in Portland, Oregon, see Portney, 2003.

<sup>13</sup> Information drawn from [www.Oregon.gov](http://www.Oregon.gov)

<sup>14</sup> Oregon Department of Land Conservation and Development - <http://www.oregon.gov/LCD/goals.shtml>

Based on the proposal, I began my work into community sustainability initiatives with a review of communities in Oregon that seemed to be engaged with the community on sustainability policies and initiatives. This review led to a short list of communities that fit the interest parameters that I had set. One of the major parameters was that the community to be studied should not exceed 75,000 residents. This parameter was important because of the perception that larger communities contain higher levels of complexity, which themselves create an urban pull, changing the dynamic with the surrounding regions. Another parameter I looked at was the proximity to Portland. Portland is the largest city in Oregon, and the surrounding metropolitan region is greatly (and positively) affected by their proximity to this 'green' city.

#### 4.4 Case Study Selection

The choice of the first case study was critical to the success of the overall research. Therefore, I spent several weeks contacting and gathering background research on cities and towns in Oregon that have committed to an ICSP process of some type. Through email and web searches, I narrowed down to two communities, Corvallis, and Lake Oswego. Lake Oswego was ruled out because while impressive, their sustainability activities were centered on internal city actions; further, they are within the Portland metro boundary, which positively influenced the available resources and level of general population awareness (interviewee, 1.20).

Following an initial interview with a primary member of staff, I determined that Corvallis was an ideal initial case study because the city had dedicated staff to address internal sustainability issues, and who cooperated with the Corvallis Sustainability Coalition, a group of active local citizens. The coalition had recently published an Action Plan, listing twelve areas and several hundred action items to move the community towards greater sustainability. This was the extent of my knowledge when I undertook the case study.

#### 4.5 Data Collection

Initially, I chose several basic categories to focus my exploration. As has been previously explained, these guided the development of the initial questions, and slowly, a more complete picture unfolded, directly where I should look for more information. This process will be explored and explained in detail in the next chapter. However, below are the sources from which I gathered data.

In all three communities, semi-structured interviews provided the bulk of the information gathering. Again, the grounded theory technique guided my questions; each interview set was built upon information gained in previous interviews, and required constant revisiting of relevant literature. All interviews were tape recorded, with additional written notes taken. Each interview, when it is referenced, is noted as (interviewee/date of the interview). If it was the second interview to have occurred on that day, it is noted as (interviewee, date/2).

*Figure 4.5a: Total number of Interviews conducted*

	City Staff	Community Leaders	Elected Officials	University Leaders	Total interviews
Corvallis	1	10	4	1	16
Ashland	1	3	1	1	6
Lincoln City	1	1	1	0	3
<b>Total interviews</b>	<b>3</b>	<b>14</b>	<b>6</b>	<b>2</b>	<b>25</b>

The other interactive data collection method I used was a survey. While I wrote the survey to address specific elements of my conceptual framework, I drew multiple questions from the Community Livability Survey (CRC Research, 2009) to add strength to my own research, and to provide for a broader level of academic comparability. These questions were referenced in the survey, and I was given written permission to use the questions by the authors (pers.comm. 1.7). Their survey was developed from the Onyx and Bullen (2000) scale, which is an accepted measurement tool for elements of social capital. Each question aimed to address a piece of data that I could not access through other means, and some were geared specifically to gain more insight into the unique communities. The survey data also allowed me to develop a rudimentary social network analysis. The complete text of the two surveys is listed in Appendix 4.6.

The survey technique was used in two of the three communities, Corvallis and Ashland. In Corvallis, the survey was administered during a gathering of sustainability advocates. In Ashland, I used three different avenues to gather survey feedback. Paper surveys were administered at a gathering of sustainability advocates; I also developed an online version of the survey, which was advertised through the Oregon Shakespeare Festival employee server, and also posted on a local resource forum. The survey totals were:

*Figure 4.5b: Total number of surveys completed*

Survey Gathering:	Number of Surveys
Corvallis	46
Ashland	46
Total	92 surveys

#### Census

The United States government provides extensive census data relating to housing, economy, and other elements, for public use on the internet. Unfortunately, 2010 is itself a census year, and so complete census data was only available from 2000. However, certain communities are chosen to participate in the American Community Survey, which is an ongoing survey, also run through the US Census Bureau.

#### Elections Offices

Voting information is available to the public through county voting offices. This data was valuable for statistical and historical purposes about the communities.

#### Public Data

By law, most of a city's business must be freely available to the public. Therefore, I made use of information from city council meeting minutes and others. Further, the city of Corvallis performs a yearly 'citizen attitude survey', which takes stock of the community on issues like perspectives on transport, community safety, and growth (city of Corvallis, 2010).

#### Organizational data

I was able to obtain some proprietary information from community organizations through the generosity of those organizations.

## 5 Corvallis – A Successful ICSP Initiative

### 5.1 Introduction

Following a brief introduction to Corvallis as a community and the methods of empirical research, I will introduce the ICSP itself and its component structures, which will provide the necessary background to explore the dependent variables. The second part of the chapter explores the background and emergence of the current initiative. I then introduce the conceptual framework and explanatory variables to ‘measure’ Corvallis’ conditions and processes using triangulated data from various sources.

As the 7<sup>th</sup> largest city in Oregon, Corvallis has a population of 55,000 residents, with an official city motto of ‘Enhancing Community Livability’ (City of Corvallis, 2009). Corvallis is located on the line between Benton and Linn counties in western Oregon’s Willamette Valley, on the eastern edge of the coastal mountain range. It is the seat of Benton County, which itself has a total population of 82,600 (U.S. Census). While Corvallis is the most important city in Benton County, it retains an isolated feeling, partially because it is located nearly ten miles from the nearest arterial highway. The nearest major city of more than 100,000 people is the capital, Salem, approximately 30 miles north. Founded in 1845, the railroad first moved through the area in 1880. The area’s growth focused primarily on the livestock and timber industries, at one point boasting the largest timber mill in the area (City of Corvallis, 2010). The population grew through migration coming from the Oregon Trail, helping Oregon to become a formal state in 1848. Corvallis College began there in the late 1850’s, and grew continuously as the state’s first institution of higher education; that school is now known as Oregon State University.

With a current student population hovering around 22,000 (OSU, 2009), Oregon State University (OSU) plays a critical role in the demographics of the community overall; its presence is fundamental to the town<sup>15</sup> in both population and general attributes. Interviewees often moved to the community because of the university either as a job or because of the benefits of a college town (interviewee, 2.11). People believe that OSU has helped to build an educated, aware community, a fact that will be addressed in this chapter. OSU is currently the only public university in the country to hold sun, land, sea, and space grants from the federal government, retains \$250 million in average annual funded research, and is in Carnegie’s top tier research schools (OSU, 2010). The university has been estimated to employ between 19-20% of the community (Benton Chamber Coalition, pers.comm. 7.28). The two other largest employers in the city are Hewlett Packard’s printer cartridge complex, and the Good Samaritan Hospital. Together, these three employers account for approximately 26% of the total employment in Corvallis. According to the OSU website, “along with Oregon State University, agriculture, lumber, wood products, and some printing technology research and development form the economic base of the county” (OSU, 2010).

Corvallis has a significant history of deliberate planning, especially related to land use. This is evidenced by the municipal codes that have prevented large box stores (Wal-Mart, shopping malls, etc) from moving into town. Many credit this fact with the retention of a vibrant downtown and locally owned shops (interviewee, 4.19; 2.4). In the past several years, Corvallis has begun to be recognized for its deliberate efforts at improving ‘livability’<sup>16</sup>. Several of these recognitions are likely a response to increased attention

---

<sup>15</sup> When asked to describe the most important elements of Corvallis that has facilitated the establishment of the sustainability initiative, 86% of interviewees mentioned the University.

<sup>16</sup> Some of the recent awards include: Corvallis High School -“America’s most eco-friendly school” (2009); “Best Green Place to live in America”, and “Best Green Small City” -Country Home Magazine (2008); Green Power Community EPA designation (2006); 7<sup>th</sup> best place in the nation to live – Men’s Journal (2005); 15<sup>th</sup> most creative city in the nation – Harvard Business review (2004).

since sustainability became a priority issue; others may highlight the existing ethic in the community. While excluded from most measurements, Corvallis' importance for the livelihoods of nearby residents of Linn County deserves recognition in terms of employment statistics and median home prices<sup>17</sup>. Corvallis has retained a better economic picture than most in Oregon (interviewee, 2.4); although budget constraints have begun to negatively impact locally funded initiatives (interviewee, 8.5).

### *Research in the Community*

Primary data collection came from sixteen interviews. The list of crucial interviews evolved organically, as interviewees suggested other important players in the leadership of sustainability in the community, including many on the Coalition steering and executive committees, city staff, and elected officials (see figure 4.6). My goal was to understand the complete picture, successes and failures, in order to draw out the most salient facts and lessons for other. I encouraged participants to tell their story of the Coalition's development, its role in the community, and challenges being faced. Because most of the people possess positions of political sensitivity, I ensured my interviewees of their anonymity, unless permission was granted for a specific quote. Therefore, as I cite interviews throughout my explorations, I will mention the general positions (community leader, city councilor etc) if they are important to improving the strength of the argument. Otherwise, they will simply be cited as 'interviewees', with the date the interview was completed.

The other major component of the interactive research involved the survey. This survey was performed at a quarterly gathering of the Corvallis Sustainability Coalition, which took place on April 26th. The leadership felt that because of the lunchtime schedule, its location at the library, and the overview type of presentation, these meetings frequently attract first time participants as well as 'the usual suspects'. The meeting gathered approximately 65 participants. At the beginning of the meeting, the Coalition facilitator asked how many people were new to a Coalition event. I estimated at the time that about 18%-20% of participants raised their hands. Of those who responded to the survey question regarding the number of previous events they had attended, 21% claimed to not have participated in any of the Coalition's open meetings; 64% of respondents had attended either two or three of the Coalitions' major meetings in 2008 (which will be explained in the next section). Nearly 60% of the survey respondents were women. The rest of the results of the survey will be inserted and discussed throughout this chapter, where the information is most applicable.

Corvallis completes an annual survey of their community, called the Citizen Attitude Survey. This public information addresses city services and infrastructure, quality of life, and the affordability of housing, among other things (city of Corvallis, 2009).

## **5.2 The Sustainability Initiative- The Players and the Plan**

The current ICSP initiative in Corvallis is comprised of two major players: the city government and the Corvallis Sustainability Coalition. Through cooperation, the community has developed a comprehensive, integrated community sustainability plan, which encompasses goals, strategies, and specific action items across a broad spectrum of issues. The Action Plan is explored below.

---

<sup>17</sup> According to staff at the Benton Chamber Coalition, Linn County is home to many of the lower income employees in Corvallis because of the high costs of local housing. When the economic recession hit, Corvallis' job loss remained low because the unemployment statistics were reflected elsewhere, often in Linn County (interviewee, 2.10).

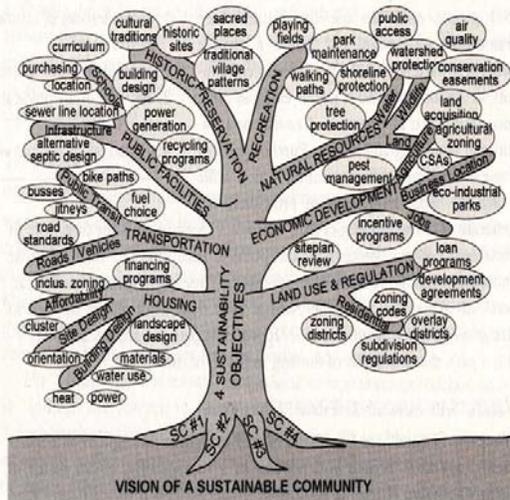
The city employs a Sustainability Coordinator, whose goal is to coordinate the activities of the departments within the city and identify effective projects and means to reduce the city's overall footprint. In addition, the city is currently developing a community sustainability policy, which, while soft policy, is meant to support city council actions in the future related to community projects (interviewee, 8.5). The city of Corvallis offers the following definition of sustainability: "In a sustainable society, environmental protection, economic objectives, and social justice join together to meet the needs of today without compromising the ability of future generations to meet the needs of tomorrow." In order to support this goal, the city employs 1.5 sustainability staff housed within the public works department. While decision-making that relates to spending or new policy must go through the elected city council and the mayor, day-to-day actions are supported by the city manager. "The City Manager promotes the objectives of the [organizational sustainability] policy, adopts and implements sustainable strategies and practices in the departments, documents department progress towards sustainable development on an ongoing basis, and prepares an annual report on progress achieved, as well as the objectives to achieve before the next annual review" (City of Corvallis, 2009). Within the Council Policy Manual, a section on organizational sustainability has been in place since 2005, with the most recent revision in November 2009. This document will be explored further in subsequent sections. Further, the city is currently developing a Community Sustainability Policy, which "supports development of community practices, plans, and programs that promote a balance of environmental values with economic and social equity values" (City of Corvallis, draft). The Coalition is expected to be a primary arm of the city's outreach work of this policy, according to one city councilor (interviewee, 3.18).

The Corvallis Sustainability Coalition, hereby referred to as the Coalition, is an independent, non-profit organization with over 160 partner organizations, and approximately 200 active citizen participants (interviewee, 2.24). Coalition partnership is open to any local organization or citizen who agrees to support their vision, mission, and goals. The Coalition's motto, "Working together to create a more sustainable community", emphasizes that their network includes "non-profits, businesses, faith communities, educational institutions, and government entities" (Corvallis Sustainability Coalition, 2009). Comprised of a facilitator, an executive committee, and a steering committee, the Coalition leadership consists of approximately fifteen people. Steering committee members often represent or are affiliated with other community entities like the League of Women Voters, the Corvallis School Board, the Pacific Green Party, the City itself, and Oregon State University.

The Coalition operates using a set of principles and guiding objectives derived from the Natural Step, which is introduced below (box 5.2a). The Natural Step has had a local chapter in Corvallis since 1994.

Box 5.2a - The Natural Step Framework

Figure 3.3: Guiding the municipal system



The Natural Step Framework was developed in 1989 in Sweden. Essentially, it defines a sustainable community in relation to quantifiable ecological processes, using system conditions like “In a sustainable society, nature is not subject to systematically increasing concentrations of substances extracted from the earth’s crust” (James and Lahti, 2004, 6). These principles form a baseline from which stakeholders determine strategies for decision-making. Implementation methods are relative to the context, geography, and political situation, but by using the principles to guide all decision-making, sustainability thinking is embedded into the system (James and Lahti, 2004, 23). This framework has been successfully applied to cities, towns, small business and corporations all over the world (TNS, 2010). The tree illustration to the left is a visual aid for the role of sustainability objectives in decision-making, according to the framework. (James & Lahti, 2004, 12). The ‘roots’ in the illustration refer to the

system conditions introduced in chapter 2.2.

The four sustainability guiding objectives (the trunk of the tree) are to “Develop policies and practices that ultimately:

- 1) Eliminate our community’s contribution to fossil fuel dependence and to wasteful use of scarce metals and minerals.
- 2) Eliminate our community’s contribution to dependence upon persistent chemicals and wasteful use of synthetic substances.
- 3) Eliminate our community’s contribution to encroachment upon nature (e.g. land, water, wildlife, forests, soil, ecosystems)
- 4) Meet human needs fairly and efficiently.

The Coalition received funding from the city of Corvallis in 2007 to address the city’s goal of supporting community sustainability (Corvallis Sustainability Coalition, 2008). Using these funds, the Coalition hired a consultant and cooperatively developed a public process consisting of three town halls meetings, which took place throughout 2008. The first town hall meeting was aimed at soliciting input for community goals and at gathering volunteers. The second town hall meeting gathered feedback regarding the goals for the community. The volunteers gathered baseline metric data, and made recommendations of supporting organizations and timeframes for the specific goals, and organized them into topic areas. The final town hall meeting introduced the selected strategies and priorities using electronic polling. The final Action Plan consists of twelve major action areas, which each have a dedicated team of volunteers and specific agenda items and goals to achieve. The action areas include Food, Waste and Recycling, Economic Vitality, and Land Use, for example. Each goal contains strategies, baseline metrics (if available) potential key organizations to cooperate with, and a timeline for implementation.

The Corvallis Sustainability Coalition Community Action Plan (Corvallis Sustainability Coalition, 2008) represents, in one sense, the culmination of cooperation and sustainability planning. In another sense, it is the launching point for a significant community transformation.

*Box 5.2b Corvallis Community Action Plan example- Food*

The Action Plan's Food category contains one vision and three goals. The vision, "We are fed primarily by food which is locally produced, using practices that renew and enrich the land and community", then has a specific goal of "By 2020, 60% of the food consumed by the Corvallis population is grown or produced in Benton, Linn, Lincoln, or Lane County". This goal is supported by an interim goal, three strategies, and eight specific actions to support those strategies. The two other goals address secure access to food and sustainable production practices.

Every person in the Coalition is a volunteer; there are no paid positions supporting this group. The volunteer nature of the action teams has also meant that interest in some areas has waned, and in others has grown and become self-sustaining. They have a functioning website, their own logo, send regular updates to the community through an internet group, and maintain a presence at many of the community's local fairs and festivals. Most recently, the Coalition released an annual report, highlighting its 2009 accomplishments, which include the Coalition's independent non-profit status, a re-structuring of the leadership organization, and elements of formalization of their relationship with the city of Corvallis (Corvallis Sustainability Coalition, 2010/2).

Corvallis is developing a new institution for sustainability, which is becoming embedded into both the city's structure and the wider community<sup>18</sup>. The partnership between the city government and the Coalition includes staff support of projects, funding and grants, and publicity. The city's sustainability coordinator is a member of the Coalition steering committee, and represents the city in that capacity. At each gathering of the Sustainability Coalition that I attended, the mayor himself or at least several city councils were in attendance. As an example of the Coalition's partnerships and work, this example came through my email in July publicizing cooperation on a festival. Da Vinci days is an annual festival in Corvallis; this year's organizers have incorporated food composting for the first time to significantly reduce waste from the event. According to the email sent to Coalition's group subscribers, "Five of the Coalition's partner organizations have been working hard for many months to bring about this significant change: da Vinci Days, EcNow Tech, Allied Waste, OSU Campus Recycling, and First Alternative Co-op." This tiny snippet highlights the role of the Coalition as facilitating greater cooperation between active groups, which is creating behavioral change in the greater community.

While Corvallis has unarguably moved progressively forward on its sustainability agenda, it is not without criticism for the path taken and the current focus. There is some tension between the Coalition and the city, where some in the Coalition argue that the city holds too much power in Coalition decisions, and others representing the city believe that the Coalition should be a formal arm of city hall (interviewees, 3.4; 4.19). For some, the Coalition is too-project oriented and fails to get at the heart of unsustainable behavior by focusing on 'feel-good' tree plantings and easy projects. I heard consistent responses that the Coalition does not represent the full community, as it lacks minority and business presence. I also heard that the coalition is too inclusive (interviewee, 2.11), and that there need to be minimum requirements to be a coalition partner organization in order to prevent green-washing. However, the coalition facilitator feels that different groups are simply joining at different places along a spectrum, or track, and that their participation is necessary to get everyone moving in the same direction. These are a few of the more serious concerns that were mentioned. People remain committed to the process and to

---

<sup>18</sup> While several interviewees believed that the Coalition is already a community institution (interviewee, \_\_\_), the mayor (interviewee, 8.5) argued that the Coalition cannot be considered an institution unless it lobbies for and passes a ballot measure. This would showcase a degree of legitimacy and representation in the community that it currently lacks.

the Coalition. The following section will break down the components of the dependent variables and present the results of the strength of those variables.

### **5.3 The strength of the dependent variables**

The ICSP initiative is itself larger than the Plan, and encompasses the actions of the two component structures, the Coalition and the City, and their actions to support the emergence and implementation of the plan. Therefore, the combined approaches of the Coalition and the city's operations are addressed here as the ICSP initiative, with the emphasis on the Coalition's work since 2007 forming the boundary for the ICSP initiative itself. The elements explored below constitute the dependent variables; some were developed during the proposal phase, and some were added to expand the categories during the research itself.

#### ***Principles for sustainability***

The Coalition follows the 'guiding objectives' of The Natural Step (TNS). The wording of the Coalition's objectives has been softened from 'eliminate' to 'reduce and eventually eliminate...' (see box 5.2) in order to appeal to a wider audience<sup>19</sup> (interviewee, 2.11). The Coalition was developed through the Corvallis chapter of The Natural Step; therefore, adoption of their principles for sustainability was taken as "a given", according to many interviewees, and were decided upon during their initial meetings. These principles stem from a science-based opinion of sustainability, also termed 'strong' sustainability, which argues that natural capital cannot be replaced, and therefore must be conserved (du Pisani, 2006). These principles permeate all decision-making in the Coalition, according to several members of the leadership (interviewees, 2.11; 4.9). However, not all partner organizations would know the guiding objectives, nor even potentially The Natural Step (interviewee, 3.4).

In order to gauge the knowledge and relevance of the principles, survey participants were asked, "how important are the four guiding objectives to the sustainability coalition's direction and effectiveness?" 52% responded that the guiding objectives were "essential", and only 4% believed they are "unimportant". 10% of those surveyed were "not familiar" with the guiding objectives. Therefore, from the strength of the principles for sustainability themselves, the degree to which they are applied in decision-making, and the level of importance placed upon them, I believe that principles for sustainability are strongly present in this case, and are indicative of a successful ICSP initiative. This indication is supported by the literature previously reviewed. The principles are clear, strong, and they permeate decision-making.

The city government does not use specific principles, but has chosen the Triple Bottom Line (TBL) as their framework for decision-making. "the [triple bottom line] is used to capture the set of values, issues and processes that organizations must address to minimize harm and create environmental, economic, and social value" (city of Corvallis, 2009). However, the triple bottom line is a form of 'weak' sustainability as the city only claims that sustainability projects must encompass at least one of the three imperatives (city of Corvallis, 2009). Their principles for sustainability fail to fully support the ICSP imperatives. The specific language of the city's sustainability plan will be further explored in the following section. Sustainability principles are linked to commitment language; the strength of the principles impacts the strength of the commitment to sustainability, and therefore actions, that are demanded by the principles (interviewee, 2.11).

---

<sup>19</sup> The American Planning Association has also adopted this phrasing in their sustainability planning guide (APA, 2010).

### *Commitment Language*

Language within the salient plans need to showcase long-term commitment to the principles in decision-making and in the timetables for measurement. While true sustainability will remain a goal for human society to strive towards, than the commitment to the ethic needs to be equally long-term, and without options for reversal due to political pendulums. Corvallis' commitment to sustainability stems from three different areas, which each showcase differences between the city's approach and the coalition's approach, as well as their relationship to the success of the initiative.

The Coalition Action Plan, which was described above, contains no legal language to commit to the implementation of the plan. The Coalition has consistently declared the Action plan to be a "living document", which will evolve with the community. While I argue this to be a weakness in the plan, the majority of interviewees expressed that the Coalition's strength was in the network structure of the coalition and the continued enthusiasm and commitment of the participants.

City council goals can be seen as indicative of commitment language; every city council since 2003 has adopted a component of sustainability in their two-year goals (interviewee, 3.18/2). The City Organizational Sustainability Policy contains language that can be used to support sustainability; it emphasize to goal of reduction in demand before increasing supply of a resource, and prevention of pollution "through planned, proactive actions that go beyond regulatory compliance", for example. By emphasizing the role of Corvallis as a "model of sustainable operations for other public and private organizations" in that they will "support and implement innovative programs that maintain and promote Corvallis' leadership as a sustainable city organization" (City of Corvallis, 2004), the city draws on their reputation as an incentive for continued action. The weakness of the city's commitment language comes from the triple bottom line framework.

"To the extent possible, sustainable initiatives will meet more than one of the triple bottom line components. For each component, goals will be reviewed and refined at least annually to reflect accomplishments of the organization and innovations in sustainable technologies."

Only sustainable initiatives, and not the overall business of the city, will need to address the triple bottom line, and then, only to 'the extent possible'. While this does represent a step in the right direction, the triple bottom line places the economic on the same level as the environmental, instead of recognizing that the environmental system forms the basis for the economic system to function (see figure 2.4).

The third area where commitment language should be present is in the formal city strategies to support implementation of the Action Plan. Adoption of the Plan was one of the primary goals of the Coalition within the plan itself. However, the Corvallis city council refused to outright adopt the plan (City of Corvallis, 2008), but instead "accepted" it for review. As one interviewee mentioned, "the problem was they had 300 action items over 12 different topic areas, and it just overwhelmed people" (interviewee, 1.22). However, city staff and councilors took the plan, determined areas where they have the most expertise and resources, and existing council support, and developed projects to support those areas of the Action Plan (interviewee, 1.22; 8.5). According to a city councilor, the mayor, and city staff (interviewee, 1.22; 3.18; 8.5) there is an unwritten assumption that this pattern will persist, providing continuity to the city's commitment to sustainability, and supporting the Coalition in its continued mission. However, there is no guarantee that annual budget will continuously support the same commitment. Therefore, the commitment language is there, stemming from the organizational and (draft) community sustainability policies from the city and the Action Plan. However, these are still 'soft' policies, with no legal enforcement ability. The areas where the city has made financial commitments that support goals of the Action Plan, success is achieved. I would argue that the city should formalize this relationship by naming the Coalition's plan as representing community goals, and their responsibility to act on those goals.

### ***Sustained Participation***

Sustained participation in the process is linked to the success of collective action initiatives, and successful ICSP initiatives have the same requirement. For an institution to exist, participation in that institution must be sustained. This appears to be the most impressive element of the ICSP initiative in Corvallis. Over the course of the Coalition's history, it is estimated that as many as 2,000 members of the community have been involved (interviewee, 3.25). The Coalition leadership, and the facilitator particularly, show dedication to the long-term success of the initiative, as evidenced through my conversations with them. The coalition facilitator admitted that at the beginning of 2010, she was spending nearly 50 (volunteer) hours per week on Coalition issues which is itself unsustainable (interviewee, 2.11). Action teams have between 6-25 active participants, usually with a stable core group, and peripheral actors coming and going (interviewee, 4.9). According to interviews, the most successful action teams have a dedicated leadership and passionate members (interviewee, 4.20). The fact that the coalition remains entirely volunteer-driven is a testament to sustained participation, four years after the launch. The Coalition Partners are also continuing to grow, although their particular role, and the methods for gathering their input, remains vague (interviewee, 8.5; 2.24). The survey posed the question "how many hours per week do you volunteer for the Sustainability Coalition (meetings, action team activities, fundraising, research, etc)? The results showed that, of those surveyed, 15% volunteer at least 5 hours per week, with 83% volunteering less than 5 hours per week.

### ***Measurement and Feedback Processes***

There is that old adage in business, "that which gets measured, gets done". Each element in the Coalition's Action Plan contains a timeline of 0-2 years, 3-5 years, or 6-10 years for implementation (Corvallis Sustainability Coalition, 2008). This structure facilitates feedback in each annual community sustainability report based on the pre-assigned metrics, according to the Plan. Further, baseline metrics were gathered for goals wherever possible. However, the action plan was developed with the assumption of city funding for an Action Plan Coordinator; when this funding fell through, several other feedback mechanisms and long-term reporting was disrupted. Measurements and feedback currently remains with the action team leaders and the coalition leadership (interviewees, 2.24; 4.9), and is therefore less clear and less accessible than designers hoped. The Coalition has put out a 2009 annual report, which gives brief project highlights, new members, and the updated structure of the Coalition, but does not systematically work through the timeframes from the Action Plan to any degree.

Measurement and feedback on the city's side has been developed using the ISO 14001 series (see box 2.6), which is an environmental management system. However, according to city staff, it was adapted into a 'sustainability management system', to include social and economic imperatives (interviewee, 1.22). The current emphasis for sustainability staff is to develop an audit system to quickly and efficiently get feedback from staff on the state of their projects on a regular basis (interviewee, 1.22). The city sustainability coordinator puts together an annual report, which is "an overview of the successes and challenge in development organization-wide sustainability management system, a "report card" on progress toward meeting 2009 goals" (City of Corvallis, 2009) as well as next steps. This variable is currently stronger for the city than the Coalition, especially when one recognizes the considerable institutional knowledge burden that rests in the heads of the Coalition leadership, and has not been formally tracked.

### ***Resource Commitment***

Resources indicate a degree of commitment, as well as a solid base of legitimacy for the initiative. Corvallis' city government has provided key initial legitimacy to its own sustainability efforts by taking on 1.5 staff, and by the requisitioning of over half a million dollars in block grant funding from the federal

government, which has gone into transportation and energy projects, according to city staff (interviewee, 1.22). For an initiative to be truly a functioning ICSP, some funding is required. Even though the Coalition is run by volunteers, the activities and projects they are taking on require the procurement of funding. The city funded the Coalition's consultant and Action Plan development process using community sustainability funds, which then committed the city to the outcomes from that process. Since that point, the Coalition has relied on the contributions of member organizations to sustain itself. According to the Coalition treasurer's estimate (pers.comm, 8.5), the Coalition has received approximately \$125,000 including in-kind donations, City grants, fund-raising receipts, and other exchanges.

A primary source of funding for sustainability initiatives has come from federal stimulus money in the form of \$500,000 in energy block grants. "The purpose of the EECBG program is to reduce fossil fuel emissions, reduce a community's total energy use, and improve energy efficiency in government buildings and transportation services" (US Department of Energy, 2010). The city applied for and received these funds, which then instigated a public application process to dole out the funds. As an example of how these funds are being used, the Coalition energy action team has developed a revolving loan fund for residents to improve efficiency and weatherize their homes. A coordinator position has been set up in cooperation with The Natural Step chapter and the Corvallis Environmental Center to support action on energy audits that have already been performed through an existing program (interviewee, 4.20). However, as the city budget is further slashed in response to the economic crisis, funding for sustainability programs will likely be cut, placing implementation on hold, or solely in the hands of volunteers (interviewee, 8.5).

### ***Core of responsibility***

Many individuals have shown personal commitment to the success of the sustainability initiative in Corvallis. The city's core of responsibility for sustainability planning center on the full-time sustainability staff, who act at the 'hub' of information and reporting on the city's activities. The mayor of Corvallis has taken on visible leadership on sustainability by through his personal actions, and the initiatives he supports. The mayor is not seeking re-election, and admitted that it meant continued sustainability engagement is tenuous (interviewee, 8.5). The Coalition's core leadership has remained stable, but mounting complexity and continuous pressure on those people brought many interviewees to express their concern about 'burnout'.

The cooperation between the two sides is continuously improving, for the most part, which may strengthen the core in the long run. One Coalition Action group per month has a standing invitation to give a presentation to the City Council on their current efforts (interviewee, 2.11). This is evidence of a successful ICSP initiative because it shows that there is communication and information passing between the two sides of the initiative, and that the core of responsibility is not wholly divided between the groups. However, many cited the need for a paid staff member to support the Coalition as being vital to the long-term viability of the Coalition to stay true to its mission and maintain the level of effort currently being shown (interviewees, 3.28; 4.18).

These six dependent variables together show the presence of an ICSP initiative. Each one provides an element of a total, functioning structure that incorporates both the Action Plan and the two major supporting players: the Coalition and the city. Further, these variables are generally applicable to other initiatives, as they were developed following thorough research into collective action and sustainability planning (see Chapter 2). The following reconstruction aims to delve into the background of the Coalition, and the circumstances under which it emerged, as well as the processes taken to develop the Action Plan and its current structure. This story will then inform the investigation into the conceptual framework (figure 5.5).

#### 5.4 Developing a picture of the community conditions <sup>20</sup>

While the story of any community is bounded by complexity, incomplete information, and personal perspective, I will frame the history of Corvallis sustainability through the lens of the events and groups have been repeatedly mentioned through interviews as having causal links to current success. This comprehensive build-up to the Sustainability Coalition's Action Plan and implementation strategy by framing it as the culmination of several city-wide initiatives, and facilitated by foundational local organizations and individuals who have been "working quietly with city councilors for years to get them on board with sustainability" (interviewee, 1.22). Following this exploration, I will systematically work through a set of concepts and measurements, which will highlight Corvallis's conditions and processes in relation to established research on collective action initiatives. While compartmentalizing these elements into 'explanatory variables' for analysis is inherently a gross simplification, nevertheless it is vital to approaching a framework for understanding necessary conditions that may apply to other communities

Corvallis could be argued to have a relatively strong recent history of environmental awareness and activism, based on the founding of the Corvallis Environmental Center in 1994 to improve local environmental education, a local branch of both the Audubon and the Sierra Club, and numerous other environmental groups. The Northwest Earth Institute (NWEI) founded in Portland, runs local discussion courses related to voluntary simplicity, sustainable systems and living, and global warming actions, among other things. A chapter was founded in Corvallis in 1994, and its success there may be indicative of the larger social ethic in the community. "NWEI's presence in Corvallis, Oregon has created a climate of sustainability awareness - not only for the folks who take the courses and their sphere of influence but for the general public that sees these courses taking place and knows that change is afoot!" (NWEI, 2010). They have been consistently running between 20-30 courses per year in the area (interviewee, 3.4). The Natural Step (TNS), which has already been introduced, also has a local Corvallis chapter, founded in 2001 following the success of a one-day, open workshop on the Framework was held at the Hewlett-Packard company with 125 participants (interviewee, 3.4). TNS subsequently held a public lecture at OSU, which had 250 attendees (interviewee, 3.4). The local NWEI and TNS chapters have shared leadership for over ten years, and those same people have actively participated in the development of the Coalition.

Chronologically and otherwise, the initial event that many interviewees cited as having sown the seed of the sustainability Coalition's success was the Corvallis vision statement, called Vision 2020. This process and resulting document occurred in 1998 by gathering extensive community input through small group meetings and surveys; the document claims 2000 residents participated over the course of several months (City of Corvallis, 1998). The input was collected into projections for the future of the community based along several categories including 'protecting the environment', 'livability', 'civic involvement', and 'economic vitality' (Vision 2020, 1997). While not being termed 'sustainability', the community process, collective long term planning, and focus on 'improving livability' of the Vision project positively impacted community involvement with local government and generated a widely-accepted set of goals for the community. While the sitting city council adopted the Vision 2020 in 1998, no funds were specifically allocated to implement the vision. However, Vision 2020 became an element of city council yearly goal-setting exercises, which have been developed into concrete plans and projects (interviewee, 3.18; 3.25).

---

<sup>20</sup> This exploration highlights the most foundation events. For a complete timeline, see Appendix 5.4. Further, a history of the Coalition written by its current facilitator can be found at *Focus on the Future, Action in the Present*, at [healthygreenpages.com](http://healthygreenpages.com).

In 2003, the city council adopted the goal to “make city government operations more sustainable” (city of Corvallis; interviewee, 1.22). “The nature of the goal did not carry with it a specific directive for staff; it was done more to heighten the awareness of sustainability and to get staff to begin thinking about how to incorporate those concepts in our daily activities” (City of Corvallis, 2010). According to interviews with city councilors (3.18; 3.25), this goal setting was the formal launch of city initiatives on sustainability to date, and facilitated the city support of the Coalition. This goal setting enabled an inclusion in the budget for a consultant to assess current operations and make recommendations for actions to integrate city processes, improve communication, and track and lower their overall footprint.

In 2005, the chosen consultants completed the audit of current city programs, waste streams etc, and submitted their recommendations in two reports (Zero Waste Alliance, 2005). By working closely with city staff and educating them along the way, some felt this process helped to draw out new creativity and support from staff for the initiative and goals (interviewee, 1.22; 3.18; 3.25). One of the consultant’s recommendations was to hire a sustainability coordinator who would oversee implementation of the city’s organizational sustainability policies, and coordinate activities between departments. The sustainability management system, which developed beginning in 2007, is now transitioning into an “integrated, organization-wide system” (Sustainability annual report, 2008).

*Box 5.4 – Conflict between the Triple Bottom Line and The Natural Step in Corvallis*

In the first two years of annual reports from the city of Corvallis’ organizational sustainability initiative, projects and policies were categorized under the four Natural Step guiding objectives. However, the City transitioned to the Triple Bottom Line in 2005, and has dropped the Natural Step from any of its documentation. City staff claim that while they might privately support the values of the Natural Step, municipal organizations more easily support TBL models because it is easier for people to absorb, and doesn’t mandate specific behavior.

While the Natural Step had built support for strong sustainability in the ‘guiding objectives’ around the community, more than one interviewee cited the “elephant in the room” as being the city’s rejection of the Natural Step in favor of the triple bottom line framework, and Coalition Action Plan’s comparison between the two models (see Figure 2.2). In the Action Plan, the TBL model is criticized for showing the environment as only one of three important elements to think about, which “allow[s] trade-offs” (Corvallis Sustainability Coalition, 2008), and does not accurately portray human systems as reliant on ecological systems.

In parallel, the Corvallis-Benton County Economic Vitality Partnership (EVP) was launched in 2005, as “a consortium of organizations, including non-profit, government and private industry that meet regularly to coordinate and positively impact the economic development efforts in Benton County” (CBC-EVP, 2006). They had the goal of finding the appropriate goals for financial growth and new development that would diversify the economic base when it became apparent that Hewlett Packard was slowly shedding jobs in the area<sup>21</sup>, and that the “need for comprehensive economic development planning” had been apparent for many years (CBC-EVP, 2006). The EVP hired consultants whose “primary objective was to ensure the community would be afforded multiple venues and opportunities to help shape the resulting

<sup>21</sup> Also, jobs in the timber and agriculture industries have been declining steadily in the area, with no sign of recovery (interviewee 2.4; CBC-EVP, 2006).

plan” (CVC-EVP, 2006). This group, and the resulting Report and Action Plan, evidenced strong support for sustainable alternatives in local business practices<sup>22</sup>.

The EVP followed several stages in the public process, which are listed below. These stages are important, because as will be addressed in following sections, the Corvallis Sustainability Coalition closely followed this model in their own Action Plan process.

### Economic Vitality Partnership

- Initial Survey – 600 respondents provided feedback “to help frame public opinion” (CVC-EVP, 2006). The result of this survey highlighted a long-term community debate on growth. While many wanted to bring in new business, they also hesitated to allow the population to grow<sup>23</sup>.
- Review – going back to 1995, the group reviewed 24 prior community documents that addressed economic development, including the Corvallis Natural Step Strategic plan (2004), the City and downtown strategic plans (1995, 2004), and the city’s sustainability recommendations (2005).
- Town Hall meeting #1– The town hall meeting, attended by 350 residents, was designed to “reconfirm public goals” and test the “strategy and action concepts” that had been designed. The group used small breakout groups, each with a trained facilitator, to discuss ideas and gather new input.
- Town Hall Meeting #2 – 200 residents attended the second meeting, where the final plan was presented, and the residents helped to develop ideas to implement the plan.

The final plan, which was called “Prosperity that Fits”, contained several direct references to the importance of sustainability for economic growth. For example “Integrating sustainability and economic development” was one of four focus areas. The push to embed sustainability as a tenet of the EVP plan should be credited to the Natural Step leadership who participated and who persisted in keeping sustainability in the conversation (interviewee, 3.4).

In 2007, the City Council allocated a small amount of funding in the budget for beginning a process of community sustainability, which had been the second stage of their sustainability effort since the organizational plan was developed three years earlier (interviewee, 1.22; 8.5). In parallel, and as some argue, because of this action by the city, the Corvallis Sustainability Coalition was launched in January 2007. Initially, the Coalition was developed within the Corvallis chapter of the Natural Step Framework. Meeting in the Benton Chamber Coalition office (a chamber of commerce), representatives from 25 different community organizations were brought together to discuss improved cooperation and coordination between sustainability activities in the community. Many of those initial participants have remained involved, and have evolved into the coalition’s core leadership. According to interviews, the TNS leadership put together a list of organizations and people who represented branches of the Natural Step’s “guiding the municipal system” tree (figure 5.2). The current facilitator came to that first meeting, and was able to carry the torch of leadership responsibility, as an experienced citizen activist with a long background in city administration in Virginia.

The City of Corvallis’ Vision 2020 document formed the basic structure for the Coalition Action Plan, and the city council funded the Action Plan as a means to support the implementation of Vision 2020.

---

<sup>22</sup> In 2006, the EVP developed a web survey in order for residents to rank the action concepts that were developed. Three of the top five concepts related directly to support of sustainable businesses and green land use (CBC-EVP, 2006, 13).

<sup>23</sup> According to multiple interviewees (2.4; 3.18; 4.19; 4.28), the “growth vs. no growth” debate has pervades most public processes in Corvallis for many years, and is not resolved<sup>23</sup>. The survey also highlighted a community interest in “a healthy town and environment”, and “environmentally friendly/sustainable businesses”.

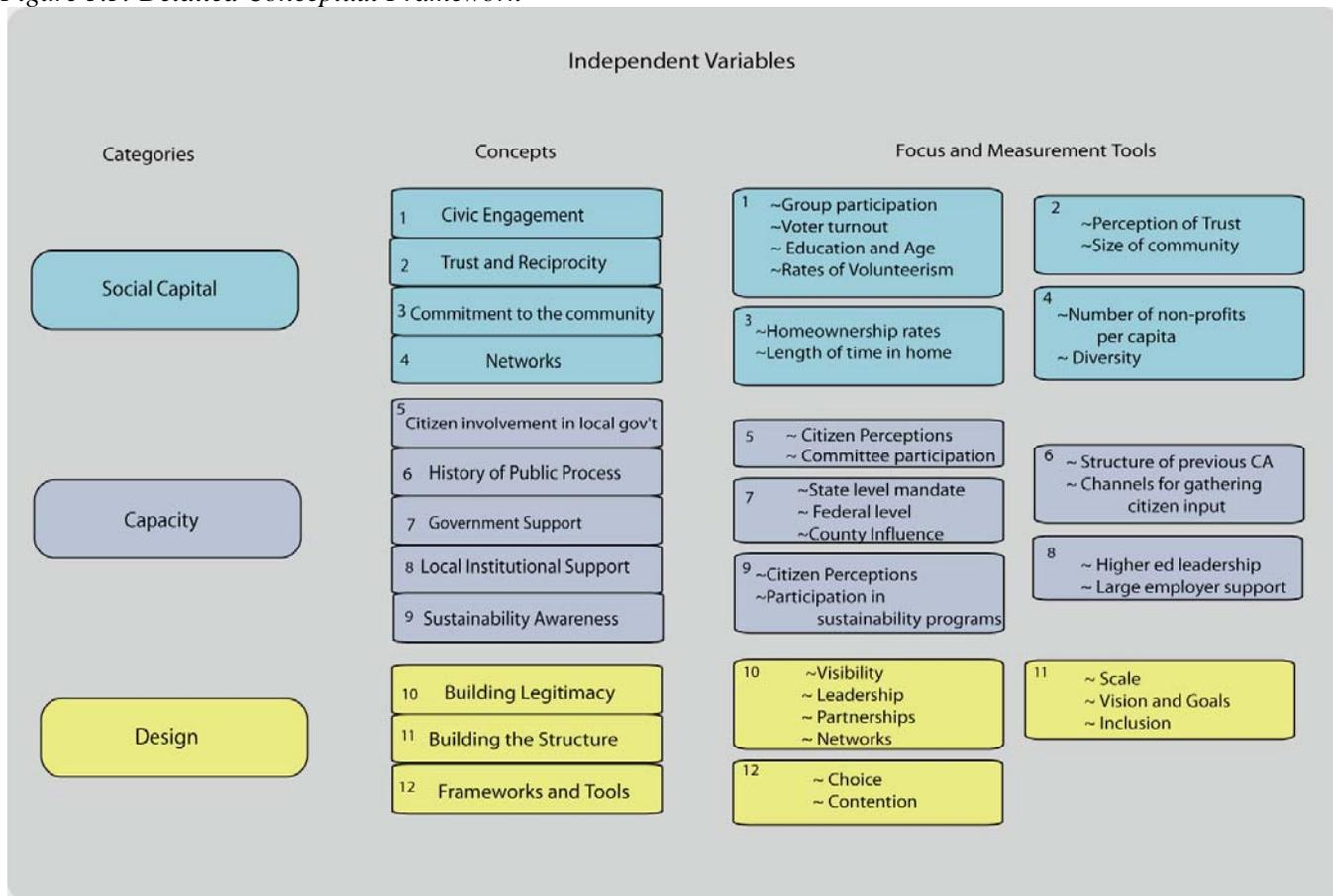
“The partner agreement between the City of Corvallis and the Coalition stipulates “To best position Corvallis to begin implementing Vision 2020, the partners will work together to develop a Sustainability Action Plan targeted for completion by December 2008” (Corvallis Sustainability Coalition, 2008, 12). The success of the Town Hall meeting structure from the Prosperity that Fits project led people to push for continuing that structure in the Coalition. The Coalition brought the community together three times over nine months, and made extensive use of volunteer time between the meetings to perform research, combine all the feedback, and plan for the events (Corvallis Sustainability Coalition, 2008).

When the Action Plan was finished, the city government took steps to gauge their role in its implementation, and has since further developed their partnership with the Coalition. The sustainability team developed a matrix containing each action item from the Plan, determining for each one what role the city would need to play, from none to a leading role (interviewee, 1.22).

### 5.5 Categorizing Community Conditions- The Explanatory Variables

From the complex story above, what can be drawn out into conditions of broader applicability? The conceptual framework developed throughout the case study phase, and a complete visual representation of the categories, concepts, and measurement tools is shown in figure 5.5.

Figure 5.5: Detailed Conceptual Framework



In order to maintain a degree of clarity as well as an understanding of the complexity of this storyline, the following exploration of variables will be introduced under the categories, broken down into the set of concepts attached to them and the measurement tools. For some readers, this may seem an overly

academic approach; however, it is the only way that an element such as ‘civic engagement’ can be addressed through its manifestations in the Coalition’s evolution, connected to specific literature, and validated with compelling measurements in the survey and local statistics.

### 5.5.1 Social Capital

One of my most powerful tools in the interview process was the ability to ask the city’s core leaders “what is it about Corvallis that has facilitated this degree of success in pursuing sustainability?” and to hear how often their responses significantly overlapped. Upon introduction to the community, it became quickly obvious that I could not ask people about their opinion of ‘social capital’, for the simple reason that it is not a categorization people use, and remains too abstract to easily explain. However, interviewees did begin to tell me about characteristics of the community that I could clearly see were themselves elements of social capital. Most of these elements of social capital significantly influence one another. For example, The Corporation for National and Community Service (2010) lists several factors that positively influence volunteering in general, such as education, attachment to the community, and the number of non-profits per capita. Each of these found their way into people’s comments on Corvallis, and my analysis of vital conditions.

#### *Civic engagement*

According to Putnam (2000, 134), “the touchstone of social capital is the principle of generalized reciprocity”. There are five measurements that have been used to gauge levels of civic engagement in the community: formal participation in groups, voter turnout, rates of volunteerism, age, and education. Each of these measurements has been validated previously in the literature review as indicative of civic engagement. Three quarters of my interviewees cited the fact that Corvallis is a generally ‘involved’ and ‘engaged’ community as indicative of the ability for the Coalition to succeed. The following data strongly supports this claim.

#### *~ Formal Participation*

I first began looking for information about formal participation in groups in the community, which was one of Putnam’s (2001) approaches. These are the types of engagement that “involve repeated, intensive, multi-stranded networks” (Putnam, 2000, 22). In order to gather the needed data, several questions in the survey approached formal membership, drawing directly from Dale’s work (Dale et al., 2009). Her team’s Community Livability Survey (CLS) asked about engagement in three different ‘formal’ arenas that are positively linked to social capital: sports, religion, and community groups. I used their question in order to better understand where the most common face-to-face interaction comes from, at the formal level.

Oregon in general is a particularly non-religious state, according to Gallop polls (Jones, 2004)<sup>24</sup>, which was correlated by the results of the survey; 52% of those who responded claimed that they ‘never’ take part in organized religion, and only 2% (1 person) responded that they ‘always’ take part in religious services in a typical week. This finding would suggest that Putnam’s (2000) emphasis on religious communities as a vital source of general civic engagement does not play a large role in Corvallis. Further, those surveyed are not sports oriented; 70% claimed that they ‘never’ or ‘rarely’ take part in organized sports, which might have provided opportunities for linkages outside of work, and conversation on a wide variety of topics (Putnam, 2000). The results show the opposite trend for participation in groups. 75% of respondents marked that they ‘often’ or ‘always’ “take part in a group activity or meeting outside of work” in a typical week. Considering the survey was taken at such a meeting, this result may well be a-

---

<sup>24</sup> Oregon tops the Gallop poll listing of ‘U.S. States with the Most Non-Religious’, at 18% unaffiliated.

typical for the community as a whole. The results do show that meetings are a primary source for formal engagement in this group.

While Putnam acknowledged that formal membership in professional associations does not guarantee active participation of any kind<sup>25</sup>, another question from the CLS sought to address the diversity of groups to which people belonged. 83% of respondents confirmed that they were “part of a professional association or community”, with 50% claiming membership in at least two such communities. While this question did not specify the locality of these groups, at least two are indicative of local networks, volunteer and religious. The results are:

*Figure 5.5a: Formal Participation in Associations*

Professional Association or community	Percentage of respondents
Professional Network	37%
Volunteer groups	39%
Union membership	7%
Education group	24%
Trades association	9%
Religious community	11%
Media Network	9%
Other	20%

While the survey was performed at a ‘volunteer group’ meeting, 60% of respondents didn’t claim formal membership, which is itself indicative of representation by the larger community at the meeting. One criticism of this question may be the vague and subjective nature of these categorizations. For example, for many, the Coalition itself could fall under a professional, volunteer, and education network (interviewee, 3.11).

*~ Voter Turnout*

As previously mentioned, voter turnout is a common proxy measurement for civic engagement, and thus an indirect measurement for social capital itself. Putnam has done an enormous amount of data gathering in relation to voter turnout to solidify his argument on the decrease in social capital in the US since the 1960s. For example, he claims that turnout for presidential elections hovered around 50% of eligible voters nationwide in 2000 (Putnam, 2000), 32). By calculating the total number of ballots cast in the 2000 election as a ratio of the total population of Corvallis (minus non-citizens), the result shows that just over 60% of eligible voters cast ballots in the 2000 election. However, this data may be skewed by the presence of the student population, who may have cast ballots in their home community.

If one looks at turnout among registered voters, Corvallis’ presidential election turnout in 2000 was 84%, averaging 82% for all presidential elections in the 1990s, and averaged over 89% in 2004 and 2008 (Benton County Elections archive, 2010). This is on par with national averages of registered voters; 86% of registered voters claimed to have voted in the 2000 election (US census, Corvallis), but is significantly lower than the state average of 92% for registered voters for the 2008 election. Overall, Corvallis shows only a slightly better turnout than the national average overall, which makes voter turnout an interesting

---

<sup>25</sup> While the number of and membership in national organizations has grown over the years, Putnam argues that most of this ‘membership’ is actually to professionally run organizations whose ‘members’ are merely financial contributors (see Putnam, 2000). Therefore, these types of organizations do not necessarily contribute to the network elements of social capital.

contrast to the otherwise strong evidence of civic engagement. There will be further analysis of voter turnout data in the following chapter.

### *~Education and Age*

While the other measurement tools for social capital are more direct expressions, education and age are an indirect measure, as their relevance is only to the potential for social capital, and do not indicate its presence. There is consistent statistical correlation between education levels and civic engagement, volunteering specifically (Putnam, 2001; Corporation for National and Community Service, 2008). Corvallis is an extremely well educated community, the highest per capita in Oregon [US Census, 2008]. 94.4% of the population has earned a high school diploma, almost 54% has at least a Bachelor's degree, and 27% of the population has an advanced degree (US Census-Corvallis, 2008). Therefore, as there is a direct correlation between education and civic engagement, the evidence supports other claims that Corvallis is a highly engaged community.

Several interviewees mentioned the importance of Corvallis as “developing into something of a retirement community” (interviewee, 3.18). The age spectrum has shifted in the last number of years. In 2000, 16% of the population was over 55 years old (US Census-Corvallis, 2000); that figure had risen to 19% by the 2006-2008 American Community Survey (US Census-Corvallis, 2008). Putnam (2000, 119) correlates volunteerism with parents of school-aged children, late thirties or early forties. However, he also claims that today's senior population “is largely responsible for the boom in volunteering in recent decades, and they have resisted most staunchly the decline in participation in community projects” (Putnam, 2000, 130). Of the participants in the Coalition, I would estimate that at least 40% are over 55 years old; of the survey participants, 45% reported to be over 55. This finding correlates with new data on the average age of volunteers.

### *~Rates of volunteerism*

Volunteerism in this context is different from formal participation as a component of civic engagement. Volunteerism here is connected to a certain degree of service to others. For example, if formal participation refers to the membership in an organization, than volunteerism would refer more specifically to those serving on committees, or who actively donate their time as a service to others. Putnam (2000) argues that formal participation often leads to much greater rates of volunteerism, but recognizes that they are distinctly different elements. Many of the Coalition leadership with whom I spoke (interviewees, 2.11; 2.24; 3.4; 4.9; 4.28) explained that they have been actively involved as political, environmental, and/or social activists and volunteers as a significant element in their lives

The survey asked two different questions about volunteerism, in order to differentiate between volunteerism focused on social capital (general levels of volunteerism), and volunteerism specifically for the Sustainability Coalition. While gathering this information was an important exercise, the question was poorly presented. One significant error was that I broke down the hour increments into 0-5, 5-10, 10-15, and 15-20 hours. However, 0 hours per week is fundamentally different from 5 hours per week, and this difference was lost. The results indicated that 33% of those surveyed volunteered more than 5 hours per week, with 67% indicating they volunteer between 0 and 5 hours per week.

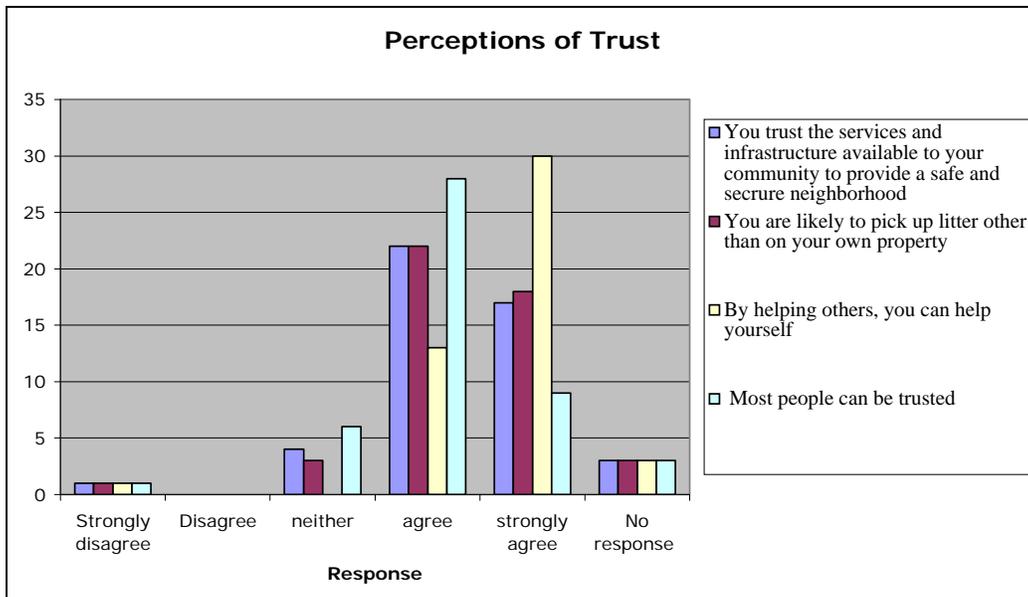
### ***Trust and Reciprocity***

Trust and reciprocity has been linked to statistics like crime, as well as to poll responses about openness and kindness to strangers, and generalized trust in people. Corvallis' initial 'condition' of being a small community is beneficial to the possibility of generating a sustainability initiative.

*Perception of Trust*

In order to gauge community trust, I again drew from the CLS. Participants were asked to state the extent they agree with the following statements.

*Figure 5.5.b – Perception of Trust*



The widest spectrum of results in this question resulted from the statement “most people can be trusted”. Further, it is the question to which most people were ambiguous. This set of questions will have likely produced some who wrote what they felt was the most sought after response; that is, they want to claim that they feel connected to their community, and expressed confidence in the importance of altruism for successful communities.

Acceptance of others implies a trust in others. To gauge the community’s perception of their acceptance of others, I drew on another CLS question to ask “What kinds of people do you feel are accepted as part of your community?” The results are shown as percentages of those who responded to the question.

*Figure 5.5c – Acceptance in the Community*

“Kinds of people”	Never	Rarely	Sometimes	Often	Always
Homeless	0	28%	49%	15%	7%
Newcomers	0	3%	25%	43%	33%
Racial difference	0	0	32%	41%	27%
Religious difference	0	0	15%	64%	21%
Accessibility difference	0	0	16%	61%	24%
Low income	0	5%	46%	28%	21%

Interestingly, the largest spread of opinion was on the community response to newcomers. It was commonly felt that homeless and those on low income are the least well received, and racial issues are obviously still felt, as 32% of respondents felt that other races are only “sometimes” accepted in the community.

### *Size*

Like age and education, community size merely supports the potential for social capital through a generalized finding that smaller communities tend to have higher levels of generalized engagement, as a measure of social trust and mutual support through working on community projects and “informal helping behavior”. (Putnam (2000, 119), Reciprocity may be linked to reputation and face-to-face knowledge of those in the community, which would benefit reciprocal behavior in prisoner’s dilemma situations. Corvallis’ small size may be argued to benefit its social capital and generalized reciprocity.

### ***Commitment to the community.***

Commitment to the community is another general attribute of social capital. The more committed one is to the community, the more likely to be involved in elements of community life. There were two measurements used to generate an estimate of homeownership. The resulting estimate shows that over 50% of the Corvallis population has a long-term financial commitment to the community<sup>26</sup>. Further, assuming that the student population (20,000) is almost entirely a renter population, than one might argue less than 30% of permanent residents rent rather than own their home. According to Corvallis’ annual Citizen Attitude Surveys, in 2006, 63% of respondents claimed to have been in Corvallis for at least 10 years (City of Corvallis, 2006). Nearly 44% of the population had lived in their home since 2004, as of the 2008 American Community Survey (Census-Corvallis, 2008). 26% of Corvallis residents have lived in the same home for since at least 1999. Statewide, 38% of residents claimed to have moved in by 1999 and 64% of housing is owner occupied.

One survey question attempted to address commitment to the community; the statement, from Dale’s CLS, asks respondents to rate their agreement with the statement, “You feel connected to your community”. 87% of survey participants either ‘agreed or ‘strongly agreed’ with the statement. From the responses to this question, survey participants claimed overwhelmingly to feel connected to their community. The Citizen Attitude Survey (city of Corvallis, 2009) generally correlates with this response. 74% claimed that it was ‘somewhat likely’ or ‘very likely’ that they would remain in Corvallis for the next five years.

### ***Network strength***

In Corvallis, I chose to address the existing networks in the community simply, as measured by the number of participatory groups in the community, and through the diversity of the community. The smaller an ethnic population, the more isolated they are, and therefore the less chance for information and inclusion, within their group and with the larger community. This is a different take on formal participation, which addresses involvement for its attributes to the community; networks address involvement for its attributes to communication and information flow.

The sheer number of non-profit groups in Corvallis corroborates with the argument that Corvallis residents are highly participatory people. There are active chapters of the League of Women Voters, the Rotary Club, The Elks club, and the United Way, which are all face-to-face meeting organizations with long histories. According to public tax information on non-profit organizations, there are 678 non-profit organizations in Benton county, worth over \$1.3 billion (Tax Exempt World, 2010; Corvallis-Benton Chamber, 2010). The Corvallis-Benton Chamber coalition (2010) has 200 civic organizations as members. These organizations include churches, fraternities, foundations, associations, the local arts

---

<sup>26</sup> Using US census data (Corvallis, 2008) on owner-occupied housing and the number of occupants per household, I determined that 22,569 people in Corvallis live in their own home. However, using the percentage of owner occupied housing, and the total population, than 23,650 residents own their own homes.

center, and local chapters of labor organizations, for example. Virtually all non-profits require some volunteer time to make them run, and most have participating members.

According to the US census bureau, the diversity in Corvallis has increased between 2000 and 2007. As of 2007, only 83% of the population was white, compared to 89% 1990. The bridging ties that are so important to building strong networks for collective action take strength from engaged minority populations. Multiple interviewees cited a continued need to reach out to the Hispanic population in Corvallis to participate in the Coalition. This bridge has yet to be built. “There were major portions of the population that were not represented at the town hall meeting”. But it is a work in progress, and it is something that at least they are aware of, and recognize that we’re going to have to do better on.” (interviewee, 1.22) One criticism that brought to the Coalition was that “it was not broad-based enough” (interviewee, 1.22). Outreach efforts to the other sectors of the population and the business community have been minorly successful, and most interviewees believe the coalition does not represent the whole spectrum of the community. In defense, more than one coalition leader mentioned the ‘s-curve’ of new technologies<sup>27</sup>. There was no point wasting scarce resources going after ‘laggards’ when the early adopters were still just coming on board. The critical mass of people would participate once they had secured 5-10% of the population (interviewee, 2.11). Overall, by these two measures, Corvallis has very strong networks as a measurement of social capital.

### **Wrap-up**

Social capital in Corvallis is to be quite strong according to the majority of measurements. Census data corroborates the reports of interviewees, and therefore also supports the use of that data to measure elements of social capital. According to Fukuyama (1999, 21), “An adequate measure of social capital needs to take account the nature of the collective action of which a group is capable- its inherent difficulty, the value of the group’s output, whether it can be undertaken under adverse circumstances, and so on”. By looking through the frame of a successful collective action initiative focusing on sustainability, I have attempted to draw out the parallels between this group’s experiences and the existing literature on collective action. The salient elements of social capital that have causal connections to current sustainability progress have been derived from conversations with the ‘experts’, those who have been involved from the beginning. Therefore, the challenge for subsequent case studies is to test the degree to which measures of social capital are also high, and whether weaknesses in social capital have impacted their likelihood of creating an ICSP movement.

### ***5.4.2 Capacity***

Social capital is the realm of individuals within the community, and their connections with themselves. Capacity is the realm of the local government and institutions, and their ability and willingness to work with the community. Further, capacity can be deliberately built up, whereas social capital evolves as a benefit of other processes, and deliberate attempts to create it frequently fail (see Dale, 2001; Putnam, 2000). Both elements are vital to the success of an ICSP, and are mutually beneficial. Strong networks of ties in the community have been shown to facilitate certain elements of capacity, which here are explored from the specific focus on elements that have impacted the ICSP initiative in Corvallis.

---

<sup>27</sup> The S-curve is a widely used technological model, which argues that new innovation follows a typical diffusion pattern into the market. Once the ‘pioneers’ and ‘early adopters’ (5-10%) of a population, come on board, than a precipitous jump follows where the majority of the population rapidly adopts the new innovation. (see Rogers, 1995).

### ***Citizen Participation in Local Government***

Citizen participation refers to the channels available for citizens to actively bring their views to city government and be heard on issues of importance to them. The primary manifestation of this input is through citizen participation on city committees and commissions. There are currently twenty-one advisory boards and commissions for the city, which provide background research and recommendations to the city council and staff on various topics of importance (City of Corvallis, 2010). Each commission is made up of citizens<sup>28</sup>. Certain commissions, such as the Planning and Budget Commissions, hold significant power within the city government. The Planning commission is comprised entirely of citizens and can accept or decline local land use permits (city of Corvallis, 2010). However, these decisions can then be appealed to the city council, beginning the process again (city staff, pers.comm. 8.2). Another citizen commission, the Committee for Citizen Involvement, supports the Planning Commission by “focusing on facilitating citizen involvement in land use planning and decision making” (City of Corvallis, 2010). The Budget commission, which has final authority to approve or reject the year’s budget, is comprised of the nine city councilors and nine citizens. As one city councilor put it, “we have to talk to citizens; they control our budget” (interviewee, 3.18/2).

As I mentioned before, Arnstein’s (1969) ladder of participation (see box 2.2) is illuminating in gauging the degree of citizen power in relationships with local government. I developed a checklist of questions for each of the eight ‘rungs’ on the ladder (see Appendix 5.4.2 for the full list of questions) in order to investigate how Corvallis’ structure reflects the city’s openness to citizen power and public input in general. The structure of city commissions qualifies in certain ways as a ‘Partnership’<sup>29</sup>, although there are elements of ‘Placation’, which is a lower rung. Arnstein acknowledges the artificiality of the separations in the face of real-world complexity; however, the model remains helpful. Citizens and the local government, citizens apply and are approved to a commission/committee by the mayor, which is suggestive of ‘placation’ on the ladder, but the city planning department claims this check only seeks to maintain a balance of viewpoints and levels of expertise among the committee members (City of Corvallis, pers.comm., 7.13). According to city staff, newly appointed members of the Planning and Budget Commissions receive an average of four hours of formal training during beginning their term, and on an on-going basis as needed. Further, commissioners are provided with information, and occasionally stipends, to attend outside training being offered in the area (City of Corvallis, pers.comm. 7.13). Formal training of commissioners provides a degree of empowerment as it enables improved decision-making and legitimacy with the community and city council. While most of the commissions and committees are simply information gathering arms for city council, nevertheless this does serve to improve the awareness of citizens, and institutionalizes a channel for concerned citizens to be heard and a venue to gather together around specific issues. These elements promote the ‘partnership’ designation, in which citizens have small amounts of power within their local government, a step up from tokenism implied by the ‘placation’ designation.

### ***History of public process***

Public process is the intentional seeking-out of feedback and input from residents by decision-makers. Public process plays a critical role in decision-making in Corvallis at many levels (interviewee, 4.19). This has been evidenced through the extensive community involvement in the development of both the

---

<sup>28</sup> According to the Director of Planning, while there are three vacant spots on the Planning Commission, only two applicants have come forward thus far. He emphasized that they would continue outreach efforts to fill the final spot (pers.comm. 7. 15).

<sup>29</sup> In Arnstein’s model (1969, 9), partnerships exist when power is “redistributed through negotiation between citizens and power-holders”. Elements of this rung claims that planning and decision-making is somewhat shared, and the ground-rules are not subject to change, which are both true for commissions. Most commissions do not have formal power to enact policy or determine use of funding, which lowers the relationship to ‘placation’, which is an element of tokenism within Arnstein’s model.

Vision 2020 document and the Prosperity that Fits Plan (see 5.4). By focusing on economic development first, those involved could embed support for the process through something “that everyone could get behind” (interviewee, 2.4). Therefore, the city and community had seen how a partnership like this could work, and its benefits. The impact this public process had on the evolution is obvious by the fact that Coalition modeled the town hall meeting structure directly on the EVP process. Several interviewees generalized this trend as historically unique to the northwest because of their pioneer and independent mentalities (interviewee, 4.20; 2.4). One community leader went so far as to claim that Corvallis suffered from “process-itis”, claiming that in certain instances, the unending public processes resulted in “more talking and less action” (interviewee, 2.4). By having recent, successful community-inclusion processes, Corvallis had built momentum, understanding, and refined its structure of public process. Several interviewees (1.22; 2.4; 3.18; 4.28) felt there were direct causal links between the Vision process, the EVP process, and the fact that the Coalition drew 600 people to their first town hall meeting.

The deliberate seeking out of information from citizens for input on issues has taken several forms in Corvallis. For many years, Corvallis has engaged in annual Citizen Attitude Surveys, regarding perceptions about various services, the rate of growth, among other things. This is a type of public process, as is the seeking of public input and proposals for the use of the block grant funding. Overall, Corvallis’s strong history of public process has served the community very well in terms of the institutionalized cooperation between the community and the local government and staff. It has significantly contributed to the success of the ICSP initiative as it currently stands.

### ***Government support***

The city, in its internal sustainability work, has been critical in its support of the development of the initiative. The consultants who worked with the city to document their current practices in 2005 showed where positive actions were happening, and also the lack of coordination between different department’s practices and actions. This process supported the creation of an ethic, and the structuring and naming of that ethic as sustainability was fundamental to the attitude shift within the city government (interviewee, 3.18/2). “What some people [on the council] had always envisioned, was, let’s get our own house in order, and then take it out to the public, and say we want you to do this too” (interviewee, 3.18/2). Other levels of government have also provided important support.

Several interviewees (3.18; 4.19) mentioned Portland as having an important impact. As a city, which pushes innovative state legislation, Portland has shown that sustainability is a valid, and even financially lucrative endeavor, as is evidenced by the \$300 million carbon, water, and energy neutral, mixed-use building going up. Further, financial and political resources are available programs that have developed to support Portland’s sustainability planning (see Portney, 2005; Rutland & Aylett, 2008).

Corvallis has received important policy support from the state of Oregon. The state’s land use laws dictate that there is significant community-level attention to issues of sprawl, citizen participation, and long-term planning. This piece of state legislation is directly responsible for the participatory structure of the local government’s commissions and committees, among other elements (interviewee, 1.22). While the state government has developed a sustainability mandate for state agencies, I could not determine if it has had any particular impact on the activities in Corvallis.

### *Box 5.5 Energize Corvallis*

By highlighting one program currently in development, I hope to illuminate two things: first, the incredible complexity and inter-tangled nature of the various explanatory variables, and second, a graphic aid to the story of where the Coalition is now, and where it's going. The birth of awareness of sustainability among the citizens of Corvallis is also linked to the Energy Trust of Oregon, which is a Portland-based non-profit organization with the mission is to help people "benefit from saving energy and tapping renewable resources". The organization was created through funding from the state government to help citizens and businesses increase efficiency and transition to alternative energy sources (Energy Trust of Oregon, 2010). One of the city's first actions related to sustainability was a partnership with The Energy Trust of Oregon, who sponsored a program in Corvallis to help homeowners audit their energy use to find where they use energy and how they might conserve energy.

On April 12<sup>th</sup>, I attended a presentation by the Corvallis City Club, which is a monthly gathering sponsored by the Benton Chamber Coalition. The presentation focused on energy use in Corvallis, and was given by the Coalition's Energy Action Team leaders. The Energy Action Team is tasked with implementation of two goals from the Coalition Action Plan: To reduce energy consumption by 50%, and to make Corvallis a net energy producer by 2025. The Energy Action team won funding through a public process to dole out Federal Energy Block grant funding, in cooperation with the Corvallis Environmental Center. Their project is to contact the homeowners who participated in the audit program and to help implement their recommendations through unique software that they have designed and a volunteer-staffed helpline to answer questions about available rebates, local installers, and loan application support. Another grant program has developed a revolving loan fund, which provides low-interest loans to homeowners in Corvallis for appliance upgrades and weatherization projects. This program is being developed in cooperation between the CEC, the Energy Action team, OSU Student Sustainability Initiative, among others.

See [www.energizecorvallis.org](http://www.energizecorvallis.org).

### ***Local Institutional support***

Local institutions are the businesses in Corvallis whose economic and cultural sway impact the community. Oregon State University represents the largest institution. While OSU is "not the most progressive school" (interviewee, 2.11), the creation of the sustainability coordinator position in 2005, and their active engagement with the Coalition, has lent support for the Coalition and legitimized OSU's commitment to sustainability in the community. The OSU office of Sustainability released its state mandated Climate report in 2009, and according to the director of sustainability at Southern Oregon University, OSU is currently 'leading the pack' (interviewee, of higher education facilities in their programs and planning.

The fact that the Coalition is itself a network of 160 organizations, all of which are locally-based, indicates the increasing level of institutional support, and the clustering of ideologies and goodwill around the Coalition. While there is no formal requirement for joining the Coalition, coalition members frequently present their efforts at improving sustainability at Coalition events, thus supporting both that organization and the Coalition's legitimacy, improving general awareness, and showcasing how pervasive embedding sustainability has become in their community.

Prior to becoming mayor, Mr. Tomlinson helped to bring the Blue Sky energy program to Corvallis in 2006. This 'challenge' was to double the number of residents who chose to pay additional rates for renewable energy. Timing of institutional support is also a key factor that must be mentioned, although it can only be understood in hindsight. The Coalition came into existence, partly because individuals were aware that the city council was considering a community-wide sustainability initiative; OSU's internal work on sustainability began because of the emerging cultural shift and the persistence of the current sustainability coordinator, and expanded with the state mandate in 2007.

### *Sustainability Awareness*

Sustainability awareness is an element of capacity because it has been deliberately developed through the conscious efforts of many individuals and the city. While the goal would be for sustainability to become a norm, thus placing it within social capital, it has not yet reached that point. The current ICSP initiative could not exist without the groundwork laid in terms of awareness in the larger community and within city hall. This is shown in Corvallis through the strong presence of environmental groups, and the existence of chapters of NWEI, TNS, and the awareness raised by OSU and the city's internal work. In terms of measurement, In the survey, I asked people to respond to the statement, "you talk about issues relating to local sustainability with others". This action would have the combined impact of raising overall awareness, and also may feed back into support levels of social capital, as a forum for improved communication in general. 93% of people who responded either 'agreed' or 'strongly agreed' with the statement.

The other measurement of sustainability awareness I used was use of alternative transportation to work, which requires a culture and cooperative commitment on the part of both the local government and citizens. This might be true for an urban area where public transport preceded the personal vehicle; however, in the western US, the car is universal, and public transportation is only slowly making inroads through deliberate efforts and enhanced funding (ODOT, 2010). In Corvallis, ridership in 2009-2010 increased in all areas compared to previous years (Nelson, 2010). Further, census data for 2008 shows that 33% reported to either walk, carpool, take public transportation, or use 'other' means to get to work (US census-Corvallis, 2008). Because of the absence of the bicycle as a transportation option, I assume that the majority of 'others' reference the large bicycle population of the community. According to the 2009 Citizen Attitude Survey (city of Corvallis, 2009), 45% of Corvallis residents take alternative transportation to work, 18% use their bicycle.

The significance of the few individuals who began promoting community sustainability in the mid-1990's, and who lobbied the city council to adopt its own sustainability goals, cannot be overestimated. These few individuals were of vital importance for several reasons; they themselves were established Corvallis residents, they had developed social capital within the movement of active community groups and like-minded city staff. The leadership of the Natural Step and NWEI laid much of the groundwork leading up to the emergence of the Coalition in January 2007 (interviewee, 1.22; 2.11; 3.4; 3.18; 4.28). A core group of people has been working with city councilors for years to introduce ideas of sustainability, and these same people have remained active and visible throughout the process. City councilors first received information in their mailboxes about the Natural Step framework in 1993, and it has been more or less continuously 'plugged' since that point.

### *Wrap-up*

Results from the investigation into the elements of Corvallis's capacity that have impacted its development of an ICSP show how important this category is for success. As vital as social capital was to the culture of engagement that has supported the Coalition's volunteer base, the capacity of the city government to engage and support the community has facilitated action in significant areas, brought in funding, and advanced sustainability awareness. This category of understanding for an ICSP is crucial for success, and Corvallis has very strong histories in each concept.

### 5.4.3 Design

The design of the ICSP is about more than the plan itself, but includes the cooperative structure of Coalition and city leadership, the partner organizations and the action teams. Without these elements, the plan means nothing, because it is the continued participation of these groups that will see the plan through to implementation. The Coalition and the structure of cooperation between the Coalition and the city have each evolved through a unique process and design. As I gathered information, I became aware that specific decisions that were made on both the part of the Coalition and the City have been fundamental to the success of the initiative. The evolution of the design is too contextually unique to be useful in its entirety as a model for others to follow, but by reviewing notes from conversations with Corvallis leaders and the literature, I have drawn out the following three concepts that are crucial to the process of a successful ICSP design, and are themselves unique explanatory variables: legitimacy, structure, and frameworks. This is not to say there are not others, but these three stood out significantly.

#### ***Building Legitimacy***

Through what process has the Corvallis initiative built legitimacy in the community, so that the Coalition has become the central locus of operations for community activity related to sustainability? There are four distinct, but intimately related, angles from which I will address this element: visibility, partnerships, leadership, and networks.

#### *~Visibility*

Visibility relates to both the people involved and the activities of the ICSP initiative. The Coalition and the city actively work to publicize their actions. The Coalition advertises heavily for its events, and has used all of the following methods to educate and invite participants to their meetings: the Coalition website, A Google group, an e-newsletter, posters, mini-flyers, presentations, press releases, the local television station, and the local newspaper (Corvallis Sustainability Coalition, 2008). By using a distinct logo for the Coalition and a local food logo in grocery stores and restaurants, the Coalition has created recognizable branding that permeates larger spheres in the community. Further, visibility determines the success of the organization overall in terms of the mobilization of resources. “The two most consistent predictors of the mobilization of both financial and human resources are the number of public appearances made by leaders and the number of task committees fielded by a group” (McCarthy & Wolfson, 1996, 1083). The Coalition leadership maintains a constant community presence, as will be shown in the graphs below.

The Local 6 brand was developed by the local coop in 2006 and has since been adopted and supported by the food action team (Corvallis Sustainability Coalition, 2010). This is an example of how a goal from the action plan (to support local food) was attached to an existing program through a partnership with local businesses.

Figure 5.5d Branding as an element of visibility and legitimacy



### *~Partnerships*

The city of Corvallis has, since the Coalition was founded, been its most important partner; this relationship has improved the legitimacy of the Coalition. Foresight and personal interest from members of city leadership facilitated that initial relationship. Specific efforts have been made continuously to ‘smooth ruffled feathers’ and ensure that the city remains in board with the Coalition. One member of the Coalition leadership highlighted one such element of the mutual interest in supporting the city’s partnership. As I mentioned before, the city council failed to adopt the Coalition’s action plan following the 2008 set of town hall meetings. According to a community leader (interviewee, 2.11), “the mayor said., ‘the city council needs to put their imprint on this; they don’t feel like this is theirs at all’.” The mayor initiated support for the adoption of two of the action areas in each goal setting (interviewee, 2.11). The structure of the Coalition itself emphasizes communication and building partnerships with diverse groups. The Coalition website highlights the network of partnerships:

“Many representatives of our partner organizations served on Coalition action teams and committees. For example, the Food Action Team included representatives of Beit Am Jewish Community, Benton County Health Department, Crescent Valley High School, Oregon State University, Corvallis-Albany Farmers Market, Corvallis Environmental Center, Ecumenical Ministries of Oregon, First Alternative Co-op, League of Women Voters, Master Gardeners, and Ten Rivers Food Web. The opportunities afforded through collaboration were extremely valuable.”

- (Corvallis Sustainability Coalition, 2010)

### *~Leadership*

Leadership is a critical and complicated research topic in itself. I would like to restrict my conclusions on leadership to the discussion on legitimacy and visibility in the community. Certain key people form the core of sustainability leadership in Corvallis, as is evidenced by the social networks in Figures 5.5 e, f, and g. The mayor is the city’s face of sustainability, puttering around town in a tiny electric car with ‘mayor-mobile’ emblazoned across the back. According to one interviewee, at the first town hall meeting, the mayor actively vocalized his support for becoming a sustainable community as modeled by The Natural Step. This side of the leadership has helped sustainability to establish legitimacy in the community. In their investigation of variables related to mobilization in social movements, McCarthy & Wolfson (1996, 1083) determined that “volunteer labor is rooted in face-to-face interactions between leaders and activists, so its recruitment and maintenance probably depends more on the interpersonal skills of leaders than do membership and revenue levels”. The skills each leader has brought to the Coalition has determined the quality and quantity of sustained participation. Annette Mills, as the Coalition’s facilitator since its inception, plays one of the most crucial, central, and visible roles. Her background in city administration and community activism has guided the development of the entire Coalition (interviewee, 2.11). Unfortunately, she is so critical that several interviewees mentioned the Coalition’s current struggle in relying on her so heavily (interviewee, 2.24; 3.4; 3.18; 4.9; 4.28).

### *~Networks*

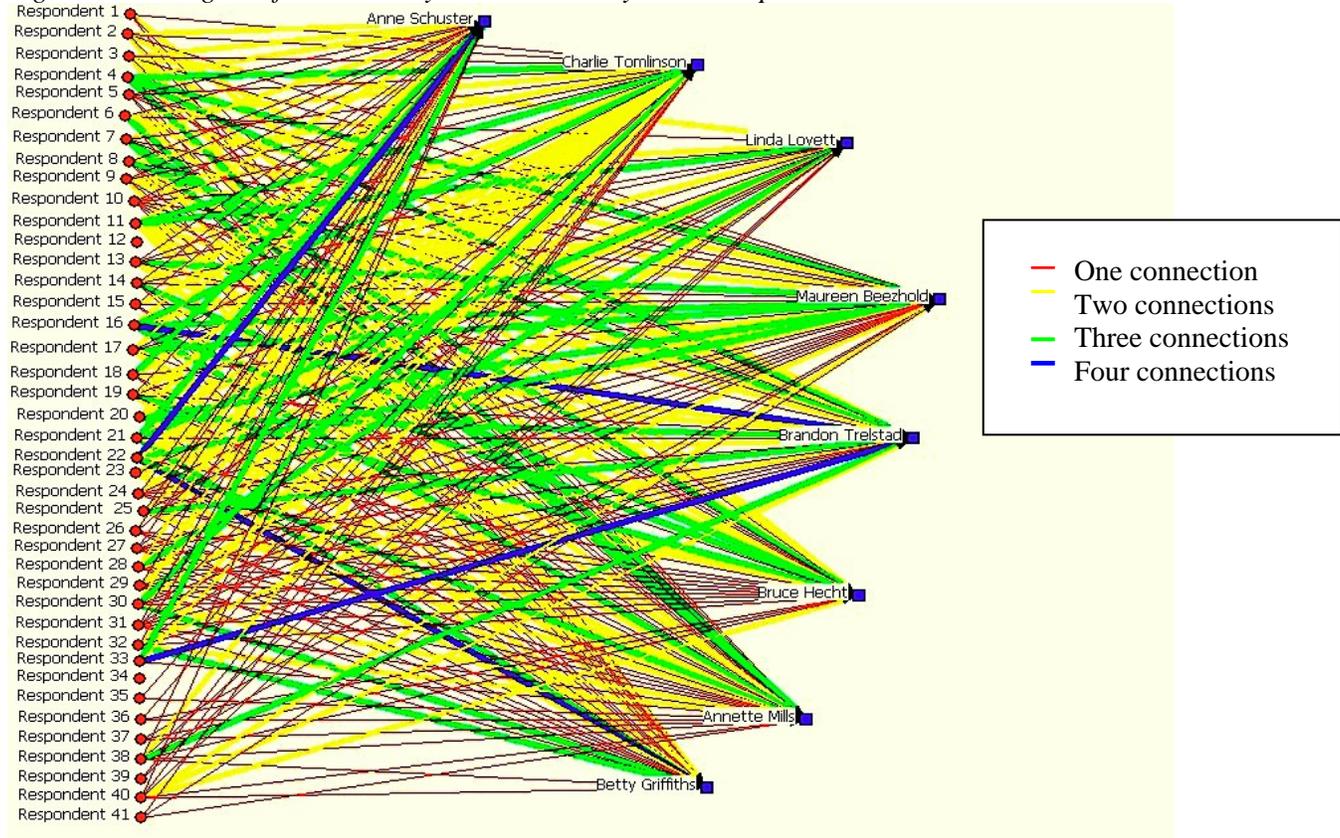
As was introduced in previous chapters, networks form the web of information and resources as a primary piece of social capital, which is then necessary for a successful collective action initiative. The strength of the networks within the initiative is another primary determinant of its success. There are two sets of networks to address that are most relevant here; one network can be found within the coalition itself, and the other exists between the local government, the business sector, and the environmental movement. These two parallel (and overlapping) networks represent a very strong element of Corvallis’ success, and also one that is difficult to untangle. For example, the Prosperity that Fits (Economic Vitality Partnership) project had causal links through the Natural Step leadership to both the structure and participants currently engaged in the Coalition. As this was being clarified for me, the interviewee explained, “These

things are all interlinked, and in a way they probably create a fairly unique environment for this, but you know, I wouldn't say that others can't do it."

The Coalition's mission is to be a hub for networking, to facilitate "communication and collaboration". A great deal of the strength is derived from the representation that the Coalition has within its leadership. They actively sought 'representation' from the community's large employers (OSU, the hospital, and HP) to participate, and actively support cooperation between the other active groups in the community. While this hasn't been completely successful, it remains a goal. As was touched on in the exploration of the Corvallis' build-up (5.4), the Coalition has developed a scale-free network of leaders and peripheral members, which make it very strong. These linkages between individuals and groups with overlapping history, and combined skill sets, is one of the most important elements that social capital brings to the evolution of an ICSP initiative.

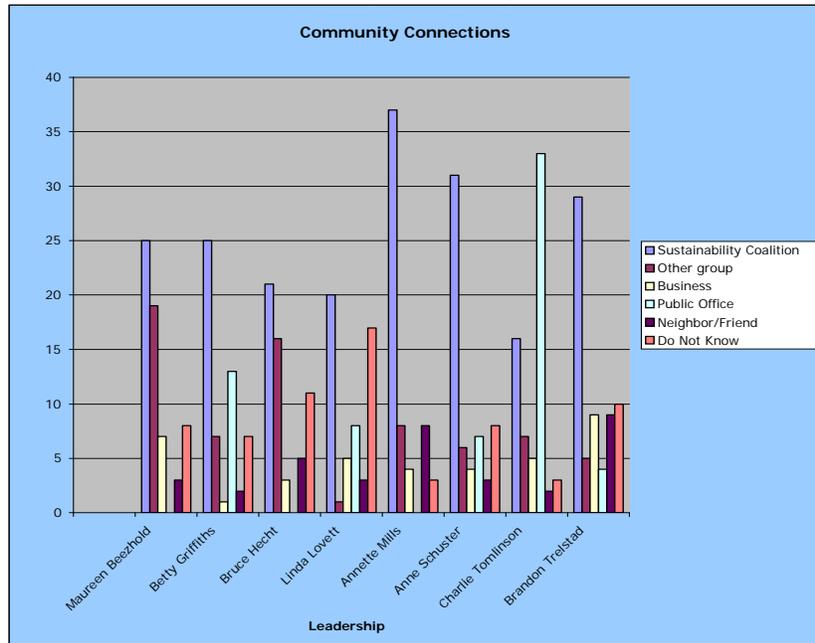
In the survey, I used two different methods in order to create a complex image of the centrality of certain actors, and the extent of the sustainability network in Corvallis. To 'test' for degrees of connectivity within the sustainability leadership, I determined to create a social network analysis grid. For the first element, I gathered the names of eight people who, over the course of my interviews, were the most frequently mentioned when I asked interviewees who they thought represented sustainability leadership in the community. This list included the mayor of Corvallis and city sustainability coordinator, the head of sustainability at OSU, the Coalition facilitator, and a previous city councilor, among others. Survey participants were then asked to indicate how many different ways they were familiar with these people. I was interested in understanding the breadth of their connections in the community. Are these people known as neighbors, from public office, other volunteer groups, or their business? Certain people may be connected through many different paths within the community, and some may be known only for their work with the Coalition, for example. Figure 5.5e is a visual representation of the social network for sustainability as I found it.

Figure 5.5e - Degree of Connectivity in Sustainability Leadership



The most effective way to read this figure is to see that the 41 respondents each declared between one and five ‘ways’ that they are familiar with the sustainability leadership. They could also mark that they weren’t familiar with that person. Those members of the leadership (names on the right) each show a different pattern. For example, Charlie Tomlinson, as the mayor of Corvallis, has the most two degree connections. Brandon Trelstad, as the OSU sustainability Coordinator and a member of Coalition steering committee, has the highest average degree of connectivity. Annette Mills, as the facilitator of the Coalition, has the most connections total. Linda Lovett, the coordinator for the city of Corvallis, has the fewest connections. Another way of visualizing this same data is shown in Figure 5.5f.

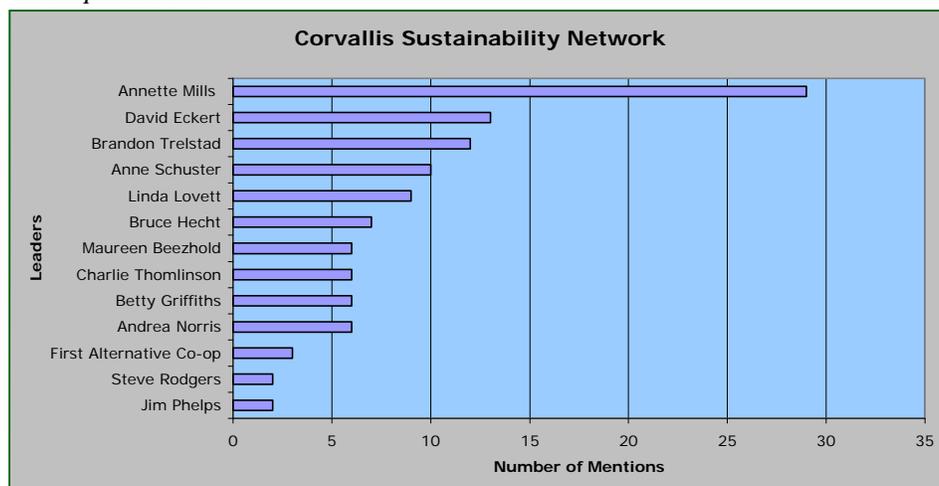
Figure 5.5f – Community Connections in Sustainability Leadership



Here, the different ways that people are most known is highlighted. Therefore, by addressing both visual representations together, the leadership in Corvallis for sustainability appears to be highly robust. This is for several reasons: The eight people chosen each represent different sectors of the community. 1) They are each reasonably visible to the public, some to a much higher degree. 2) They each have a strong secondary element beyond the Coalition, where they are embedded in the community. 3) Among survey respondents, the Coalition facilitator is as well known as the mayor.

The second element of the social network analysis was an open question. In order to understand individuals’ perceptions of leadership in sustainability, participants simply listed the five people they most strongly associated with sustainability in Corvallis. By developing a social network analysis model from this data, I was able to develop a rough sketch of the primary actors in sustainability. Again, because the survey was performed at a Coalition meeting, with Coalition leaders presenting, the feedback is selective. However, these participants are the ones most involved to provide this type of feedback; further, the most named people were not all at the meeting.

Figure 5.5g – Leadership Network



In total, survey respondents listed 50 different people with whom they associate sustainability in Corvallis. However, only 13 people were mentioned more than once, which emphasizes the clustering of leadership, and the impressive visibility and legitimacy attributed to the coalition facilitator, Annette Mills. Three of the top four people represent the Coalition’s executive committee.

### ***Building the Structure***

The structure itself, and the process to create it, may be the most difficult variable to pigeonhole into something like a measurable ‘variable’. However, addressing the structure of the Coalition draws several elements into the analysis that have not yet been dealt with. These elements include the scale, vision and goals, and inclusivity of the Coalition.

#### *~Scale*

As an element of Dale’s case study criteria for her work on sustainable communities in Canada, scale is fundamentally about the “clarity of the issues or the related issues”, and is also one of the “four common challenges to realizing sustainable communities”(Dale, 2009, 230). The ability to link to larger and smaller projects is vital to moving beyond government boundaries to impact “the larger common socio-economic system” (Ling et al., 2009, 230). There are two relevant scales at work simultaneously in Corvallis. These are the narrow-focused, city operations scale, as well as the broad-focused community scale that emphasizes cooperation and collaboration on any project that interests Coalition members. The Coalition’s work, performed now through the active action teams, has shown momentum and success in bringing together passionate people. Further, while the scale of emphasis stems from the Action Plan, which frames activities, it doesn’t present a prioritization of those activities, and its dependence on maintained enthusiasm leaves the Plan and the actual activities open to shifting interests. However, by mimicking a scale-free network in its design, the loose network joined by nodes is itself resilient, as people work within smaller networks on their own projects. No one has their ‘fingers in every pie’, which would be overwhelming.

#### *~Vision and Goals*

The initial goal of the Coalition was to support communication and collaboration on issues relating to local sustainability (interviewee, 2.11). The Coalition has developed an extensive visioning process through both the Vision 2020 process, as well as the Action Plan process. This vision, collectively achieved, shows one way that a design process can be of vital impact to the overall structure of an ICSP initiative.

*Figure 5.5h: Corvallis Sustainability Coalition Vision and Mission*



**CORVALLIS  
sustainability  
COALITION**

**Vision:** Corvallis is a community in which the needs of the present are met without compromising the ability of future generations to meet their own needs. It is a flourishing and thriving city with a vibrant economy that respects, restores, and cares for the community of life.

**Mission:** To promote an ecologically, economically, and socially healthy city and county. We will achieve our mission by using the Sustainability Guiding Objectives and a democratic, highly participative decision-making process.

Chattanooga, Tennessee, which created a very successful, and widely researched sustainability plan, also began with a Vision initiative (Portney, 2005). By considering problems, solutions, and strategies, their community was also able to develop a supportive long-term mentality about their community, and coalesce around their vision for that future.

#### *~Inclusion*

Inclusion, in the ICSP template (Ling et al., 2009) refers to participation and shared decision-making. By approaching the Action Plan using the Natural Step framework and the city's success with the Economic Vitality town hall series, inclusion has been very successful in the community. The community determined the goals to be reached, the metrics for measuring their success, and the timeframes for reaching those goals. The process of inclusion was both vital to the structure of the ICSP overall, and to its current sustained participation in implementation.

#### ***Framework and Tools***

There is no counterfactual that would help one gauge a possible other outcome for Corvallis's ICSP if other frameworks had been chosen. Therefore, I will have to work with speculation and the feedback from community members on the choices of frameworks, and the contention between them in making progress.

#### *~Choice*

The framework chosen by the Coalition and the city structures are a primary element of the design; they determine actions taken, strategies, and principles. The tools determine the route taken, but the people and characteristics determine the tool choice. Not many communities in the United States have signed on with the Natural Step as completely as Corvallis. The Natural Step USA (2010), which is now based in Portland, Oregon, highlights only two communities as the current US case studies: Madison, Wisconsin (home of the University of Wisconsin), and Santa Monica, California. Since the Canadian government has launched formal support of ICSP development, The Natural Step Canada has developed courses to specifically geared to ICSP development practitioners (Natural Step-Canada, 2010). The persistence on the part of the Natural Step leaders in Corvallis were fundamental in its acceptance in the community, and in its

The City has been successful in its own internal processes using the ISO 14001 series and the Triple Bottom Line (TBL) framework. While TBL is not prescriptive and "has no teeth" (International Society of Sustainability Practitioners, 2010), the ISO 14001 does provide specific guides for action and, which makes the two compatible (interviewee, 1.22).

#### *~Contention*

The lack of synthesis between the Coalition and the city in terms of the chosen frameworks may have challenged their cooperation (see Box 5.4). However, I don't believe, and interviewees didn't express, that it has delayed or damaged cooperation between the groups. Because the differences in the frameworks highlight fundamental, even ideological differences, there is little likelihood that any chosen tool would be able to overcome those challenges easily. As I introduced in Chapter 2, The Natural Step and TBL come from two very different perspectives on sustainability. For the most basic work, they are compatible, but TBL does not demand any specific behavior shifts, which many sustainability proponents in Corvallis demand is needed.

The reason for the city's choice not to support the Natural Step appeared more political than anything else. The city council does not believe that people would get on board with the severity of the system conditions, and their proclamation of the need for genuine social change. At a Natural Step introductory meeting I attended in Corvallis, the leaders mentioned that people frequently are turned off by the

negative tone of the system conditions and guiding objectives (to eliminate something), and that the Swedish roots of the framework may be a source of discomfort for Americans (interviewee, 3.4). Further, members of the Coalition steering committee felt that the city's prominence and power in the town hall process (which they paid for) marginalized the role of The Natural Step as a guiding framework (interviewee, 3.4).

### ***ICSP Challenges***

The city has pulled away from complete support of the Coalition at several key moments, such as the formal support of the action plan, and the failure to fund the sustainability coordinator position. However, while setbacks, these challenges have not stalled projects for several of the most active action teams. Many of these teams have begun forging their own relationships with the city on behalf of their specific work (i.e. The energy action team and the block grant funding for the revolving loan program). Other major challenges that were cited is a larger, American culture issue of not being able to put a “sugar-coated spin” on the real need to move away from consumption patterns and fossil fuel use. As one leader put it, “They want something that’s sugar-coated to make it sound easy; it isn’t easy. You do get the door slammed in your face, you do get marginalized” (interviewee, 3.4). A final note from Corvallis: some work will not get done by volunteers. Only some of the action teams have achieved sustained participation. People believe this is because most volunteers are project-oriented, needing a final goal to stay motivated. On-going communication, grant-writing, and other research-intensive work would be best served through a paid position.

The Coalition, at the point of its inception, had two facilitators. However, the choice was made for one to step down following an event where that person used their position of authority to come out against an urban renewal initiative, which angered both the city council and many of the business coalition partners. It is clear that being an ‘inclusive’ organization that is very visible requires skill with complex political nuances. The current facilitator is now very careful to avoid taking positions on issues of contention in the city, which for some weakens their position as an agent of genuine change in the community.

### ***5.6 Wrap-up***

In total, my findings in Corvallis showed that each fundamental measurement of social capital and capacity is strong in a community that has initiated a successful ICSP. Further, I can speculate that the elements of the design processes that I addressed have fundamentally impacted the current status of the initiative. While I cannot conclude that all successful ICSP initiatives must contain all the variables in order to be successful, this case study does provide a strong baseline to assess other communities’ strengths and weaknesses. There was nothing out of place in my findings; the elements that are expected to be present for a successful collective action initiative were quite strongly present in Corvallis. Further, several of the variables, including Portland, state, and federal levels of support will already be present in the follow-up community studies.

In the research period, I took time following the Corvallis case study to work through the phenomena, and develop the conceptual framework. The following chapter moves through each variable again, developing a comparison between those communities and Corvallis’s findings in terms of the explanatory variables.

## 6 Exploration of ICSP Potential

### 6.1 Introduction

Engaging in two follow-up case studies achieves two primary aims necessary to the strength of the research. First, in order to validate the importance of specific variables from the literature in the context of communities in Oregon, I needed to expand the study sample outward from Corvallis. Second, the current achievement of the Corvallis sustainability initiative provides but one example of a successful community. After tracing back the vital ‘conditions and processes’ in Corvallis, I explored two other communities who have not yet developed a formal ICSP initiative, but that have announced such intentions. The goal was to investigate their likelihood of success based on their unique situation and the strength of their current conditions. Ashland, Oregon has many parallels to Corvallis from a demographic perspective, which reduces the ‘noise’ from extraneous variables. It is a community with high education level, vocal commitment to and support for comprehensive sustainability planning, a university, and a small size. The third community, Lincoln City, is a remote beach community that is making significant headway with community participation and sustainability planning, and exhibits leadership from city hall<sup>30</sup>. Ashland, which received more research dedication, is the primary focus of this chapter. Lincoln City, where only three interviews were completed and several documents analyzed, will be addressed using boxes throughout the chapter, and statistical information on the community is interspersed with the relevant comparative data for Ashland.

Firstly, I will introduce the current level of sustainability work at the city and cooperative level, and briefly highlight why the current level of activity cannot be considered an integrated community sustainability initiative in either case. What will be addressed thoroughly is the relative strength of the explanatory variables, which would support the potential for an ICSP initiative in the future. As each variable was established using solid empirical and theoretical groundings, I feel confident that a successful ICSP initiative will require strong showings in the categories that I have developed. Therefore, to parallel the strategy taken through a grounded theory approach, I went into Ashland as open as possible, seeking out key people who appeared to be ‘hubs’ in the sustainability network; through people’s perspectives on their community, I drew out the strengths and weaknesses of the current situation against the explanatory variables.

From the development of the explanatory variables, elements of social capital and capacity can be tested, albeit less thoroughly, in terms of how Ashland is building momentum towards embedding integrated sustainability planning into the community and city structures. In Ashland, because there is no functioning sustainability organization or formal relationship to analyze, the design category is mostly speculative regarding those concepts. Of course, it is unnecessary (not to mention very difficult) to include all activities and policies that may be relevant to sustainability in the community, especially because there is no common agency or organization to track or coordinate these activities. The current levels of social capital and capacity that can be seen in the community are, as I argue, indication of the potential for an ICSP process to emerge.

---

<sup>30</sup> For a side-by-side comparison of relevant demographic statistics for the three communities, see Appendix 6.1. All of the demographic information comes from the US census. Data for Corvallis and Ashland come from the American Community Survey, 2006-2008, but due to its small size, the most recent data available for Lincoln City is the 2000 National Census.

## 6.2 Community Background

Ashland is a community of 21,600 residents (City of Ashland, 2010), located one mile from an arterial highway on a tributary of the Rogue River, 15 miles from California's border. Within Jackson County, Ashland's population represents only 10% of the total county, whose seat is held north in Medford. Founded as a logging mill town in the 1850's, Ashland experienced the gold rush and was an early connection by rail to several key cities in California (city of Ashland, 2010). Ashland is home to Southern Oregon University (SOU), which, while smaller than OSU at only 5,000 full time students, is considered very important to the community (interviewee, 5.19; 5.26). Much like Corvallis, Ashland actively promotes its location, natural beauty, and culture. The largest and most well known attraction is the Oregon Shakespeare Festival. The festival is responsible for nearly 50% of tourism to the community, and is the second largest employer in Ashland, behind the university (Ashland Chamber, 2010). Together with the Ashland Community Hospital, these three organizations employ 17% of the city (US census-Ashland, 2008; Ashland Chamber, 2010) Economic development and diversity is a primary concern for Ashland, as one-third of land within the city is tax-exempt, and therefore the city is unable to generate revenue from it (city staff, pers.comm., 2010). However, like Corvallis, Ashland has weathered the financial crisis better than the majority of Oregon, with a slightly lower level of unemployment than the state average (City of Ashland, 2010.2). This was reiterated by the tourist information I received on improved ticket sales for the Shakespeare Festival, despite the general state of the economy (OSF, 2010).

Ashland has a similar municipal structure to Corvallis. However, Ashland has no city manager, which is often an expert's position, charged with day-to-day oversight<sup>31</sup>. The city of Ashland, unlike most communities, owns their power and water utilities. Through this public ownership, the city began supporting solar power installation in 1996, and currently offers residents the ability to buy shares in the community solar supply (city of Ashland, 2010). They have numerous independent programs in various city departments related to energy conservation, hazardous waste, and recycling. There is currently no one source of information about the city's 'sustainability' related programs. However, the Conservation Division supports community programs most aligned with 'sustainability', and at one point the citizen Conservation Commission considered changing the name of the commission to 'environmental sustainability' commission (interviewee, 5.19).

### Box 6.2 Lincoln City Community Background

Lincoln city was created in 1965 by combining the 5 small, coastal towns of Nelscott, Oceanlake, Cutler City, Delake, and Taft. With a total population of 7,500 residents, it is within the municipal boundary of Lincoln County. "We use the string of pearls analogy. It's kind of like, there are these small towns or communities, but they're linked by the highway as a central spine." (city staff, 6.2). While sharing one local government, each community is known as a district, and each has their own smaller center, or downtown. There are a high number of seasonal use homes in Lincoln City, and the majority of the population is over fifty. (US census-Lincoln City, 2000).

The area became settled soon after federal legislation took coastal lands out of First Nation ownership, and opened it to white settlement in the late 1880s. Up until that point, the native tribe of the Siletz had lived there, but was subsequently relocated to reservations. I point this out simply to underscore the very recent history of settlement in these areas, and to remind readers of the individualistic types of the first 'pioneers' who laid claim to the lands where there were very few roads and 'wild' landscapes. Further, in Oregon, casinos can only be located on Native lands; The Chinook Winds casino is on the north side of Lincoln City on reservation land, and provides significant employment and tax income for the area. Lincoln City is forty minutes north from the county seat in Newport (which itself only has 10,000 residents), and is approximately two hours southwest of Portland.

<sup>31</sup> While an election was held to create this position, it failed to pass with voters in 2007 (City of Ashland, measure 15-76). I mention this only as it may be indicative of some tension within city government.

### **6.3 Research in the community**

I made use of six semi-structured in-person and telephone interviews with representatives of local elected government, city staff, the university, and the Transition Town movement in Ashland. The survey was taken differently from the method used in Corvallis; because I had no large gathering from which to recruit participants, the survey was digitized, and advertised on the Oregon Shakespeare Festival staff server, the Transition Town website, and a local networking site called Connect Ashland. Further, I passed out paper surveys outside of the local co-op grocery store and in the street, and also gathered responses from the Transition Town meeting that I attended. This helped to diversify the ‘types’ of people who responded, and hopefully represented a broader spectrum of the local community. 46 surveys were received in total. Census and other government data were used to triangulate the information that I received as much as possible. Again, citations for interviews are marked as (interviewee, date). Communication with city staff or organizations for brief questions is indicated as (pers.comm. date).

#### *Box 6.3 Research in Lincoln City*

Lincoln City was the shortest case study performed; it was the only community that I didn’t personally visit, and where no survey data was gathered. However, I completed three telephone interviews with the mayor, one staff member, and a citizen sustainability commissioner. Further, I gathered census and elections data as well as local government documents to augment the analysis.

I am working from the assumption that the variables introduced represent initial conditions that must be actively strengthened in order for an ICSP initiative to be successful. Is this community ready to initiate a community sustainability plan? If not, where are their challenges? The following chapter will highlight the results of testing the same ‘conditions’ in Ashland as were found to be vital in Corvallis and in the literature. Each category will conclude with an overview of what the results show, and full, comparative graphs of these results are introduced in the following chapter.

### **6.4 Sustainability in Ashland**

“I think that we’re as progressive as we can be” (Ashland city manager, 5.18)

Going into Ashland, an initial indication of the potential for an ICSP came from the vocal commitment from the mayor, who used sustainability as a primary platform for his electoral campaign. In his January, 2010 ‘state of the city’ address, the mayor emphasized that:

“The City Council has set goals for the next 12 to 24 months to continue Ashland’s history as a community that focuses on sustaining itself and its people. To us, sustainability means using, developing and protecting resources at a rate and in a manner that enables people to meet their current needs and also provides that future generations can meet their own needs. The City of Ashland has a responsibility towards sustainability in six primary areas: Economy, Environment, Social Equity, Municipal Organization, Public Facilities, and Partnerships” (city of Ashland, 2010).

However, this announcement has not yet marshaled in significant changes in policies or funding, as will be explained further. According to one commissioner “It’s hard to shake the city from business as usual. Change is very threatening to staff and elected officials believe that people don’t like to elect “doomers” [those who see unsustainable behavior as irresponsible] (pers.comm. 1.10.09).

From the community side, Transition Town Ashland (TTA) is a group formed in 2008 with the goal of initiating a movement away from an oil-centric economy. The Transition Town movement itself began in England several years ago, and their model of community empowerment and consensus building around local resilience has grown significantly all over the world (Hopkins, 2007). According to the Transition

Network, there are currently 320 official transition initiatives globally, who are all focused on drawing from the same framework model (Transition Network, 2010). Initiating members of the transition town group in Ashland are also commissioners on city commissions. However, while this overlap exists, commission agendas are set by the city council and the mayor, “so we don’t have much scope for action” (pers.comm. 10.09).

*Box 6.4a Transition Town Networks*

The concept and movement called Transition Towns began in England in 2005. They are focused on creating redundant, resilient systems in the community, and on re-localization of economic systems to support a future without oil. Their purpose is: “To support community-led responses to peak oil and climate change, building resilience and happiness”. The founders claim no special expertise, but claim seven general principles of transition:

1. Positive visioning
2. Help people access good information and trust them to make good decisions
3. Inclusion and Openness
4. Enable Sharing and Networking
5. Build Resilience
6. Inner and Outer Transition
7. Subsidiarity: self-organization and decision making at the local level.

- Hopkins & Lipman, 2009

Also in 2008, the city launched a community based strategic plan initiative, which was aimed at gathering public input for a vision of a preferred future, and goals to achieve it (City of Ashland, 2008). However, this initiative was abandoned and reconfigured into an economic development strategy (pers.comm. 5.10; interviewee, 5.19/2). According to the strategy flowchart for this process, public comment is invited only after the various goals have been set (City of Ashland, 2009).

The incoming city council began working on a new vision statement in early 2009; vision statements are apparently fluid, changing with each term of the city council. “The vision can change easily based on who is sitting in those seats” (interviewee, 5.18). City staff developed three different ‘visions’ (interviewee, 5.20), which were then opened to the community for comment (interviewee, 5.19). Comments were collected primarily through emails to the city council or the city administration. Following this review, two city councilors reviewed the feedback from the community. Transition Town Ashland took this opportunity seriously; according to their documents and interviewees (5.21; 5.26), TTA spent over 250 hours reviewing the goals through work groups and public forums and wrote extensive feedback. However, several transition town members felt their work was ignored by city councilors, and they have heard no response from their feedback. A city councilor (interviewee, 5.19/2) noted that the community feedback was only read by two of the six city councilors, and many felt was only political show.

In terms of funding, the 2010 city budget provides insight into the seriousness of sustainability from city hall’s perspective. The budget was organized according to the 2010 Council goals: economy, environment, social equity, organization, public facilities, and partnerships. Funds were allocated to develop an integrated land use and transportation plan, to be housed under the public works department. However, four of the six ‘environment’ goals received no additional funding, but were tasked out through existing channels<sup>32</sup>. Further, community groups are supported with Economic and Community

---

<sup>32</sup> Budget shortfalls are a significant issue for city council in Ashland, where the growing retirement community doesn’t generate taxable income for the community. Further, operating costs are increasing by over \$1 million, without the corresponding revenue stream (interviewee, 5.19/2).

Development Grants, allocated annually to qualifying organizations. For the first time, a small amount of the grants were allocated specifically to projects aimed to improve community sustainability. However, only groups carrying liability insurance could apply. Transition Town Ashland applied to take the funds and allocate them to smaller local initiative unable to meet the liability requirements (interviewee, 5.19/2; 5.26). This would have created a formalized partnership between the city government and the Transition Town group, but was rejected by city council.

Most recently, attempts to create a sustainability plan for the city have come up through the Conservation Commission.

“At the Conservation Commission meeting of April 28 [2010], the Commission voted unanimously to urge [the city council] to appoint an ad hoc committee to review and recommend a process for the development of a sustainability plan for the City” “The Committee’s purpose is to develop recommended planning processes, methods and tools (e.g. Natural Step, or other methods) for the City of Ashland to utilize for implementing a Sustainability Plan with the understanding that city budgets and personnel are very limited and that Ashland citizens may have a role in developing such a plan. (Conservation Commission, 2010).

There has been no official response from the city on this statement.

#### *Box 6.4b – The state of sustainability in Lincoln City*

Lincoln City’s community has been working on sustainability for at least ten years, according to their materials (Lincoln City, 2010). The government of Lincoln City has made strides in actively supporting alternative energy use and conservation in their community by supporting Oregon’s Blue Sky power program (introduced in 5.2) and NW Natural’s Smart Energy program. The Smart Energy program asks natural gas customers to pay a premium to support the capture of animal methane for biogas production, offsetting the emissions from their personal gas use (NW Natural, 2010).

Lincoln City does not yet possess the elements of an integrated community sustainability plan. However, in 2007, their city council “endorsed the spirit and intent of the Sustainability Plan which is to promote environmentally, socially, and economically improved alternatives for development, operations, and maintenance in Lincoln City” (Lincoln City, 2007). Like Corvallis when collecting information for the EVP, Lincoln City gathered all the relevant pre-existing policy support. (interviewee, 6.2). The city established the Community Sustainability Committee in 2007 to support community outreach related to the sustainability plans. The committee lists four goals, which guide their direction. These goals are: becoming a zero-carbon community, becoming a zero-waste community, becoming energy independent, and reaching a sustainable balance in natural systems. (Lincoln City, 2010).

Currently, there are no baseline decision-making principles that follow a sustainability ethic, and local government addresses environmental alternatives only if time and funding is available (interviewee, 6.2). The goals of the Community Sustainability Committee encompass work in the community, but because they do not have the scope of funding to gather extensive community feedback, and the city has not yet endeavored to address its own systems in an integrated approach, Lincoln City has not yet developed an ICSP initiative.

### **6.4.1 The Dependent Variables**

#### *Principles for Sustainability*

The city of Ashland agreed in soft policy to use the Valdez Principles<sup>33</sup> for decision-making in 1990, through “a resolution of the city of Ashland, Oregon endorsing the Valdez Principles as a guide for day to day city operations and programs” (City of Ashland, 1990). However, while the principles themselves are supportive of environmental responsibility, the actual use of these principles is “virtually non-existent”, according to several commissioners and a city councilor (interviewees, 5.19; 5.20). Some within

---

<sup>33</sup> The Valdez Principles, now known as the CERES Principles, is “a 10-point code of corporate environmental conduct”. The Coalition for Environmental Responsible Economies (CERES) developed the guidelines in response to the Exxon-Valdez oil spill in 1989 (CERES, 2007).

government attempt to bring the Principles into conversations; however, their use has not been continually re-enforced, and it was claimed that most people in the city government would not know what they were, nor that they were a model for decision-making at any level.

#### *Commitment Language*

Nothing that I could find in terms of city documents commits the city to any course of action integrating department activities or supporting community work dedicated to sustainability. As shown in the exploration above, previous efforts have failed to lead to firm actions which approach an integration of policy and planning from the city level, or which embed sustainability into strategic decision-making.

#### *Sustained Participation*

There is no core group of people who have come together to address sustainability in a comprehensive way, either in the community or in the city government. The Transition Town initiating group remains dedicated, although their lack of firm progress after sixteen months is wearing them out (interviewees, 5.21; 5.26). They claim to communicate with approximately 250 people who have attended at least one of their events, but sustained participation in a comprehensive process is lacking.

#### *Measurement and Feedback Processes*

Certain programs, like the water and electricity departments, are very strong in their own measurement and in their independent feedback regarding conservation and renewable energy use. However, this is not combined with efforts from other departments. Southern Oregon University's work on their greenhouse gas inventory has led to interest in similar work at the city level (interviewee, 5.20),

#### *Resource Commitment*

Significant funds have been dedicated to green space, renewable energy, water conservation, and other elements. However, the need to fund a coordinated sustainability effort, while recognized by most interviewees (5.19; 5.20; 5.20.2), has not yet achieved critical support.

#### *Core of Responsibility*

The Conservation Commission once discussed changing its name to the environmental sustainability commission, as that is its primary function. However, this commission is bounded by the tasks set forth from the city, and has little room or staff time for innovation (interviewee, 5.19). There is no core of responsibility for collaboration and cooperation on sustainability in Ashland. The Transition Town Ashland people are themselves a committed group, but have no formal responsibility within the city, nor official recognition of a role in community sustainability by the city government.

Can the cause of the general lack of success in initiating a comprehensive sustainability plan be found in lacking social capital and/or capacity? On the other hand, if these concepts are strong, than an ICSP initiative may be imminently possible.

### **6.5 Community Conditions – The Explanatory Variables**

Using the same methodological approach to locating variables, I approached the three categories of the explanatory variables from the contextual standpoint of the community; I approached the interviews from an open perspective, and used census and government data to support the findings within those concepts.

## 6.5.1 Social Capital

Each concept’s measurement will end with a summary of the findings. A comprehensive chart of these results, comparing the three communities, will be introduced in Chapter 7. Wherever findings from Lincoln City are relevant, they are presented in boxes at the close of the concept.

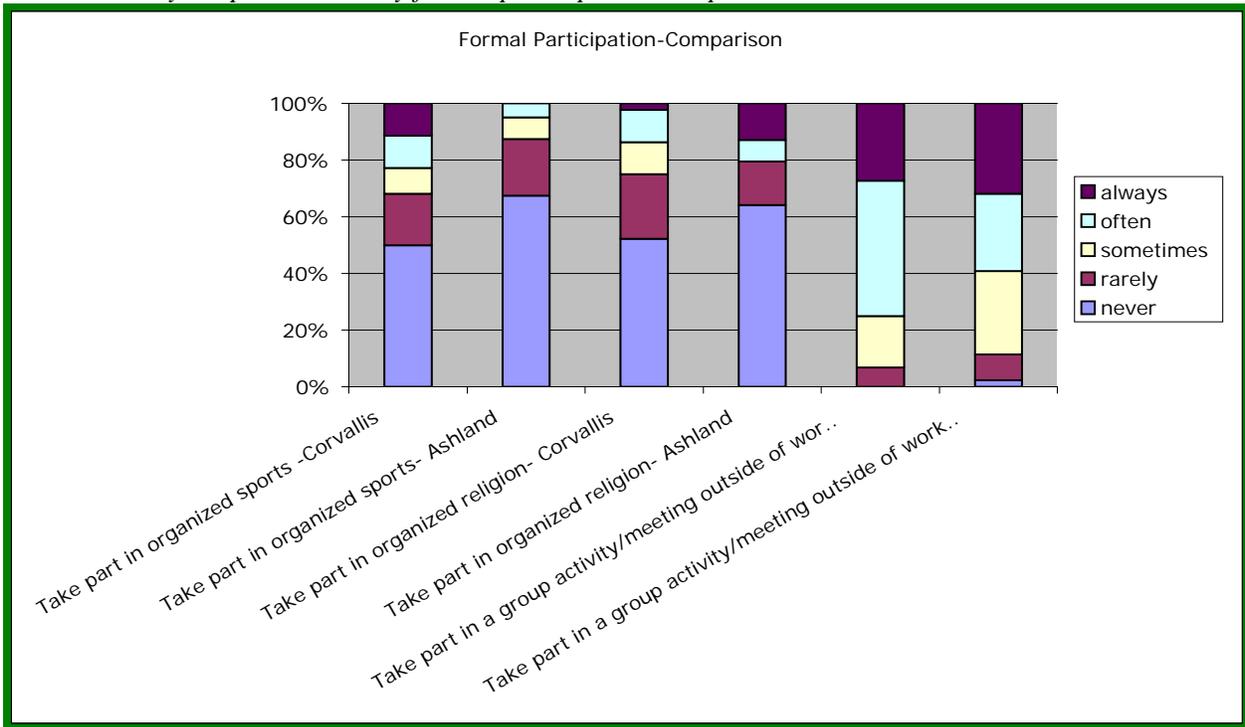
### *Civic Engagement*

In general, several interviewees noted Ashland to be an engaged community in reference to the presence of chapters of national organizations like the YMCA, the Elks, the Rotary and Kiwanis clubs, and Soroptimist International (interviewee, 5.18; Ashland Chamber, 2010).

#### *~Formal participation*

As in the survey in Corvallis, I posed a question to participants about their weekly participation in organized sports, religion, and group meetings. Certain differences arose in the two communities’ relationships to these three activities. 75% of Corvallis respondents<sup>34</sup> claimed meetings were ‘always’ or ‘often’ a part of their week, whereas only 40% of Ashland respondents claimed the same (Figure 6.5a).

Figure 6.5a: Survey Response – weekly formal participation comparison



While the claim that Corvallis is not particularly sports or religion oriented still holds true, it is even truer of Ashland, where a higher percentage either ‘never’ or ‘rarely’ participate in either of these activities. Corvallis’s survey respondents are more meeting oriented overall, where more than 75% often or always attending weekly meetings, as opposed to 60% in Ashland. Therefore, in this measure of social capital, Ashland participates less in all three elements.

<sup>34</sup> Again, the Corvallis survey participants came from a more narrowly self-selective group, potentially biasing the results.

In a reverse of the previous finding, Ashland respondents claimed to be more involved in the types of associations listed below than those in Corvallis (see figure 5.5a) in every category. This is interesting because the sample group in Ashland was more representative, but was still a very-self selective set of people taking time to complete a reasonably unsolicited on-line survey. However, involvement in these types of associations does not necessarily support the development of bridging social capital in general because they are not specified to be local, face-to-face groups. A higher percentage of Ashland residents claim to be involved in both religious (12% more) and volunteer communities (28% more) than those in Corvallis, this is a potential source of bridging social capital in the community.

Figure 6.5b: Formal Participation in Associations

Professional Association or community	Percentage of respondents
Professional Network	48%
Volunteer groups	67%
Union membership	3%
Education group	26%
Trades association	13%
Religious community	23%
Media Network	10%
Other	30%

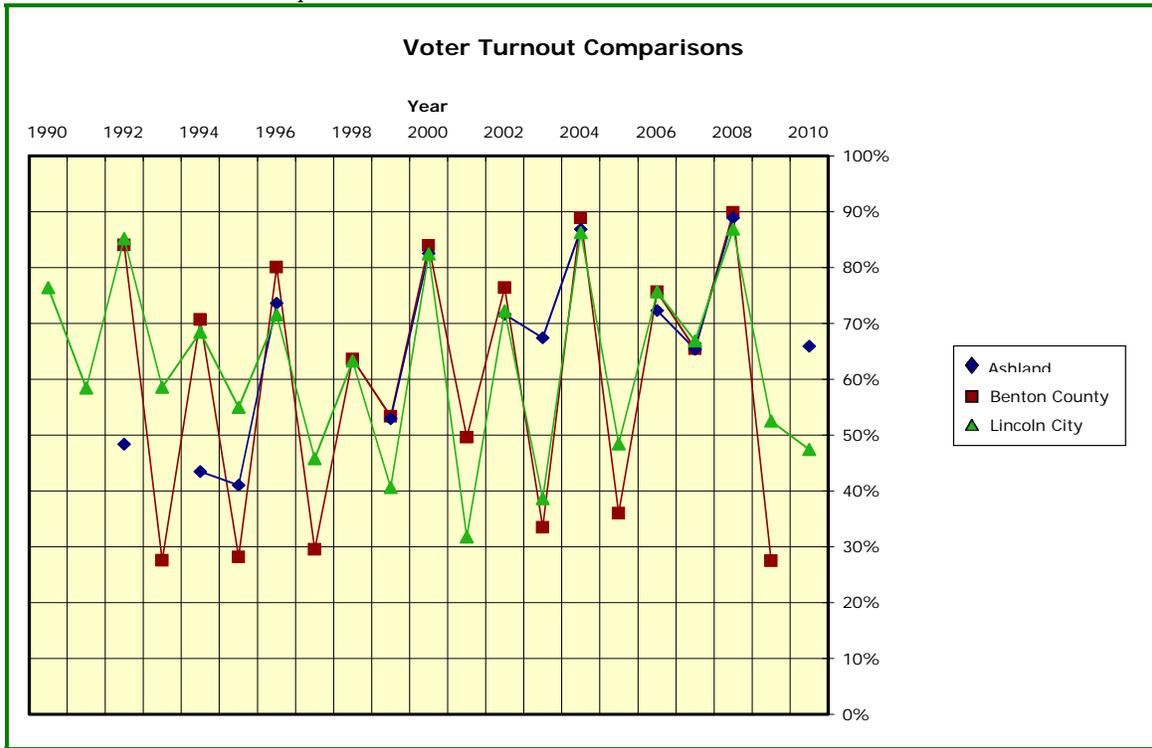
*~Voter turnout<sup>35</sup>*

A comparison of voter turnout for the previous twenty years of elections in the three communities reveals several interesting trends, which likely correlate to other measures of civic engagement. First, in the past 10 years, Ashland’s voter turnout has gone up, and has been significantly higher than both Ashland and Lincoln city for local elections, which are held in odd-numbered years. As was consistently true for much of the United States, voter turnout was the highest of the past 20 years for the 2008 presidential elections in all three communities. Interestingly, Benton County consistently shows the lowest turnout for local elections.

---

<sup>35</sup> The election information for all three communities was gathered in cooperation with county election officials in order to distinguish city precincts from the larger county results. This option was not available for Benton County, but the city represents nearly 70% of the county population.

Figure 6.5c Voter Turnout – Comparison between the three communities



General voter turnout in Ashland virtually parallels that in Corvallis, except that voters in Ashland are more likely to turn out for local elections (Jackson County Elections, 2010). This perspective refutes the general argument that Corvallis residents are more civically engaged than their Ashland counterparts. While it is often shown that registered voters tend to vote (Corporation for National and Community Service, 2007), Corvallis voters are more likely to come out for presidential elections than the other communities, but less likely than the others to vote in local elections.

~Education and age

Ashland is also a highly educated community, with 23% of the population possessing an advanced degree. 52% of the population has a Bachelor’s degree, and Ashland has a slightly higher percentage than Corvallis of residents with at least a high school diploma, 95% instead on 94%. This indicates that Ashland is virtually equal to Corvallis in measures of civic engagement as predicted by these forms of measurement. Again, education and age are only indirect measurements of civic engagement, but there are clear statistical correlations between higher education levels and engagement in community life.

Figure 6.5d – Educational attainment comparison

<b>Educational attainment</b>	<b>Corvallis</b>	<b>% of pop</b>	<b>Ashland</b>	<b>% of pop</b>	<b>Lincoln City</b>	<b>% of pop</b>
High school graduation	3656	12.60%	1754	12.90%	1424	28.1%
Some college/associate's degree	8418	28.00%	N/A	N/A	2036	4.2%
Bachelors' degree	7617	26.20%	3949	29.10%	520	10.3%
Graduate degree	8068	27.70%	3086	22.70%	314	6.2%
Percent high school graduate	N/A	94.40%	N/A	95.10%	N/A	84.7%

or higher						
Percent bachelors' degree or higher	N/A	53.90%	N/A	51.80%	N/A	16.4%

In comparison to Corvallis, Ashland has a slightly fewer of those considered to be in their ‘parenting’ years (26-54) at 34% of the population, which is the age range Putnam (2000) argues volunteerism usually peaks. However, 36% of residents are over 55 (US Census, Ashland, 2008), which puts Ashland strongly into the ‘retirement community’ category. As mentioned previously, Putnam (2000) makes a compelling argument that this population has buffered the overall decline in civic engagement in recent years. This argument is supported by recent data gathered by the Corporation for National and Community Service (2006), which shows that volunteer rates for adults between 45-65 has doubled in the past twenty years. Corvallis population shows consistency with scholarly assumptions about volunteerism, but Ashland is not far behind and may be able to capitalize on its older population. Of those surveyed who claimed to volunteer on a weekly basis, 52% were over 55 years old.

Figure 6.5e: Age comparison (US census, 2008, 2000)

Age Range	Corvallis	Ashland	Lincoln City
15-25	31.40%	18.60%	12.20%
26-39	20.30%	18.80%	18%
40-54	16.50%	15%	21.80%
55-65	9%	15.10%	11.20%
66+	10.10%	16.40%	19.30%

*~Rates of volunteerism*

It is difficult to draw comparisons between the hours that participants claim to volunteer weekly, because the wording was changed between the two surveys. I previously mentioned a problem that I realized only following Corvallis’s survey; one response option was to volunteer 0-5 hours per week. However, 0 hours is fundamentally different from 5 hours of donated time per week. Addressing this problem in Ashland’s survey, I received the following results: 24% of respondents never volunteer their time in an average week, but 44% of respondents volunteer 1-5 hours per week, and 33% claimed to volunteer at least 5 hours every week. 33% of Corvallis respondents also claimed to volunteer at least 5 hours per week in general. This shows another indication of strong parallels in civic engagement between Corvallis and in Ashland, and supports the general notion that Ashland would have an engaged population to draw on for an ICSP.

Overall, the direct comparison between Corvallis and Ashland shows that overall, civic engagement is virtually identical in the two communities.

*Box 6.5.1a: Civic Engagement in Lincoln City*

Gauging by the small amount of data available for Lincoln City, I would argue that their community possesses certain strengths in civic engagement. These strengths are their networks and their commitment to the community. If these elements could be drawn upon successfully, then an ICSP initiative would benefit.

**Trust and Reciprocity**

Divergences in social capital between the communities begin to emerge in the areas of trust and reciprocity. The survey results for questions regarding trust show that Ashland is less trusting overall as measured by the agreement with the following set of statements.

Figure 6.5 f: Perceptions of Trust

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
You trust the services and infrastructure available to your community to provide a safe and secure neighborhood	0	13%	17%	61%	9%
You are likely to pick up litter other than on your own property	0	0	20%	52%	28%
By helping others, you can help yourself	0	0	9%	50%	39%
Most people can be trusted	0	7%	17%	65%	11%

First of all, these answers represent all 46 responses, because the digital version of the survey does not allow skipped questions. Therefore, I found it most interesting that 20% of people would not comment on picking up litter, and nearly that many were uncomfortable responding to “most people can be trusted”. To me, this speaks of a lack of confidence in the reciprocity of the community. This is also shown in the fact that while 20% of those surveyed in Corvallis ‘strongly agreed’ to the statement that ‘most people can be trusted’, in Ashland, only 11% strongly agreement, while 7% ‘disagreed’ with the statement. However, both communities are significantly ahead of the curve in terms of larger trends in social capital; according to Putnam (2000), as of the year 2000, only 34% of Americans agreed with this statement.

The other concern stems from the responses to trusting of services and infrastructure, where 13% of those in Ashland disagreed with this statement, and only 9% strongly agree. In contrast, 40% of those surveyed in Corvallis strongly agreed with this statement. These responses, while they are intriguing, also may stem from current events in Ashland, like the heated discussions concerning the placement of a cell phone tower near a wellness center. Also, because of the greater diversity of response sources in Ashland, this may be a more accurate portrayal of community opinion than was true for Corvallis. However, overall, I would have to argue that in Corvallis, trust and reciprocity are significantly higher. In terms of the infrastructure statement, this also refers to capacity of the city government to instill trust in their community, which seems to be of some concern in Ashland.

Acceptance of others shows a different side of trust and reciprocity in Ashland than in Corvallis. The result of the survey question about acceptance taken from the CLS shows a more pronounced level of perceived antagonism towards the homeless and “those on low income”, the poor. A direct comparison to the results highlighted in Corvallis is shown in Figure 6.5g. Because the Ashland survey was digitized, I was able to ensure that certain questions were not skipped, which accounts for the lack of ‘no response’ columns.

Figure 6.5g – Comparison of Acceptance rates

Acceptance- combined percentages	Corvallis	Ashland
Homeless – Never or Rarely	28%	43%
Newcomers – Often or Always	76%	84%
Racial difference – Rarely or Sometimes	32%	31%
Religious difference – Rarely or Sometimes	15%	28%
Accessibility difference - Rarely or Sometimes	16%	27%
Low income - Never or Rarely	5%	24%

The figure above can be read as showing that in Ashland, 43% of respondents felt that that homeless were ‘never’ or ‘rarely’ accepted as part of the community. Ashland perceives itself as less accepting overall than Corvallis in virtually every category, with ‘Religious Difference’ and ‘Newcomers’ being the exceptions. Overall, Corvallis has a stronger sense of its community’s trust and acceptance.

### *Commitment to the Community*

There are three different measurements used to gauge commitment: homeownership, length of time in a home, and survey responses to a statement about community connection. Census data on homeownership and length of time in the community are both statistical proxies for community commitment. In these measurements of commitment to the community, how does Ashland compare to that of Corvallis? 49% of housing in Ashland is owner-occupied, as opposed to only 43% in Corvallis. This relates to the number of housing units, and not to the overall population (US census-Ashland, 2008). Owner-occupied housing has dropped by 3% in the past ten years in Ashland (Ashland Chamber, 2010). However, there are more rental units in Corvallis to accommodate the large student population, which is 38% of Corvallis’ total. The student population in Ashland accounts for 22% of the total population (OSU, 2010). If one assumes that the entire student body falls into the renter occupied housing, than Corvallis has more owner occupied housing per capita in terms of the permanent population.

Length of time in the community is measured in Ashland using the same set of data that was gathered for Corvallis, namely, census data on how long residents have lived in their home (rented or owned). In Ashland, 31% of the population moved in before 1999 (US census-Ashland, 2008), which is significantly higher than 25% for the same period in Corvallis.

It is assumed that those who feel connected to the community would be more likely to work to support the community. In the responses to the statement “I feel connected to the community”, Ashland participants overwhelmingly claimed they ‘agree’ or ‘strongly agree’, with 87% affirmation. This was the exact same response to those surveyed in Corvallis.

Overall, this comparison shows that Corvallis residents are not necessarily more committed by the measurements chosen.

### *Box 6.5.1b Commitment in Lincoln City*

Lincoln City has by far the most long-term residents, as nearly 20% of the population reported to have moved in before 1990, according to the 2000 census (US census-Lincoln City, 2000). However, on the other side, nearly 34% of houses in Lincoln City are vacation homes, used only seasonally. Therefore, it seems that there is a ‘core’ of residents for whole Lincoln City is and has been, home.

### ***Network Strength***

Network strength in Ashland, like in Corvallis, was estimated using the number of non-profit organizations per capita. This helped to create a rough estimate of social capital in terms of the cooperation and volunteer support that non-profits rely on to function at the local level, and the information sharing that occurs between groups and with the public. To that end, public data regarding the organizations with tax-exempt status (the definition of a non-profit) show that there is 1 non-profit for every 55 people in Ashland (Guidestar, 2010; Tax Exempt World, 2010). These include religious groups, foundations, and charitable organizations, among many others. This is strikingly high, and is a 30% increase to Corvallis. An ICSP initiative would have a dense network of existing groups to work with in this community, and it further shows a strong level of civic engagement.

Networks are also shown through diversity in the community. In general, a diverse community will have many cultural and ethnic pockets. Within themselves, these pockets may be a source of bonding social capital; however, in terms of relationships with the wider community, diverse groups of people can support information and value dissemination needed in ICSP emergence. Diversity is strikingly lacking in Ashland, which is more solidly white than the state average, at 91% in 2008, and has remained unchanged since 2000. Only 5% of Ashland's population is foreign born, as opposed to nearly 12% of Corvallis. Overall, this may indicate that minorities in the community would require additional outreach, as their networks would be smaller and isolated.

*Box 6.5.1c: Network Strength in Lincoln City*

Lincoln City, in a direct parallel to Corvallis, has 1 registered non-profit for every 76 people. Their community is slightly less diverse than Corvallis, but more diverse in Ashland. Overall, Lincoln City is in a solid position starting point related to their community networks, and overall social capital. The full data comparisons for social capital are presented in Figure 7.1a.

### 6.5.2 Capacity

Interviews in Ashland focused heavily on issues of leadership in local government, and on their relationship to the community. These elements stood out during conversations as a primary sticking point in overcoming the status quo for genuine community engagement, and therefore garnered the most attention. Capacity results for Lincoln City will be addressed with all the available findings in box 6.5.2.

#### ***Citizen involvement in local government***

"If you don't hear from them, then you know you're doing a good job". (city staff, pers.comm. 5.18)

Local government commissions and committees are similarly structured in Ashland and Corvallis; however, the differences in their place and power have significantly blocked active community formal participation in Ashland's local government. The city has 28 commissions, of which 15 are volunteer-based (Ashland Chamber, 2010), and 'advise' the city council. "We'll take any volunteers we can get" (interviewee. 5.19). According to a long-serving city staff member, the interest from the community "goes through cycles" depending upon what's happening in the community. While vacancies also remain on Corvallis Commissions, Ashland does not devote staff time to recruitment of participants, where Corvallis does (city staff, pers.comm. 6.23; interviewee, 5.18). The commissions themselves have little ability for initiative, as their agendas are completely set by city council. The structure of the Planning Commission parallels Corvallis; any party can appeal Planning Commission decisions to city council. While the Planning Commission is charged with the city's comprehensive plan, several interviewees felt that they were prevented from updating the plan because they have not been supported with funding, and staff are reluctant to take on new projects for the citizen commissions (interviewee, 5.19; 5.26). In a significant reversal to Corvallis's policy, Ashland citizen commissioners are given no formal training, which significantly narrows those who can participate, and reduces their authority to speak on certain issues. These structural elements place Ashland's citizen participation several rungs below Corvallis on Arnstein's (1969) ladder, at the consultation and informing rungs. These two rungs are solidly in the 'tokenism' category of the ladder, which was also the word used in relation to this issue by two different commissioner interviewees (5.19; 5.26).

The second angle for analysis is the channels open for communication with local government. In Ashland, the primary means for communication are through email and attendance at city council

meetings, which are monthly meetings, open to the public. The city government's website supports a question/comment page, and has occasional surveys for feedback. A final, and very relevant, example comes from the city council goal-setting. In Corvallis, this exercise garners significant participation at city council meetings, which is how sustainability was initially placed into the city's goals (pers.comm. 3.4). In Ashland, goals are set by categories, and are addressed or revised yearly with no indication the citizen input was taken.

To investigate the responses regarding community participation in local government, I added three questions to Ashland's survey to better address this question. The first was formed into a statement, "You believe the local government is responsive to community concerns"; 15% of respondents "disagreed" or "strongly disagreed" with this statement, but 35% 'agreed'. However, 48% of respondents listed 'neither agree nor disagree', which leads me to believe that many have no personal experience bringing concerns to their local government. The subsequent survey question addressed this issue (for full question wording, and responses, see Appendix 4.6). The results showed that 30% have never contacted the local government with ideas or concerns, but 43% 'sometimes' or 'frequently' address their local government. In a follow-up question, I asked those who responded positively to elaborate on their experience, how they went about it, and how seriously they felt they were taken. People cited using email and city council forums, and many claimed that they level of seriousness with which they were taken "depends on the issue". Some also felt that "there is usually someone who taken [ideas and concerns] seriously" (Ashland survey, 5.27). These results show that a small group of people are familiar with the city hall process, and of those people, about half feel the city responds. However, according to staff (interviewee, 5.18), "When something's affecting them is when you hear from them". Therefore, the perception on the part of the city recorder's office is that public input is usually only negative, at a time of crisis, and does not play a role in day-to-day operations of the local government.

### ***History of public process***

There has not been outreach to Ashland residents to gather extensive participation for a large initiative, which is how I interpret a true public process (interviewee, 5.18; 5.19; 5.20). However, there is a legal requirement stemming from the land use planning laws regarding public input in Oregon (Oregon Department of Land Conservation and Development, 2009), and so individual departments have done charrette<sup>36</sup> processes to gather input for isolated projects (interviewee, 5.19). However, as one commissioner mentioned, "it's not how they get the input, it's what they do with it. If you ask me, not much" (interviewee, 5.19). The recent vision process provides an important example of this; while public input was sought and gathered, the input provided was not integrated into decision-making at a serious level, which inhibits both the support of the community, and the credibility of the city that citizen input is important. In Ashland, citizen attitude surveys (still used in Corvallis) are considered outdated because of cell-phone usage and the prevalence of unlisted numbers, and so they were discontinued in 2003 (interviewee, 5.18). However, current survey techniques require that citizens own a computer and take the initiative to check the city website, which is not indicative of a public process.

---

<sup>36</sup> Charrette processes are being actively promoted for sustainability planning, according to the National Charrette Institute. "The charrette team first conducts an open public meeting to solicit the values, vision, and needs of the stakeholders. The team then breaks off to create alternative plans or scenarios, which are presented in a second public meeting usually a day or two later. The team then synthesizes the best aspects of the alternatives into a preferred plan that is developed in detail and tested for economic, design and political feasibility. The charrette concludes with a comprehensive presentation at a final public meeting" (NCI, 2010).

### ***Vertical government support***

Jackson County government has not been as pro-active as Benton County in terms of sustainability; they have no organizational sustainability policy on record and so areas where county commissioners are involved in land use, watershed protections etc, there is a less progressive infrastructure supporting decision-making (pers.comm. 5.21).

There is a new program that has very recently received funding to “incubate and accelerate” small start up businesses in Jackson County who are focusing on clean technology, or can support existing corporations through localizing production of components to their business (county staff, pers.comm., 7.22). Titled “Sustainable Valley”, the initiative has gathered funding from local corporations and the county government, and is aimed at “riding the train of sustainability” towards reducing the county’s 12.5% unemployment rate and shrinking tax base. However, while this program is aligned with some goals of sustainability, it may also draw energy and attention away from the need for comprehensive approaches benefiting from the energy and support of local groups.

Support from the state and federal level should be equally accessible to all three communities in Oregon. I was unable to gather information on the comparability of use of these channels of support.

### ***Local institutional support***

The American College and University President’s Climate Commitment (ACUPCC, 2006) obligates signatory schools of higher education to “model ways to minimize global warming emissions” and to integrate sustainability into their curriculum. Specific steps include an inventory of greenhouse gas emissions, a sustainability curriculum, and development of comprehensive plan to achieve climate neutrality, including purchasing policies, building requirements, and renewable energy, among other areas.

Like OSU, Southern Oregon University has signed onto the ACUPCC. The president did it early enough that they are considered a charter signatory, and this has created a push and obligations towards measuring and reducing carbon emissions on their campus. So far, SOU has completed a greenhouse gas inventory, as well as a climate action plan (SOU Sustainability Council, 2010). By initiating this process on campus, SOU’s efforts have impacted the wider community. Staff and contractors who work with the university have had to support staff’s efforts to document carbon emissions, which the director believes has increased awareness in those community members (interviewee, 5.20). The University Director of Campus Planning and Sustainability felt that “There is both a state-wide and system-wide push for sustainability” (interviewee, 5.20), which references the ACUPCC agreement as well as the Oregon Governor’s 2007 mandate. This mandate requires specific steps and plans for emission reductions in the majority of state-funded agencies (interviewee, 2.24).

While not directly comparable to the prominent support showcased in Corvallis, Ashland’s Sustainability Inventory, created through a sustainability subcommittee of the Planning Commission, provided important framing of the current level of general support for sustainability overall. This inventory, publicly available, introduced interested parties to businesses and organizations in Ashland who actively working on areas like water, youth, local government, food, and energy resources (Transition Town Ashland, 2008). It includes people and projects outside of Ashland proper, but was aimed to educate the community about the level of activity and to provide a resource for people to coordinate future actions (interviewee, 5.19).

### ***Sustainability Awareness***

In general, and as previously mentioned, sustainability awareness is an element of capacity, as it can be supported through deliberate actions and relates to the relationship and communication between citizens and the government. Commuting patterns are representative of both a community ethic and proactive city planning related to transportation, resources, noise, and pollution. According to results from the US census (Ashland, 2008), 63% of people in Ashland drove alone to work, and 25% walked, took public transportation, or carpooled, or ‘other’. Because using a bicycle is not an option on the census, I assume that the majority of ‘other’ references the bicycle. In general, 72% of Oregonians commute alone (US census-Oregon, 2008), which means that both Ashland and Corvallis have a higher levels of alternative transportation use than the state average. I did hear from two interviewees (5.20; 5.25) that the public transportation system (the bus) in Ashland is very limited, as a criticism of local government leadership and response to community feedback. In another measurement, I asked the same question of survey participants as was asked in Corvallis. 78% of survey respondents either ‘agreed’ or ‘strongly agreed’ with the statement “You talk about issues regarding local sustainability with others”. However, this is significantly lower than in Corvallis, where 93% of respondents claim to talk about local sustainability.

### **Wrap-up**

The differences between Corvallis and Ashland’s potential for a successful ICSP initiative became more pronounced following the investigation into capacity. The comparative graph for all three communities (Figure 7.1b) highlights these differences. Citizen involvement and public process are both significantly restricted in Ashland, which has contributed to an atmosphere of mistrust of local government, and a lack of participation by the community. Because the city has little history with public involvement, the city would likely have more impact by cooperating with local institutions and partnering with a community group to take the lead on community sustainability planning.

#### *Box 6.5.2 Current capacity in Lincoln City*

As dictated by Oregon land use laws, Lincoln City also has citizen presence on advisory committees. Sustainability is specifically supported through a Community Sustainability Committee. Water quality and sea level rise are pertinent issues for the local community, increasing their level of general awareness (interviewee, 6.13). However, neither of these issues represents a crisis, which might bring out a wide swath of community participants to address comprehensive sustainability.

Lincoln City has a history of seeking public input going back at least to 1999. When the community determined to undergo urban renewal processes, which have been the community’s most significant cooperative venture to date, the city focused attention on each of the small districts independently. In the work done on Oceanlake, for example, the community developed a vision process using ‘backcasting’. They determined a point in the future where they would like the community to be, and then develop a set of steps needed to get there.

When charrette processes were run, the city exhibited sincere interest in public input, opening a shop front to provide information and create avenues for people to be involved (interviewee, 6.2). This process has continued through four of the community districts, also using surveys, home visits, and the city’s information office as channels for feedback.

### **6.5.3 Design**

There is less that can be articulated about the design of these two community’s sustainability initiatives, because the initiatives themselves have yet to form. However, I can make several speculative claims about where they are in terms of how these elements appeared in relation to an ideal structure.

## ***Building Legitimacy***

Ashland has not yet developed a coherent approach to community sustainability. Again, legitimacy is addressed through visibility, leadership, partnerships, and networks.

### *~Visibility*

Currently, there is no legitimate venue for those working on sustainability to come together in Ashland. Work being done by city staff is scattered between the Conservation division of the department of Community Development, the Planning department, the Electric department, and Parks and Recreation to address isolated projects. The Sustainability Inventory, while it has the potential to develop into a forum for cooperation and visibility on related issues, has not been promoted by the Planning Commission, and is only easily accessible through Transition Town Ashland, which maintains a website, and uses local electronic and print media to advertise movie showings and monthly introductory workshops. However, this group does not have widespread legitimacy in the community, although they have been active for over a year, and maintain a website and an active presence in Ashland through monthly meetings and workshops.

### *~Leadership*

In Ashland, leadership is coming from those individuals who are bridging networks between the city, the university, and the community groups like Transition town. It is these individuals who have the most important placement to build legitimacy of the movement, and who may be able to take leadership positions through strategic coordination between the various groups. As was shown through my open-ended survey question about leadership in Ashland, there is no recognized core group of people as there was in Corvallis. In total, survey participants mentioned 84 different organizations, businesses, and people. While there is obviously an extensive pool of people and groups working on sustainability, which was also evidenced by the Sustainability Inventory, it shows the lack of a core, visible set of sustainability leadership in the community. Further, in their actions on strategic sustainability, Ashland's city government has shown a series of half steps and false starts. The vision process was abandoned halfway through. A plan for a community-based strategic plan was drafted, but abandoned in favor of an economic strategy.

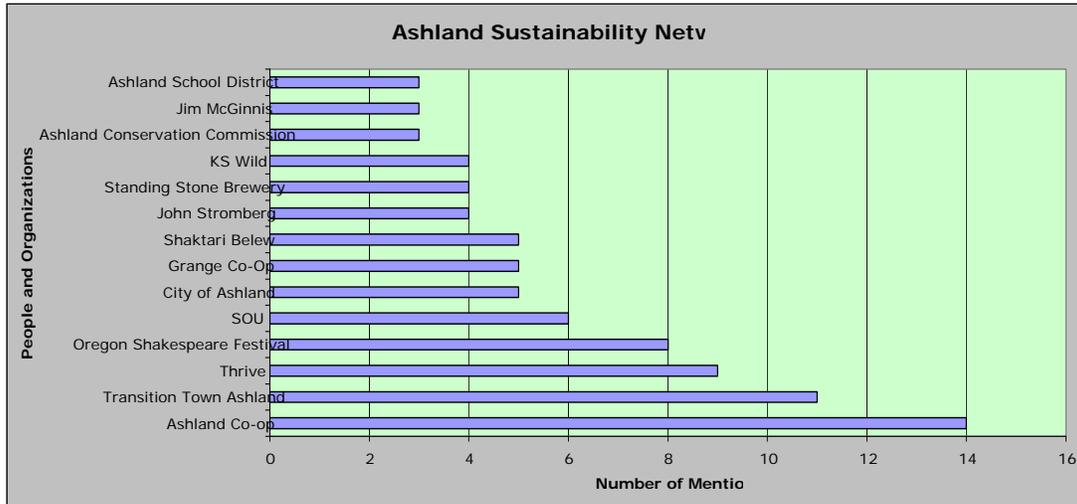
### *~Partnerships*

From the results of the network data, introduced below, it is clear that food issues feature prominently in people's minds when it comes to Ashland sustainability. This may be a fundamental starting point for cooperation on strategic sustainability planning, bringing the multitude of existing groups and activities together to share insights and support one another, ensuring a collaborative vision. I could find no evidence for contractual partnerships related to integrated sustainability planning in Ashland.

### *~Networks*

As was evidenced by the responses from the survey, Ashland citizens have some clear groups and people with whom they associate sustainability work in the community. The Sustainability inventory also highlights some interesting elements of the potential for sustainability networks, based on the sheer number of groups doing related work. Ashland respondents listed the six groups or people with whom they most associate sustainability activities in Ashland. The following chart illustrates the clustered network of leaders people mentioned most.

Figure 6.5.3: Ashland Sustainability Network



This graph presents the findings on those people and organizations that the community most associates with sustainability. The Ashland Co-op, the Grange Co-op, and Thrive are all local food organizations. The strong presence of the Transition Town group and Oregon Shakespeare festival likely reflect the source of the survey respondents. The mayor and the City of Ashland, and the Conservation Commission all have an important role in community sustainability, as does the University in people’s minds. KS Wild is a regional conservation activism group, and Standing Stone Brewery recently won the State of Oregon’s Sustainable Business award (Standing Stone Brewery, 2010). As previously mentioned, 84 different people or groups were mentioned. Therefore, the above graph highlights only the few whom people agreed upon. This reiterates that the network for sustainability remains very loose.

**Building the Structure**

Many interviewees in Ashland vocalized their support for a comprehensive approach to sustainability (interviewees 5.18; 5.19; 5.26). However, each cited the city’s lack of willingness to engage as a primary obstacle to overcome. Further, from the mixed results in the survey of the people’s experiences in city hall and the city’s lack of experience with public process, it seems clear that a group outside of the city hall would receive the most community support to spearhead an initiative. However, I don’t think that Transition Town is that group. They lack dynamic leadership from someone in the community who is approachable and mainstream.

In order to fully launch a community sustainability plan, Ashland will need to cooperatively establish the goals and vision of their community as an initial step, as well as working to establish cooperative ventures with their local county government, and the other cities in their valley and watershed, for example. Inclusion of participants will continue to be an issue in whatever structure the ICSP takes....

**Frameworks and Tools**

*~Choice*

In Corvallis, while the city council chose to not adopt the Natural Step Framework, it possesses a degree of legitimacy within city hall. In Ashland, some members of local government are aware of the support, and may even support their aims. However, the local government must agree upon a framework to follow and educate their staff on that framework as a first step to moving toward strategic sustainability.

Transition Towns is a framework to use explicitly outside of local government, and so there is no chance for the two groups to come together at the framework level.

*~Contention*

There may be growing validation of Transition Town as a movement, as evidenced by its growth, and the recent Stanford study.<sup>37</sup> However, currently the Transition Town movement does not have widespread validation, leading me to speculate that the framework contention is simply lack of understanding.

*Box 6.5.3: Foundations of an ICSP structure in Lincoln City*

In Lincoln City, the existence of the Community Sustainability Committee has supported visibility of the issue within the community, as a venue for interested parties to congregate. According to the mayor, by being a publicly funded group, they have the advantage of publicity from the local newspaper and being able to use the city's channels for outreach (interviewee, 6. 13). Currently, Lincoln city has developed their greenhouse gas inventory through ICLEI, following the mayor's signing of the climate agreement. Overall, the Lincoln City Sustainability Committee has established several clear goals, with success on initiatives dependent upon personal interest and ability of committee members. Financial support has been made available on a case-by-case basis. While sustainability may be seen as a legitimate cause, there is not yet a community or city leader who has stepped forward to champion the work ahead.

Ashland does not have a legitimate sustainability structure. However, from the results of the network analysis, it became evident that people do see the city government as playing an important role in the community's sustainability. By far the most legitimate organization in people's eyes, the Ashland Co-Op, may be able to develop a community structure from within their customers and networks.

In the following chapter, I will introduce side-by-side comparisons of the three communities and the findings from important measures of each concept.

---

<sup>37</sup> "The members of the Transition Movement in the United States are part of a social movement that promotes changes in individual behavior as a collective action. The purpose of this research is to understand how the Transition Movement in the United States promotes the coordination of individual actions and behavior in order to solve large problems, such as a new organization of the economy based on environmental sustainability" (Parigi, 2010).

## 7 Results and Discussion

Through the course of this research, I have developed and ‘tested’ multiple conditions that are invaluable in order for a community to develop an integrated community sustainability plan initiative. The primary community, Corvallis, Oregon, has successfully developed a functioning non-profit organization as the core of responsibility, a comprehensive plan involving extensive and sustained community participation, and a firm partnership with the local government. The other two communities are each attempting to initiate an ICSP process, drawing on their unique cultures and community history.

Two elements of each community’s strategy run parallel to the others. First, all three communities have signed onto the US Mayors Climate Action Agreement, and to some extent, this has positively impacted their progress. In Lincoln City, the mayor signed on because she believed in the principles, and felt she would receive support from the community, but took it as a personal initiative, not requiring city council approval (interviewee, 6.13). While all three communities are signatories, there are widely divergent ways that each community has chosen to move forward on their ‘obligations’ to that agreement, as has been evidenced through this research. The second element is that all three communities have tackled economic development as a preliminary process in active community engagement. On the one hand, economic development priorities have been priority concerns for most communities<sup>38</sup>. On the other hand, several interviewees from Corvallis and Lincoln City cited these processes as important to the development of sustainability plans because they create community-building, support for long-term planning, and experience with partnerships between the city and interested citizens.

### 7.1 Categorical Findings

I attempted to unravel community conditions into concepts within the categories of social capital, capacity, and design. To establish comparability between the communities, I developed measurement tools from the different concepts that I found when investigating my communities. While each community’s context and culture is unique, nevertheless the structure of the research has been geared to support an understanding of the current state of sustainability in three very different communities, and to compare them on those conditions vital to success (for the full conceptual framework, see Figure 5.2).

The following sections highlight the results of that endeavor in each category of explanatory variables.

#### **Social Capital**

Through this research process, I have established and ‘tested’ several concepts within social capital that have been argued to be vital for the development of collective action, and therefore, ICSP, initiatives. The following table reiterates, from left to right, the concepts themselves, and then the tools established to measure the presence of those concepts. The results for each measurement are shown in side-by-side comparisons for the three communities wherever possible. A discussion of these findings and their implications concludes each category.

---

<sup>38</sup> To reiterate, the state of Oregon has been economically unstable for many years, as its extractive industries in timber, mining, and fishing have diminished by overexploitation and increased restrictions. Further, the current economic crisis has doubled the state’s unemployment rate, making it one of the highest in the country (Bureau of Labor Statistics, 2010).

Figure 7.1a Findings in Social Capital

<i>Concepts</i>	<i>Measurement</i>	<b>Corvallis</b>	<b>Ashland</b>	<b>Lincoln City</b>
Civic engagement	<i>Formal Participation</i>	<ul style="list-style-type: none"> <li>● 75% participate in group meetings</li> <li>● 39% are involved in volunteer groups. 11% in religious community</li> </ul>	<ul style="list-style-type: none"> <li>● 60% participate in group meetings</li> <li>● 67% are involved in volunteer groups. 23% in a religious community</li> <li>●</li> </ul>	<ul style="list-style-type: none"> <li>● N/A<sup>39</sup></li> <li>● N/A</li> </ul>
	<i>Voter Turnout</i>	<ul style="list-style-type: none"> <li>● Local election turnout consistently low.</li> <li>● Federal/state election turnout very high</li> </ul>	<ul style="list-style-type: none"> <li>● Local election turnout steadily improving</li> <li>● Federal election turnout improving</li> </ul>	<ul style="list-style-type: none"> <li>● Local election turnout unsteady</li> <li>● Federal turnout improving</li> </ul>
	<i>Education and Age</i>	<ul style="list-style-type: none"> <li>● 54% finished college</li> <li>● 27% have advanced degrees</li> <li>● Highest population percent = 26-39</li> </ul>	<ul style="list-style-type: none"> <li>● 52% finished college</li> <li>● 23% have advanced degrees</li> <li>● Highest population percent = 26-39</li> </ul>	<ul style="list-style-type: none"> <li>● 16% finished college</li> <li>● 6% have advanced degrees</li> <li>● Highest population percent = 40-54</li> </ul>
	<i>Volunteerism</i>	<ul style="list-style-type: none"> <li>● 33% volunteer at least 5 hours per week</li> </ul>	<ul style="list-style-type: none"> <li>● 33% volunteer at least 5 hours per week</li> </ul>	<ul style="list-style-type: none"> <li>● N/A</li> </ul>
Trust and Reciprocity	<i>Perception of Trust</i>	<ul style="list-style-type: none"> <li>● Confident in importance of altruism</li> </ul>	<ul style="list-style-type: none"> <li>● Hesitant on importance of altruism</li> </ul>	<ul style="list-style-type: none"> <li>● N/A</li> </ul>
	<i>Acceptance in the community</i>	<ul style="list-style-type: none"> <li>● Less accepting of newcomers and racial differences</li> </ul>	<ul style="list-style-type: none"> <li>● Less accepting of homeless, religious &amp; accessibility, differences, and the poor</li> </ul>	<ul style="list-style-type: none"> <li>● N/A</li> </ul>
	<i>Size</i>	<ul style="list-style-type: none"> <li>● 52, 102</li> <li>● 12% foreign born</li> </ul>	<ul style="list-style-type: none"> <li>● 20,782</li> <li>● 6% foreign born</li> </ul>	<ul style="list-style-type: none"> <li>● 7,437</li> <li>● .7% foreign born</li> </ul>
Commitment to the community	<i>Homeownership rates and length of time in home</i>	<ul style="list-style-type: none"> <li>● 43% housing owner occupied</li> <li>● 25% lived in home since 1999</li> </ul>	<ul style="list-style-type: none"> <li>● 49% housing owner occupied</li> <li>● 31% lived in home since 1999</li> </ul>	<ul style="list-style-type: none"> <li>● 45% housing owner occupied</li> <li>● 20% have lived in home since 1990</li> </ul>
	<i>Connection to community</i>	<ul style="list-style-type: none"> <li>● 87% “feel connected to the community”</li> </ul>	<ul style="list-style-type: none"> <li>● 87% “feel connected to the community”</li> </ul>	<ul style="list-style-type: none"> <li>● N/A</li> </ul>
Network Strength	<i>Formal Networks</i>	<ul style="list-style-type: none"> <li>● 1 non-profit per 77 people</li> <li>● 85% white</li> </ul>	<ul style="list-style-type: none"> <li>● 1 non-profit per 55 people</li> <li>● 91% white</li> </ul>	<ul style="list-style-type: none"> <li>● 1 non-profit per 76 people</li> <li>● 89% white</li> </ul>

### Discussion

The number of significant parallels in elements in social capital between Corvallis, Ashland, and Lincoln City shows that each community possesses a wealth of engaged, active citizens that possess qualities

<sup>39</sup> N/A – not available

needed for sustained participation. Ashland features almost as strongly as Corvallis in many measures of social capital, which indicates that the potential to engage the community exists through strong networks and a generally engaged social ethic. However, divergences appear between Corvallis and Ashland in elements like perceptions of trust and acceptance, where Ashland appears to be significantly weaker in their image of themselves.

Lincoln City, a very small vacation community, shows potential in the few areas where measurements were taken. It has as many registered non-profits per capita as Corvallis, and strong measures of commitment to their community. This may explain the perception by my interviewees of the generally ‘involved’ nature of the residents. However, thus far, Lincoln City’s sustainability related events have not succeeded in bringing out more than the “same 20 people who were at the last meeting” (interviewee, 6.13).

Overall, the implications of these results indicate that Ashland possesses the majority of social capital condition for an ICSP initiative that may be required. While I have to reiterate that having social capital does not equate to having available social capital for sustainability specifically, I would argue that this is not going to be an issue for Ashland. When asked what issues drew the most people in the community into city council chambers, the results were 1) a cell phone tower near a wellness center, and 2) the development of Mt. Ashland, which would threaten a grove of old trees. Further, when planning for sustainability is made relevant to all input and interests, many seemingly divergent priorities may come together.

### **Capacity**

Institutional willingness and ability to engage with the community has been shown to be a vital prerequisite for a successful ICSP initiative. Through my investigations, this finding was significantly strengthened, and it was in this category that the most significant differences between Ashland and Corvallis came through. Lincoln City, as will be discussed below, has already developed much of the vital capacity for an ICSP initiative, and may only be lacking a ‘fire spirit’ to get the ball rolling.

Placing these concepts within the categories necessarily meant that some categorizations were made that other researchers would argue against. For example, I chose to place sustainability awareness as an element of capacity and not social capital because capacity can be deliberately enhanced, whereas social capital is much more difficult. However, if and when sustainability awareness becomes a social norm, than perhaps its place would be more appropriate as an element of social capital.

Figure 7.1b Findings in Capacity

Concept	Measurement	Corvallis	Ashland	Lincoln City
Citizen involvement in local government	<i>Formal Participation - Arnstein's ladder</i>	<ul style="list-style-type: none"> <li>● Placation/ Partnership</li> </ul>	<ul style="list-style-type: none"> <li>● Informing/ Consultation</li> </ul>	<ul style="list-style-type: none"> <li>● Consultation/Placation</li> </ul>
	<i>Perceptions/frequency of contact</i>	<ul style="list-style-type: none"> <li>● N/A</li> </ul>	<ul style="list-style-type: none"> <li>● 57% never or rarely contact local government</li> <li>● 30% felt they were taken seriously</li> </ul>	<ul style="list-style-type: none"> <li>● N/A</li> </ul>
History of Public Process	<i>Structure of previous CA</i>	<ul style="list-style-type: none"> <li>● Extensive history</li> </ul>	<ul style="list-style-type: none"> <li>● Isolated charrettes</li> </ul>	<ul style="list-style-type: none"> <li>● Inclusive charrettes</li> </ul>
	<i>Channels for seeking input</i>	<ul style="list-style-type: none"> <li>● Ward meetings</li> <li>● Citizen Attitude Surveys</li> <li>● Town Hall meetings</li> </ul>	<ul style="list-style-type: none"> <li>● Occasional web surveys</li> </ul>	<ul style="list-style-type: none"> <li>● Home visits</li> <li>● Store front</li> <li>● City hall</li> </ul>
Government support	<i>Perceived Influence</i>	<ul style="list-style-type: none"> <li>● County sustainability policy</li> <li>● City Sustainability policy</li> <li>● State land use laws</li> <li>● Federal grant funding</li> </ul>	<ul style="list-style-type: none"> <li>● No county sustainability policy</li> <li>● City conservation and energy rebate programs</li> <li>● State land use laws</li> </ul>	<ul style="list-style-type: none"> <li>● Statement of sustainability 2007</li> <li>● State land use laws</li> </ul>
Local Institutional support	<i>Large employer support</i>	<ul style="list-style-type: none"> <li>● OSU internal work, outreach to community</li> <li>● State level mandate</li> </ul>	<ul style="list-style-type: none"> <li>● SOU sustainability council</li> <li>● GhG inventory</li> </ul>	<ul style="list-style-type: none"> <li>● Chinook Winds casino energy</li> </ul>
	<i>Ethic of local business</i>	<ul style="list-style-type: none"> <li>● 160 businesses in coalition network</li> </ul>	<ul style="list-style-type: none"> <li>● 14 certified "green businesses"</li> </ul>	<ul style="list-style-type: none"> <li>● N/A</li> </ul>
Sustainability Awareness	<i>Citizen perception</i>	<ul style="list-style-type: none"> <li>● 93% talk about local sustainability</li> </ul>	<ul style="list-style-type: none"> <li>● 78.3% talk about local sustainability</li> </ul>	<ul style="list-style-type: none"> <li>● N/A</li> </ul>
	<i>Participation in alternative transportation</i>	<ul style="list-style-type: none"> <li>● 33% use alt. transport to work</li> <li>● 88% participate in recycling program</li> <li>● 82% participate in compost program</li> </ul>	<ul style="list-style-type: none"> <li>● 25% use alt. transport to work</li> <li>●</li> </ul>	<ul style="list-style-type: none"> <li>● 27% use alt. transport to work</li> </ul>

## Discussion

What does this graph show in terms of the strength of capacity in Ashland and Lincoln City, as compared with Corvallis? I am of the opinion that this category is where Ashland is fundamentally lacking. Because the role of city government in people’s lives was dramatically different in Ashland than in Corvallis, an additional measurement, ‘perceptions/frequency of contact’ was added to address this issue. Ashland is significantly weaker than Corvallis on citizen involvement in local government by not training their commissioners, and by providing few avenues for input citizens to be heard, unless one formally presents during a three-hour city council meeting, or feels that sending an email is sufficient. This is likely the reason for the reports that a) many people feel they are not heard by the city, and b) city staff feel they only receive negative feedback. By having never done a genuine community process, the city hall has no real experience and no forceful incentive to incorporate extensive public input into their decision-making. Ashland lacks a history of structured methods for seeking citizen input. Councilors do not hold meetings with their constituents on a regular basis, nor does the city conduct surveys to gauge citizen impressions on an issue or service. These weaknesses in capacity have already hindered community progress on community sustainability, and will likely continue unless significant leadership is taken in city hall.

Capacity in Lincoln City falls in the middle between the two other communities. They have experience with public process and citizen inclusion, have issued a sustainability statement, and their citizen involvement methods and sincerity has been shown to place above Ashland, but lower than Corvallis. Therefore, Lincoln City possesses the majority of fundamental building blocks for creating an ICSP initiative.

### Design Processes

I gauged the design processes more superficially than the other two, simply because there is less to compare between the three communities in this category. Making any claims about the design of these community projects is the most speculative element of this research. Therefore, it is less useful to compare them to an established, strong community initiative. However, this ‘checklist’ of measurements may be useful for these communities if and when they determine to undertake an ICSP, and need to develop a strong, legitimate design framework.

Figure 7.1c Findings in Design

<i>Concept</i>	<i>Measurement</i>	<b>Corvallis</b>	<b>Ashland</b>	<b>Lincoln City</b>
Building Legitimacy	<i>Visibility</i>	<ul style="list-style-type: none"> <li>● Highly visible</li> <li>● City sustainability coordinator</li> <li>● Sustainability Coalition</li> </ul>	<ul style="list-style-type: none"> <li>● Not visible</li> <li>● City Conservation Commission</li> <li>● No Sustainability group</li> </ul>	<ul style="list-style-type: none"> <li>● Partly visible</li> <li>● Community sustainability committee</li> </ul>
	<i>Leadership</i>	<ul style="list-style-type: none"> <li>● Strong</li> </ul>	<ul style="list-style-type: none"> <li>● Weak</li> </ul>	<ul style="list-style-type: none"> <li>● Weak</li> </ul>
	<i>Partnerships</i>	<ul style="list-style-type: none"> <li>● 160 Coalition partners</li> </ul>	<ul style="list-style-type: none"> <li>● Unclear</li> </ul>	<ul style="list-style-type: none"> <li>● Unclear</li> </ul>
	<i>Network Strength</i>	<ul style="list-style-type: none"> <li>● Clear group of community leaders. Strong periphery group</li> </ul>	<ul style="list-style-type: none"> <li>● N/A</li> </ul>	<ul style="list-style-type: none"> <li>● N/A</li> </ul>
Building the Structure	<i>Scale</i>	<ul style="list-style-type: none"> <li>● Extensive, includes municipal and state efforts</li> </ul>	<ul style="list-style-type: none"> <li>● Minimal</li> </ul>	<ul style="list-style-type: none"> <li>● Unclear</li> </ul>

	<i>Mandate and Goals</i>	<ul style="list-style-type: none"> <li>• Clear</li> </ul>	<ul style="list-style-type: none"> <li>• Unclear</li> </ul>	<ul style="list-style-type: none"> <li>• Clear goals</li> <li>• Unclear scope for action</li> </ul>
	<i>Inclusion</i>	<ul style="list-style-type: none"> <li>• Extensive</li> </ul>	<ul style="list-style-type: none"> <li>• Minimal</li> </ul>	<ul style="list-style-type: none"> <li>• N/A</li> </ul>
Frameworks and tools	<i>Choice</i>	<ul style="list-style-type: none"> <li>• TNS - Coalition</li> <li>• TBL - City</li> </ul>	<ul style="list-style-type: none"> <li>• Valdez Principles – City</li> <li>• Charrettes</li> </ul>	<ul style="list-style-type: none"> <li>• No Principles</li> <li>• Charrettes</li> </ul>
	<i>Contention</i>	<ul style="list-style-type: none"> <li>• Minor</li> </ul>	<ul style="list-style-type: none"> <li>• Unused</li> <li>• Transition Town</li> </ul>	<ul style="list-style-type: none"> <li>• N/A</li> </ul>

**Discussion**

In Ashland, I found that their current sustainability design structure is fragmented, and no one with whom I spoke was satisfied with the current state of activities or coordination. Possibilities would be to support and legitimate the Transition Town group through efforts by the city, or to put together a coalition of the businesses and groups in Ashland, similar to the Corvallis model. In Lincoln City, the community sustainability committee has initiated and completed isolated projects, but has yet to legitimate their role in the community, or to extensively partner with existing groups and businesses in visible projects. It may be that the overall level of support for city hall in Lincoln City means that their sustainability initiative could be successful housed within that structure. It does not seem likely that this structure would work in Ashland, based on the findings in their capacity.

**7.2 Implications of this research**

Until the Ashland city government takes a comprehensive approach to sustainability seriously and educates their staff and officials in strategies to include community input, their initiatives will continue to fall behind those of other communities and fail to live up their expressed goals of the mayor. Their current Transition Town group may or may not be the group with whom the city would most benefit from aligning with for the community’s sustainability planning. The leadership of that group, while passionate, lacks certain levels of legitimacy and support from the community. Further, the terminology used by the Transitions movement is unnerving to several interviewees as ‘cultish’. In terms of principles for sustainability, Corvallis is the only community to have developed, and used a set of solid principles in their decision-making. Both Ashland and Lincoln City are in need of solid leadership who can show sustainability as inclusive, valid, and beneficial for those in the community. Both communities would benefit from brainstorming within city hall staff about how sustainability planning is different, but not always more, work and how to draw from the strengths of different departments in decision-making. Both cities legitimacy and momentum would be supported by creating a sustainability position/point person in city hall. This position focuses on generating savings through shifts in internal practices, as was done in Corvallis. The savings then funds the continuation of the position. If the focus remains on sustainability as responsible resource use, than financial savings would be more supported. In Ashland, what came out is that a focus on renewing localized food production support would be a great focus for sustainability and economic development cooperation.

Overall, this research has facilitated the researcher’s education on context and possibilities in Oregon, where I hope to live and work. Further, the conceptual framework that I developed was validated to a small degree by the follow up case studies. I applied existing concepts to new situations, and found that they continue to be valid in current ICSP development case studies.

### ***7.3 Errors Committed in the Research***

One of the primary challenges to the research was the constant tension between developing a story, allowing for its complexity and occasional internal contradictions, and the need to box things in, and compartmentalize them into ‘variables’ for dissection. This type of exercise highlights the challenge for a city attempting to restructure itself to deal with a systems perspective. I spend a great deal of time doing exactly what I believe that science and human society should be undoing; scientific reductionism has a place, but is a far cry from the only method of learning. Therefore, I appreciated the opportunity to struggle through these challenges, and recognize that my placement of certain variables and attempts at isolating them from influence by other variables likely failed.

Many would likely argue for the artificiality of the placement of variables as I have described them. Further, while I have attempted to separate these variables out into different elements, in reality, most of them significantly impact one another as this was a case study of real communities, with no availability for ‘experimental’ settings. Therefore, sustainability awareness capacity in Corvallis, as evidenced by alternative transportation, has already been impacted by their sustainability programs, and by leadership from the city hall. These are by no means isolated variables; however, what I have tried to do is to add to existing literature on these variables, and show their relative presence in three communities at different stages.

Another challenge to the research is the fact that Corvallis is ranked so highly for its ‘green’ attitude and activities. Some argue that this means it would be too far ahead for other communities to be able to learn anything. Others in Corvallis worry that it means citizens feel they can ‘rest on their laurels’ and consider their community sustainable. Corvallis is an outlier, but because of the infancy of comprehensive sustainability planning, all these communities will be outliers, and we can use all the examples of success we can get.

Several elements were incompletely ‘tested’ as there was only one measurement. For example, a significant weakness was the fact that I didn’t develop a more thorough test for sustainability awareness as a measure of capacity. I assumed that I would be able to ‘see’ awareness, but I then could not measure or compare my findings. I also acknowledge having been overly ambitious with my conceptual framework, which negatively impacted the degree that I could address each variable.

### ***7.4 Further Research***

A great deal more research in this emerging field is need. Following are few questions that I asked myself throughout this research:

- To what extent do social capital and capacity determine successful sustainability planning in other communities, and does national context impact this finding?
- Are there communities who have successfully implemented community sustainability plans where one of my explanatory variables was absent?
- Under what conditions is community participation undesirable for sustainability planning?
- What is the extent of the theoretical overlap between collective action literature, and sustainability planning literature? What are the differences?
- What are measurable ways to gauge the impact, output, and outcomes of a sustainability plan?
- Do communities that are moving towards comprehensive sustainability planning express a reversal of the general decline in social capital?

### ***7.5 In Closing***

With the development funding for the Oregon Sustainability Center, which purports to be the world's first net carbon, energy, and water neutral building<sup>40</sup>, Oregon is going to remain at the forefront of sustainability planning and innovation. It can be expected that its smaller communities will develop innovation solutions to suit their local needs in relation to reducing carbon footprints, re-localizing food supplies, and supporting local sustainability.

There are infinite directions that communities will take to tackle the challenges rapidly approaching from the climate, shifts in our energy infrastructure, and rethinking global commodity's roles in our daily lives. I hope that through this research, I have provided some small insight into three such potential directions, and to have successfully added to the case study literature on innovative approaches to local climate policy and comprehensive sustainability planning. The success in Corvallis is unique; however, the elements that they have maximized in their community exists many places. Genuine social capital networks related to little league, watershed councils, and the plumbers union all have a role to play, and appropriate designs to maximize the energy already contained in our communities will require innovative leadership, and a little good luck.

---

<sup>40</sup> This means that the building will draw only water and energy (sunlight) that falls within its footprint.  
<http://oregonsustainabilitycenter.org/>

## References

- Agyeman, J., & Angus, B. (2003). The role of civic environmentalism in the pursuit of sustainable communities. *Journal of Environmental Planning and Management*, 46(3), 345-363.
- American College and University President's Climate Commitment. (2006). Retrieved 6/24, 2010, from <http://www.presidentsclimatecommitment.org>
- American Planning Association. (2000). *Policy guide on planning for sustainability*. Retrieved 7/13, 2010, from <http://www.planning.org/policy/guides/adopted/sustainability.htm>
- Armstrong, J., & Williams, D. M. The revolutionary impact of new technology: The early steamship, 1812-1840, an interdisciplinary study. *The International Journal of Interdisciplinary Social Sciences*, 2(3), 343-350.
- Arnstein, S. R. (1969). A ladder of citizen participation. *Journal of the American Institute of Planners*, 35(4), 216-224.
- Ashland Chamber of Commerce. (2010). *Ashland-living and doing business guide*. Ashland, Oregon: Ashland Chamber of Commerce.
- Association of Municipalities of Ontario. (2010). *Integrated community sustainability plan.*, 2010, from <http://www.amo.on.ca/Content/NavigationMenu/SustainableMunicipalities/FederalGasTax/IntegratedCommunitySustainabilityPlan/default.htm>
- Beckett, H. M. (2006). *Sustainable community planning: Challenges and opportunities for the comox valley*. Unpublished Master's thesis, Royal Roads University, Victoria, BC; Canada.
- Benton County Administrative Services. *Elections archive.*, 2010, from <http://www.co.benton.or.us/admin/elections/archives.php>
- Benton County Sustainability Policy, Administrative policy No. 02-01U.S.C. (2002).
- Bodorkós, B., & Pataki, G. (2009). Local communities empowered to plan?: Applying PAR to establish democratic communicative spaces for sustainable rural development. *Action Research*, 7(3), 313-334. Retrieved from SCOPUS database.
- Boyd, S. (2001). Sustainable communities and the future of community movements. *National Civic Review*, 90(4), 385.
- Bridger, J. C., & Luloff, A. E. (1999). Toward and interactional approach to sustainable community development. *Journal of Rural Studies*, 15, 377-387.
- Brugmann, J. (1996). Planning for sustainability at the local government level. *Environmental Impact Assessment Review*, 16(4-6), 363-379. doi:DOI: 10.1016/S0195-9255(97)81658-7

- Burch, S. In pursuit of resilient, low carbon communities: An examination of barriers to action in three Canadian cities. *Energy Policy*, Retrieved from SCOPUS database.
- Callaghan, E., & Colton, J. (2008). Building sustainable & resilient communities: A balancing of community capital. *Environment, Development and Sustainability*, 10, 931-942.
- Campbell, A., Hughes, J., Hewstone, M., & Cairns, E. (2008). Social capital as a mechanism for building a sustainable society in northern Ireland. *Community Development Journal*,
- CERES. (2007). *Ceres principles*. Retrieved 7/26, 2010, from <http://www.ceres.org//Page.aspx?pid=416>
- Chaskin, R. J. (2000). Building community capacity: A definitional framework and case studies from a comprehensive community initiative. *Urban Affairs Review*, 36(3), 291-323. Retrieved from SCOPUS database.
- Chaskin, R. J., George, R. M., Skyles, A., & Gultinan, S. (2006). Measuring social capital: An exploration in community-research partnership. *Journal of Community Psychology*, 34(4), 489-514. Retrieved from SCOPUS database.
- City of Ashland. (2009). *Economic development- strategy flowchart and process timeline*.<http://www.ashland.or.us/Page.asp?NavID=12036>
- City of Ashland. (2010). , 2010, from <http://www.ashland.or.us/>
- City of Ashland. (2010). *State of the city 2010*. Ashland, Oregon: Retrieved from <http://www.ashland.or.us/Page.asp?NavID=12503>
- City of Corvallis. *Draft- community sustainability policy*. Unpublished manuscript.
- City of Corvallis. (1997). *The Corvallis 2020 vision statement*. Corvallis, Oregon: (Vision 2020)
- Council Policy Manual - Organizational Sustainability, CP 04-1.08 (2004).
- Minutes- city council: Minutes- city council: City Council, (2008).
- City of Corvallis. (2009). *2009 sustainability report*. Corvallis, Oregon:
- City of Corvallis. (2009). *Citizen attitude surveys*. Retrieved 03/04, 2010, from <http://www.ci.corvallis.or.us/index.php?option=content&task=view&id=154&Itemid=826>
- City of Corvallis. (2009). *Geography and demographics.*, 2010, from [http://www.ci.corvallis.or.us/index.php?option=com\\_content&task=view&id=3581&Itemid=4242](http://www.ci.corvallis.or.us/index.php?option=com_content&task=view&id=3581&Itemid=4242)
- City of Corvallis. (2010). *Corvallis history*. Retrieved 7/7, 2010, from [www.ci.corvallis.or.us](http://www.ci.corvallis.or.us)
- Community Research Connections. (2009). *Sustainable communities.*, 2010, from <http://www.crcresearch.org/sustainable-communities/sustainable-communities>

- Conroy, M. M., & Berke, P. R. (2004). What makes a good sustainable development plan? an analysis of factors that influence principles of sustainable development. *Environment & Planning A*, 34(8), 1381-1396.
- Meeting minutes: Meeting minutes: 4.28th (2010).
- Corbin, J., & Strauss, A. (1990). Grounded theory research: Procedures, canons, and evaluative criteria. *Qualitative Sociology*, 13(1), 3-21.
- Corporation for National and Community Service. (2008). *Volunteering in Oregon*. Retrieved 07/03, 2010, from <http://www.volunteeringinamerica.gov/OR>
- Corporation for National and Community Service, Office of Research and Policy Development. (2007). *Volunteering in America: 2007 city trends and rankings*. Washington, DC:
- Corvallis Sustainability Coalition. (2008). *Community sustainability final action plan: Focus on the future, action in the present*. Corvallis, Oregon:
- Corvallis Sustainability Coalition. (2010). *Annual report '09*. Corvallis, Oregon:
- Presentation to the Corvallis city council: Presentation to the Corvallis city council: Nov. 16 (2009).
- Corvallis-Benton Chamber Coalition. (2010). In de Heer L. (Ed.), *Civic orgs in Benton county*
- Corvallis-Benton County Economic Vitality Partnership. (2006). *Prosperity that fits: An economic development plan for Corvallis and Benton county*. Unpublished manuscript.
- Cowan, R., & Doggett, T. (2010, August 3). Senate democrats delay action on oil spill bill. *Reuters*, Retrieved from <http://www.reuters.com/article/idUSTRE67259X20100803>
- Cullen, H. M., deMenocal, P. B., Hemming, S., Hemming, G., Brown, F. H., Guilderson, T., et al. (2000). Climate change and the collapse of the Akkadian empire: Evidence from the deep sea. *Geological Society of America*, 28(4), 379-382.
- Dale, A. (2001). *At the edge: Sustainable development in the 21st century*. Vancouver, Canada: UBC Press.
- Dale, A. (2005). Social capital and sustainable community development: Is there a relationship? In A. Dale, & J. Onyx (Eds.), *A dynamic balance: Social capital and sustainable community development* (pp. 13-32). Vancouver, BC: UBC Press.
- Dale, A., Ling, C., & Hanna, K. (2007). Integrated community sustainability planning tool.
- Dale, A., & Newman, L. (August 11, 2008). Social capital: A necessary and sufficient condition for sustainable community development? *Community Development Journal*,

- Dale, A., & Newman, L. (2005). The role of agency in sustainable local community development. *Local Environment, 10*(5)
- Dale, A., & Onyx, J. (Eds.). (2000). *A dynamic balance: Social capital and sustainable community development (sustainability and the environment)*
- Dale, A., & Sparkes, J. (2008). Protecting ecosystems: Network structure and social capital mobilization. *Community Development Journal, 43*(2), 143-156. Retrieved from SCOPUS database.
- Daly, H. (1973). *Toward a steady state economy*. San Francisco: Freeman.
- de Vries, H. J. M. (2008). *Sustainability science: An introduction - reader part 2*. Unpublished manuscript.
- du Pisani, J. A. (2006). Sustainability development; historical roots of the concept. *Environmental Sciences, 3*(2), 83-96.
- Energy Trust of Oregon. (2010). Retrieved 5/24, 2010, from <http://energytrust.org>
- Fleeger, W. E., & Becker, M. L. (2008). Creating and sustaining community capacity for ecosystem-based management: Is local government the key? *Journal of Environmental Management, 88*(4), 1396-1405. doi:DOI: 10.1016/j.jenvman.2007.07.018
- Fukuyama, F. (2001). Social capital, civil society, and development. *Third World Quarterly, 22*(1), 7-20.
- Genat, B. (2009). Building emergent situated knowledge in participatory action research. *Action Research, 7*(1), 101-115. Retrieved from SCOPUS database.
- Gray, B. e. a. (2008). Institutionalization in collective action fields: Actors and factors for building collaborative institutions. *Draft*,
- GuideStar. (2010). *Non-profit organizations in Ashland, Oregon.*, 2010, from <http://www2.guidestar.org/SearchResults.aspx>
- Haight, A. (2008, 12/12). Lincoln city crimps its carbon. *The Oregonian*, Retrieved from [http://www.oregonlive.com/environment/index.ssf/2008/12/lincoln\\_city.html](http://www.oregonlive.com/environment/index.ssf/2008/12/lincoln_city.html)
- Hanna, K. S., Dale, A., & Ling, C. (2009). Social capital and quality of place: Reflections on growth and change in a small town. *Local Environment: The International Journal of Justice and Sustainability, 14*(1)
- Hardin, G. (1968). The tragedy of the commons. *Science, 162*(3859), 1243-1248.
- Hawken, P. (2007). *Blessed unrest: How the largest social movement in history is restoring grace, justice, and beauty to the world*. New York, NY: Penguin Books.

- Heinberg, R. (2004). *Beyond the peak- closing address. first US conference on peak oil and community solutions*. Yellow Springs, Ohio:
- Hitchcock, D., & Willard, M. (2010, July). Sustainability circus: Bringing the major frameworks and indicators under one tent. *International Society of Sustainability Professionals*,
- Hopkins, R. (2008). *The transition handbook: From oil dependency to local resilience*. Devon, England: Green Books Ltd.
- Hopkins, R., & Lipman, P. (2009). *Who we are and what we do* Transition Network.
- Houghton, J. T., Jenkins, G. J., & Ephraums, J. J. (Eds.). (1990). *Climate change: The IPCC scientific assessment* (1st ed.). Cambridge, MA: Cambridge University Press.
- Huetting, R., & Reijnders, L. (1998). Sustainability is an objective concept. *Ecological Economics*, 27, 139-147.
- Institute for Business and Home Safety. (2010). *Summary of state land use planning laws*. Retrieved 7.10, 2010, from [http://www.ibhs.org/land\\_use\\_planning/](http://www.ibhs.org/land_use_planning/)
- International Council for Local Environment Initiatives. (1993). Guidelines for local agenda 21.a
- Jackson County Elections. (2010). In de Heer L. (Ed.), *Ashland election archives*
- James, S., & Lahti, T. (2004). *The natural step for communities: How cities and towns can change to sustainable practices*. Gabriola Island, BC, Canada: New Society Publishers.
- Jones, J. M. (2010). *Tracking religious affiliation, state by state*.<http://www.gallup.com/poll/12091/tracking-religious-affiliation-state-state.aspx>
- Krishna, A. (2001). Moving from the stock of social capital to the flow of benefits: The role of agency. *World Development*, 29(6), 925-943. doi:DOI: 10.1016/S0305-750X(01)00020-1
- Latesteijn, H. v., & Schoonenboom, J. (1996). Policy scenarios for sustainable development. In A. Blowers, & P. Glasbergen (Eds.), *Environmental policy in an international context* (Book 3 ed., pp. 223-254) Arnold.
- Ling, C., Hanna, K., & Dale, A. (2009). A template for integrated community sustainability planning. *Environmental Management*, 44, 228-242.
- Maiter, S., Simich, L., Jacobson, N., & Wise, J. (2008). An ethic for community-based participatory action research. *Action Research*, 6(3), 305-325. Retrieved from SCOPUS database.
- Margerum, R. D. (2002). Collaborative planning building consensus and building a distinct model for practice. *Journal of Planning Education and Research*, 21(3), 237-253. Retrieved from SCOPUS database.

- Margerum, R. D. (2007). Overcoming locally based collaboration constraints. *Society and Natural Resources*, 20(2), 135-152. Retrieved from SCOPUS database.
- McCarthy, J. D., & Wolfson, M. (1996). Resource mobilization by local social movement organizations: Agency, strategy and organization in the movement against drinking and driving. *American Sociological Review*, 61, 1070-1088.
- Meadowcroft, J. (2007). Who is in charge here? governance for sustainable development in a complex world. *Journal of Environmental Policy and Planning*, 9(3-4), 299-314.
- Middlemiss, L., & Parrish, B. (In press). Building capacity for low-carbon communities: The role of grassroots initiatives. *Energy Policy*,
- NCI. (2010). *National charrette institute -system*. Retrieved 6.12, 2010, from <http://www.charretteinstitute.org/charrette.html>
- Newman, L., & Dale, A. (2005). The role of agency in sustainable local community development. *Local Environment*, 10(5), 477-486.
- Newman, L., & Dale, A. (2007). Homophily and agency: Creating effective sustainable development networks. *Environment, Development and Sustainability*, 9, 79-90.
- Newman, L., Waldron, L., Dale, A., & Carriere, K. (2008). Sustainable urban community development from the grassroots: Challenges and opportunities in a pedestrian street initiative. *Local Environment*, 13(2), 129-139.
- Newman, L., & Dale, A. (2005). Network structure, diversity, and proactive resilience building: A response to Tompkins and Adger. *Ecology and Society*, 10(1) Retrieved from SCOPUS database.
- Northwest Natural. (2010). *Smart energy*. <http://www.smartenergynw.com/about/>
- Olsen, M. (1965). *The logic of collective action: Public goods and the theory of groups*. Boston, MA: Harvard University Press.
- Onyx, J., & Bullen, J. (2000). Measuring social capital in five communities. *The Journal of Applied Behavioral Science*, 36(1), 23-42.
- Oregon Department of Land Conservation and Development. (2010). *Statewide planning goals*. Retrieved 06/20, 2010, from <http://www.oregon.gov/LCD/goals.shtml>
- Oregon Department of Transportation. (2010). , 2010, from <http://www.oregon.gov/ODOT/index.shtml>
- Oregon State University. (2009). *Enrollment summary, academic planning & assessment, no. 21*. Retrieved 3/20, 2010, from <http://oregonstate.edu/ua/ncs/archives/2009/nov/osu-enrollment-jumps-more-8-percent-nearly-22000>

- Oregon State University. (2010). *About OSU*. Retrieved 3/7, 2010, from <http://oregonstate.edu/about/>
- Oregon Sustainability Board. (2009). *Report to the 2009 legislative assembly*
- Ostrom, E. (1998). A behavioral approach to the rational choice theory of collective action. *American Political Science Review*, 92(1), 1-22.
- Pearce, D., & Atkinson, G. (1993). Capital theory and the measurement of sustainable development: An indicator of "weak" sustainability. *Ecological Economics*, 8(2), 103-108.
- Portes, A. (1998). Social capital: Its origins and applications in modern sociology. *Annual Review of Sociology*, 24, 1-24.
- Portney, K. (2005). Civic engagement and sustainable cities in the united states. *Public Administration Review*, 65(5), 579-591.
- Portney, K. E. (2003). *Taking sustainable cities seriously: Economic development, the environment, and quality of life in American cities*. Cambridge, Massachusetts: The MIT Press.
- Putnam, R. (2000). *Bowling alone; the collapse and revival of American community*. New York: Simon & Schuster.
- Putnam, R. D. (1997). The prosperous community: Social capital and public life. *Frontier Issues in Economic Thought*,
- Rama, D., Milano, B., Salas, S., & Lui, C. (2009). CSR implementation: Developing the capacity for collective action. *Journal of Business Ethics*, 85, 463-477.
- Robert, K. H., Daly, H., Hawken, P., & Holmberg, J. (1997). A compass for sustainable development. *International Journal of Sustainable Development and World Ecology*, 4, 79-92.
- Robert, K. H., Schmidt-Bleek, B., de Lardereel, J. Aloisi: Basile, G., Jansen, J. L., Keuhr, R., Price Thomas, P., et al. (2002). Strategic sustainable development- selection, design and synergies of applied tools. *Journal of Cleaner Production*, 10, 197-214.
- Rogers, E. M. (1995). *Diffusion of innovations* (4th ed.). New York: The Free Press.
- Roseland, M. (2000). Sustainable community development: Integrating environmental, economic, and social objectives. *Progress in Planning*, 54, 73-132.
- Roseland, M. (revised edition; 2007). *Toward sustainable communities; resources for citizens and their governments*. Gabriola Island, Canada: New Society Publishers.
- Rowley, T. (1997). Moving beyond dyadic ties: A network theory of stakeholder influences. *Academy of Management Review*, 22(4), 887-910.

- Scerri, A., & James, P. (2009). Communities of citizens and 'indicators' of sustainability. *Community Development Journal*,
- Schensul, J. (2009). Community, culture and sustainability in multilevel dynamic systems intervention science. *American Journal of Community Psychology*, 43, 241-256.
- Schimek, P. (1996). Automobile and public transit use in the united states and Canada: Comparison of postwar trends. *Transportation Research Record: Journal of the Transportation Research Board*, 1521, 3-11.
- Sen, A. (1987). *On ethics and economics*. Malden, MA: Wiley-Blackwell.
- Solomon, S., Qin, D., & Manning, M. (Eds.). (2007). *Climate change 2007: The physical science basis*. Cambridge, MA: Cambridge University Press.
- Southern Oregon University- Sustainability Council. (2010). *Sustainability at SOU.*, 2010, from <http://www.sou.edu/sustainable/>
- Tax Exempt World. (2010). *Benton county, Oregon.*, 2010, from <http://www.taxexemptworld.com/organizations/benton-county-or-oregon.asp>
- A Resolution... Endorsing the Valdez Principles, 90-21, (1990).
- The Natural Step - Canada. (2010). *Integrated community sustainability planning course.*, 2010, from <http://www.naturalstep.org/en/canada/integrated-community-sustainability-planning-course-icsp>
- The Natural Step Network- USA. (2010). *Strategic sustainability for cities.*, 2010, from <http://www.naturalstepusa.org/sustainable-cities/>
- The United States Conference of Mayors. (2008). *U.S. conference of mayors climate protection agreement*. Retrieved 4.15, 2010, from <http://www.usmayors.org/climateprotection/agreement.htm>
- Thomas, C. D., Cameron, A., Green, R. E., Bakkenes, M., Beaumont, L. J., & et al. (2004). Extinction risk from climate change. *Nature*, 427, 145-148.
- Transition Network. (2010). , 2010, from <http://www.transitionnetwork.org/>
- U.S. Census Bureau. (2008). *Data profile- Corvallis city, Oregon*. Retrieved 4/24, 2010, from [http://factfinder.census.gov/servlet/ADPTable?\\_bm=y&-qr\\_name=ACS\\_2008\\_3YR\\_G00\\_DP3YR4&-geo\\_id=16000US4115800&-gc\\_url=&-ds\\_name=ACS\\_2008\\_3YR\\_G00\\_&-lang=en](http://factfinder.census.gov/servlet/ADPTable?_bm=y&-qr_name=ACS_2008_3YR_G00_DP3YR4&-geo_id=16000US4115800&-gc_url=&-ds_name=ACS_2008_3YR_G00_&-lang=en)
- United States Department of Energy. (2010). *Energy efficiency and conservation block grant program*. Retrieved 8/09, 2010, from <http://www1.eere.energy.gov/wip/eeecbg.html>
- United Nations, 21: Program of Action for Sustainable Development, United Nations. New York, USA Cong. (1992).

- Verschuren, P. :. D., H. (1999). *designing a research project*. Utrecht: Lemma.
- Vries, H. J. M., de (2008). *Sustainability science: An introduction - reader part 2*. Unpublished manuscript.
- Weiss, B., & Bradley, R. S. (2001). What drives societal collapse? *Science*, 291(5504), 609-610.
- Widerberg, O. (2009). *The influence of a bureaucracy on international environmental governance: The division on sustainable development*. Unpublished MSc, Utrecht University, Utrecht, Netherlands.
- Wijen, F., & Ansari, S. (2007). Overcoming inaction through collective institutional entrepreneurship: Insights from regime theory. *Organizational Studies*, 28, 1079-1100.
- Wilson, J. (2000). Volunteering. *Annual Review of Sociology*, 26, 215-240. Retrieved from <http://www.jstor.org/stable/223443>
- World Commission on Environment and Development. (1987). *Our common future*. Oxford: Oxford University Press.
- Zero Waste Alliance. (2006). *City of Corvallis phase 1 report: Assessment of sustainability performance* No. PW-05-16). Portland, Oregon:

## Appendices

### Chapter 4

#### Appendix 4.4: Dale's Case study Criteria

##### **Case Study Selection Process**

Cases should clearly demonstrate explicit and implicit links between the four substantive “pillars” of the research project—the meaning of place; scale; diversity and limits. In addition, they will offer an opportunity to explore three interrelated research aspects, namely, networks, social capital and sustainable development.

Cases should also share several other key criteria. These criteria should reflect the larger scope of the research project and its links to social capital and sustainable development.

These shared criteria and their considerations are:

leadership: presence of identifiable leadership (from single to collaborative);

enthusiasm: participant enthusiasm and motivation, degree of engagement (e.g from apathy to highly driven);

scale: clarity of a single issue or multiple related issues;

evolution: traceable organizational evolution, for example the development of internal networks, the evolution of goals, the focusing or branching out of mandate and leadership and ideally the development of external network links to other groups.

intervention: identifiable timing and degree of government intervention;

diversity: 1. degree of observable or identifiable diversity of leaders and engaged participants, from visible minorities, gender balance etc. 2. Diversity of case types, e.g. government and non-government

outcomes: does the group have clear goals? Is the project discrete or ongoing? Is there continuity of the network, from planned obsolescence to self-perpetuation;

evaluation: observable (explicit or implicit) attempts to evaluate successes and/or failures, measures for self-evaluation or by an external agency;

feasibility/pragmatism: cases must be accessible, feasible and “researchable” from a functional perspective. Distance, cost, background data accessibility, and openness of key leaders/participants are all factors to be considered for this criterion.

**Appendix 4.6: Corvallis survey**  
**Survey by Louisa de Heer, Graduate Student**  
**Utrecht University, Netherlands**  
**Master's thesis research re. Corvallis Sustainability Coalition**

*Please answer the following questions honestly. The demographic requests (gender/age) are meant in no way to discriminate, but are merely for statistical completeness.*

<> Gender (circle one) M F

<> Age range (circle one) 15-25 26-39 40-54 55-65 66+

<> Do you actively participate as a member of a coalition action team?  
 Yes No which one? \_\_\_\_\_

<> How many of the 2008 sustainability coalition town hall meetings did you participate in?  
 0 1 2 3 (circle one)

<> Are you part of a professional association or community? If so, what kind(s) of association(s) are you a part of? \* (Check any that apply)

- \_\_\_ Professional network
- \_\_\_ Volunteer group
- \_\_\_ Union membership
- \_\_\_ Education group
- \_\_\_ Trades association
- \_\_\_ Religious community
- \_\_\_ Media network

Other: \_\_\_\_\_

<> During a typical week you: \*

	Never	Rarely	Sometimes	Often	Always	No answer
Take part in organized sports						
Take part in organized religion						
Take part in a group activity/meeting outside of work						

<> How many hours per week do you volunteer, outside of the sustainability coalition?

- \_\_\_ 0-5
- \_\_\_ 5-10
- \_\_\_ 10-15
- \_\_\_ 20+

<> How many hours per week do you volunteer for the sustainability coalition (meetings, action team activities, fundraising, research, etc)?

- \_\_\_ 0-5
- \_\_\_ 5-10
- \_\_\_ 10-15
- \_\_\_ 20+

<> How important are the four guiding objectives to the sustainability coalition’s direction and effectiveness?

- \_\_\_ Essential
- \_\_\_ Useful
- \_\_\_ Unimportant
- \_\_\_ I am not familiar with the coalition’s four guiding objectives

<> What kinds of people do you feel are accepted as part of your community? \*

	Never	Rarely	Sometimes	Often	Always	No Answer
Homeless people						
Newcomers						
People of different race						
People of different religious beliefs						
People with accessibility challenges						
Those on low income						

<> Please state to what extent you agree with the following statements\*

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	No answer
You feel connected to your community						
You trust the services and infrastructure available to your community to provide a safe and secure neighborhood						
You are likely to pick up litter other than on your own property						
By helping others, you can help yourself						
Most people can be trusted						
You are aware of volunteer opportunities available to you						
You talk about issues relating to local sustainability with others						

<> Please list five people who you most strongly associate with sustainability activities in Corvallis  
(in no particular order)

- 1) \_\_\_\_\_
- 2) \_\_\_\_\_
- 3) \_\_\_\_\_

- 4) \_\_\_\_\_
- 5) \_\_\_\_\_

◁ Please indicate the ways in which you are familiar with the following people:  
*(check ALL that apply)*

	Sustainability Coalition	Other volunteer group	Business relationship	Public office	Neighbor/Friend	Not familiar with this person
Maureen Beezhold						
Betty Griffiths						
Bruce Hecht						
Linda Lovett						
Annette Mills						
Anne Schuster						
Charlie Tomlinson						
Brandon Trelstad						

\* Questions marked with an asterisk are derived from the *Community Livability Survey*. Dale et al, Royal Roads University, Canada.  
 Printed on 100% recycled paper

Appendix 4.6b: Ashland Survey  
**Survey by Louisa de Heer, Graduate Student**  
**Utrecht University, Netherlands**  
**Master's thesis research re. Ashland Sustainability**

Please answer the following questions honestly. The demographic requests (gender/age) are meant in no way to discriminate, but are merely for statistical completeness.

**1. Gender and Age Range**

- M
- F
- 15-25
- 26-39
- 40-54
- 55-65
- 66+

**2. Are you part of a professional association or community? If so, what kind(s) of association(s) are you a part of? \* (Check any that apply)**

- Professional network
- Volunteer group
- Union membership
- Education group
- Trades association
- Religious community
- Media network
- Other: \_\_\_\_\_

**3. During a typical week you: \***

	Never	Rarely	Sometimes	Often	Always
Take part in organized sports					
Take part in organized religion					
Take part in a group activity/meeting outside of work					

**4. How many hours per week do you volunteer your time outside of work?**

- 0-5
- 5-10
- 10-15
- 20+

**5. What kinds of people do you feel are accepted as part of your community? \***

	Never	Rarely	Sometimes	Often	Always
Homeless people					
Newcomers					
People of different race					
People of different religious beliefs					
People with accessibility challenges					
Those on low income					

**6. Please state to what extent you agree with the following statements. \***

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
You feel connected to your community					
You trust the services and infrastructure available to your community to provide a safe and secure neighborhood					
You are likely to pick up litter other than on your own property					
By helping others, you can help yourself					
Most people can be trusted					
You are aware of volunteer opportunities available to you					
You talk about issues relating to local sustainability with others					
You believe the local government is responsive to community concerns					

**7. Do you contact your local government with ideas or concerns?**

- \_\_\_ Never
- \_\_\_ Rarely
- \_\_\_ Sometimes
- \_\_\_ Frequently

**8. If you have contacted you local government with ideas or concerns, how have you made contact, and did you feel like you concerns were taken seriously?**

**9. Please list the six people, groups, or businesses who you most strongly associate with sustainability activities in your area. (in no particular order)**

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

\*Questions which are marked with an asterisk denote those derived from the Community Livability Survey, Dale et al. Royal Roads University, Canada.

“The ideal goal of community sustainability is not growth at any cost, but optimization of economic opportunity and quality of life within the real ecological limits imposed by the environment in which the community is situated” – (Ling et al 2009, A Template for Integrated Community Sustainability Planning, Environmental Management, vol. 44, pp 228-242)

Please write in the name of your community:

## Chapter 5

### **Appendix 5.4 Complete Corvallis Timeline**

**1973-** the Oregon Land Use act determines the first conscious planning and community inclusion in land use decision-making.

**1997-** The city of Corvallis develops the vision 2020 project with extensive volunteer participation and a town hall meeting style in an \_\_\_\_ month process.

**2001-** First Natural Step workshop held at Hewlett Packard- open to the public. Organized by Maureen Beezhold.

**2002-** Benton County approves an administrative policy on sustainability through support of internalizing environmental costs, reduce harmful impacts on the environment, and the development of “clear, measurable goals”, as well as measurement procedures. Further, they declared that “all county agencies and employees will take actions to promote sustainable practices within county government”.

**2003-** Incoming city council established official goal to improve sustainability in city government operations. Anywhere from 5-10 goals that the council wants to accomplish in their two year goals. “to make city government operations more sustainable”. That was the first step.

= approved funding to hire a sustainability consultant to come and evaluate city operations and make recommendations for improvement.

**2004-** City council approved policy on organizational sustainability.

- First sustainability annual report completed.

- The city released the City Policy manual on sustainability, which contains six major areas of focus: Sustainable Purchasing Practices, Green Building Practices, Solid Waste Management, Land Use Planning, Greenhouse Gas Emissions, and Toxics and Persistent Biotoxins.

**2005-**

January – Economic vitality partnership began work. Two town hall meetings organized over the course of this year. The natural step is a partner organization of this effort.

February- City Council adopted a specific goal to enhance organizational sustainability efforts.

Zero Waste Alliance – consultant hired in order to implement organizational sustainability efforts

Corvallis city council announced the Blue Sky Challenge- to double community sign-ups for local power utility’s option to buy renewable energy. This program was set up and supported by the US Department of Energy, and run through Pacific Power (gazettetimes,

**2006-** Economic Vitality Partnership action plan released

- new city comprehensive plan released

- the Council approved funding to hire a sustainability coordinator to develop a sustainability management plan for city government. This was a temporary position, with subsequent employment contingent on level of savings to the city through the coordinator’s activities.

- Revised sustainability policy adopted.

**2007**

City Council established goal to “enhance organizational sustainability efforts and begin to develop a community-wide sustainability initiative” (pers.comm.; Corvallis Sustainability Coalition, 2008).

The city began developing and implementing a Sustainability Management System (SMS) for internal operations

January 10<sup>th</sup> – First meeting of coalition parties under the Natural Step.

## **2008**

December- City Council received Corvallis Sustainability Coalition’s Community action plan for consideration and future action

## **2009**

Feb- city council established goal to develop community sustainability policies and implement selected actions

Sept- city ad hoc committee to create a community energy strategy

Dec- community energy strategy completed

OSU releases its “Strategic Plan for Institutional Climate Neutrality.

## **2010**

--- draft community sustainability policy is put up for city council discussion and vote.

March 29- city opens up discussion to community on five new fees to pay for sustainability initiatives. Survey posted on survey monkey for community input.

Energy work and food teams are the highlight of successful initiatives so far.

## Appendix: 5.4.2 Arnstein's ladder- questions

The 8 levels of the ladder:

### **8. Citizen Control**

Do local people get money to implement programs?

Did they design the program?

Are there neighborhood corporations?

### **7. Delegated power**

Do citizens have majority of seats on any councils/committees/commissions?

Do citizens have any veto power?

### **6. Partnership**

Is there an organized power base in the community?

Can citizens mobilize against the city to react to decisions?

Are citizen groups funded as a branch of city hall?

### **5. Placation**

Do citizen representatives on committees represent anyone in particular?

What are the citizen rights and responsibilities?

Is there distrust of city hall?

Is innovation of ideas supported in city hall?

Is there significant impact of citizens?

Is community participation continued through to project implementation?

Is there participant training?

Are there public meeting participant rights?

### **4. Consultation**

Is there only one way for citizens to be involved?

Does the city use attitude surveys, neighborhood meetings, or public hearings? Are there any other methods?

Do people know their options for making requests to the city?

### **3. Informing**

Is information provided understandable?

At what stage of projects are citizens informed?

Do citizens have an option for responding to the information provided?

### **2. Therapy**

#### **1. Manipulation**

Who sets the agenda?

Is the citizen information for education of the city's agenda?

Chapter 6

Appendix 6.1: Full demographic comparison between the three communities

Statistical comparison	Corvallis		Ashland		Lincoln City	
	Number of residents	percent of population	Number of residents	percent of population	Number of residents	percent of population
<b>Total population</b>	52102	100%	20,782		7437	
<b>Total university student population</b>	20,000	38%	4560	22%	0	
<b>Total number of part-time residents</b>						
<i>Educational attainment</i>						
<b>High school graduation</b>	3656	12.60%	1754	12.90%	1424	28.10%
<b>Some college/associate's degree</b>	8418	28.00%			2036	40.20%
<b>Bachelors' degree</b>	7617	26.20%	3949	29.10%	520	10.30%
<b>graduate degree</b>	8068	27.70%	3086	22.70%	314	6.20%
<b>Percent high school graduate or higher</b>		94.40%		95.10%		84.70%
<b>Percent bachelors' degree or higher</b>		53.90%		51.80%		16.40%
<b>years in residence more than one year</b>		62.20%		70.40%		N/A
<b>Total population</b>	52102		20,782		7437	
<b>Born in Oregon</b>	21170	40.60%	5951	28.60%	3078	42.10%
<b>Born in US</b>	45025	86.40%	19303	92.90%	6719	92%
<b>Foreign Born</b>	6059	11.60%	1159	5.60%	50	0.70%
<i>Commuting to work</i>						
<b>Drive alone</b>	62.20%			62.80%		68.60%
<b>other means (bus, carpool, walk, etc)</b>	37.80%			37.70%		31.40%
<b># of employed civilians</b>	25766		9649		3077	
<b># of unemployed civilians</b>					413	7%
<b>Occupation- Services</b>	4307	16.70%	2538	26.30%		
<b>Occupation - arts, entertainment, accomodation and food</b>						38.80%
<b>Occupation-Management</b>	12464	48.40%	3794	39.30%		5.10%
<b>Occupation- Sales</b>	5224	20.30%	2067	21.40%		
<b>Occupation- Farming</b>	261	1%	15	0.20%		0.40%
<b>Occupation- Construction</b>	1440	5.60%	659	6.80%		
<b>Occupation - Production</b>	2070	8%	576	6%		
<b>Median household income</b>	41062		36,701			

Mean household income	57378		52,291			
Families below the poverty level		10.80%		12.10%	232	12.50%
All people below the poverty level		25%		19.60%	1155	16.10%
Owner occupied housing		43.20%		48.70%	1506	
Renter occupied housing		56.80%		51.30%	1845	
Moved in before 1990		9.20%		10.30%		18.60%
Moved in 1990-1999		16%		20.40%		49.90%
Moved in 2000-2004		19%		27.90%		
Moved in after 2005		53.90%		41.50%		
Total number of houses	22902		10319		4990	
Number of occupied houses	21541		9510		3351	
Vacant houses	1361		809		1619	
Seasonal use houses	8.1		4.5		1135	
<i>Vehicles available</i>						
0-1		49.40%		53.80%		59%
2+		50.60%		46.30%		41.00%
Male		49.90%		44.20%		45.80%
Female		50.10%		55.80%		54.20%
<i>Age Range</i>						
15-25		31.40%		18.60%		12.20%
26-39		20.30%		18.80%		18%
40-54		16.50%		15%		21.80%
55-65		9%		15.10%		11.20%
66+		10.10%		16.40%		19.30%
Race- White only		84.50%		91%		88.40%
Number of non-profits in the community *	636		359		86	