Community Vitality Index Tool
Some Preliminary Thinking

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Introduction

The concepts sustainable development and sustainability are often used interchangeably, although the concepts have very different meanings (Dale, 2001; Robinson, 2004). Regardless of definitional debates among researchers and practitioners, the concept has not resonated with the Canadian publics. It has not had widespread knowledge beyond the intellectual elites, and some of the early adopters. Investigation of the four themes of the first five years of my Canada Research Chair (CRC) in Sustainable Community Development—place (Dale et al, 2008), scale (Newman & Dale, 2009), limits (Newman & Dale, 2008) and diversity (Dale & Newman, 2010)— revealed that many communities face an array of social, ecological and economic challenges, and their response to the implementation of sustainable development is very mixed. While some communities struggle to survive, others appear to be thriving. Understanding community vitality: why some communities are resilient, adaptive and innovate in the face of change and others do not, is a pressing research question. The next five years of my renewed CRC will focus on trying to understand community vitality, how to measure it, and most importantly, how to proactively communicate the concept and diffuse its principles widely throughout Canadian society.

A new research team has been assembled, working in partnership with Sustainability Solutions Group, Inc., a not-for-profit consulting cooperative composed of community practitioners, some of whom are former graduate students, from across the country. A research workshop was recently held in Quebec, October 23-25, 2010.

The Project

At the Quebec workshop, the research team agreed that they would develop a prototype of a community tool,called the Community Vitality Index, to be finalized by the end of June 2011. Since the team is constrained by very limited financial resources, ithe tool has to rely on existing databases upon which to draw its information. As part of the project, 12 discussion papers are being developed, which we will begin to publish monthly on the CRC website, beginning in April 2011. In addition, they will be published as academic peer-reviewed papers and an international peer reviewed journal has agreed to publish them as part of a unique community vitality series.

The purpose of the tool is twofold: to get individual Canadians to reflect upon on the ecological, social and economic characteristics of their individual communities, and upon themeaning of community for them and how to sustain it. In addition, we hope to compile comparative data on communities against proxy indicators.

Following the development of the tool prototype, the research team agreed to survey the opinions of two demographic groups—the young and the old—against the information compiled by the tool. For the former, a cell phone application will be developed and for the latter, a mail-out survey questionnaire will be sent. Surveys now have a higher response rate, due to the fact that ordinary mail is now more novel, and coupled with an attractive flyer, we anticipate that response rates from this population should be good. Robert Bateman has agreed to produce the artwork for the flyer.

Following the Quebec workshop, the research team agreed that the following 'indicators' were critical to the project and if there were existing data, they would drive the development of the tool. One of the twelve papers addresses the definition of community vitality in detail but for this introductory paper, community vitality is defined as the difference between thriving and merely surviving with the capacity to anticipate and prevent rather than simply reacting and adapting.

Potential Vitality Indices

Diversity: (hotspots—human and biological), economic (population and age figures)

Accessibility: built and non-built environment (accessible to greenspace, public transportation, resources, local markets, ethnic restaurants, public art), literacy), sports activities

Ecological footprint: (GHG emissions)

Dead Space: single-use of land, built environment, % of impermeable surfaces

Reconciliation: evidence of integrated decision-making, connectivity to place, to one another, to other species

Community capital: participation (governance), voting rates, volunteering, community associations, number of local businesses per capita, number of cooperatives, education Community resilience: debt load

Social Innovation: community foundations, number of collaborative organizations, density and centrality of networks, number of strategic partnerships and alliance

Aesthetics: How beautiful is your neighbourhood? How peaceful is your neighbourhoods? How much does your neighbourhood care about art? (survey)

Spatial Justice: mixed income, # of gated communities per capita, NPRI

All of these indices remain to be defined further and linked to whether or not there are existing databases from which to draw information. It is thought that a multi-criteria analysis (MCA) may be useful in allowing users to draw conclusions about the data. MCA allows users to compare both qualitative and quantitative data in a transparent framework .

Some Preliminary Thinking

Scan of Existing Indices

Most community vitality work is almost indistinguishable from quality of life work—and tends to be a rather less integrated list of indicators around health, wealth, greenspace and cultural resources. For example, Oakville's Vital Signs project includes indicators such as obesity, income, tree cover, and so forth as part of their Vital Signs work.

One of the most comprehensive approaches is the Community Vitality Initiative of the Centre for Innovative and Entrepreneurial Leadership based in Nelson, BC. Another example is the Tamarack Institute's community vibrancy project which is focused on poverty reduction and quality of life. But again, we believe, there is no real consideration of what vitality actually is at the community level, they simply build on the huge number of indexes. Other indexes such as Genuine Progress, Quality of Life, are more complex and provide great value for general education and communication purposes but are difficult to use in the municipal context.

There is also the Canadian Index of Wellbeing that was devised by EKOS Research for the Institute of Well-being. This includes community vitality as part of wellbeing but limits it essentially to social capital and related concepts (trust, feelings of safety, and so forth). But this is getting more to the heart of the challenge of trying to assess a community's likelihood of achieving and remaining 'vital'. The International

Development Research Centre has quite a good take on Urban Ecosystem Health which is more along the lines of community vitality as envisioned by the CRC, in that is operated in the space at the intersection between the ecology and society.

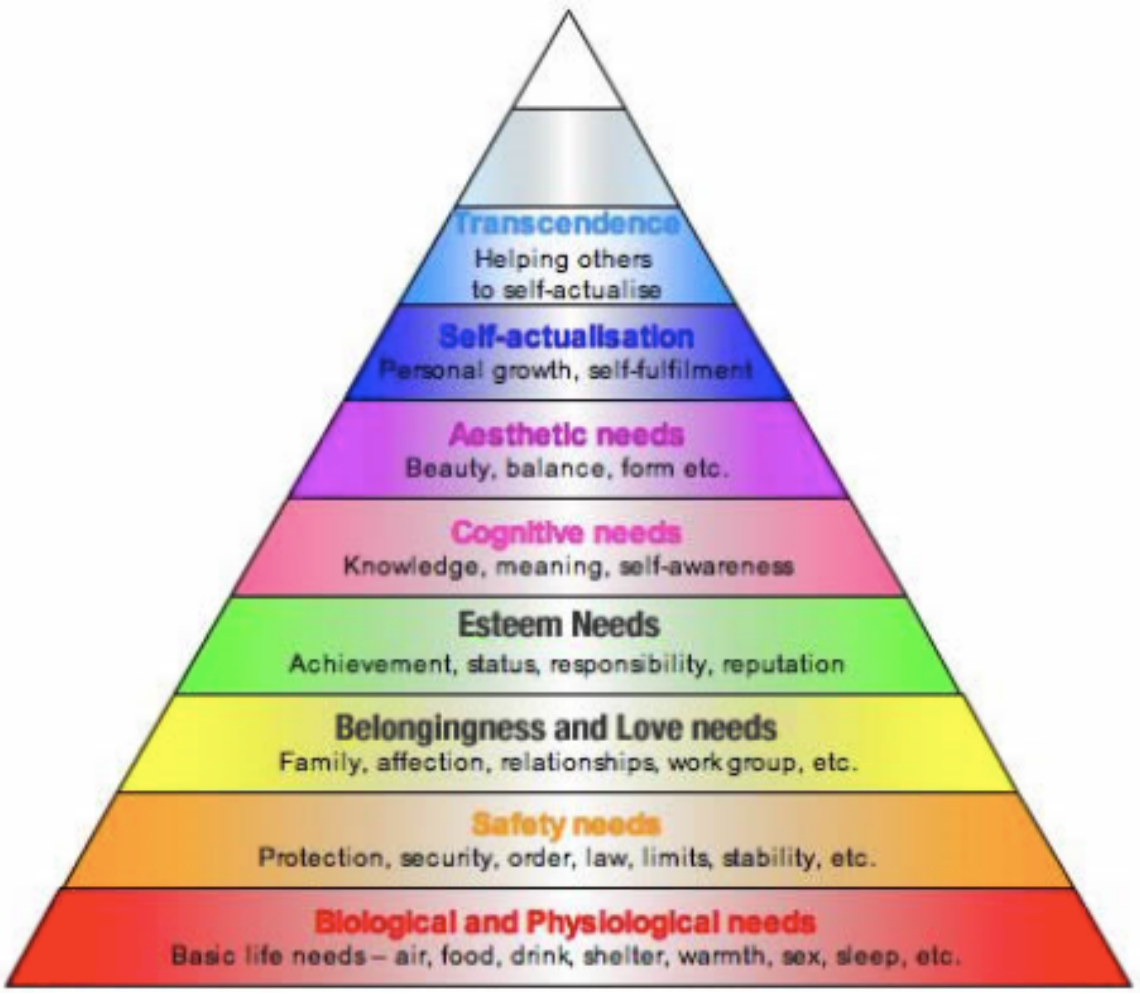
The short-comings of the current vitality work examined so far is that the focus is on the indicators. So, if an indicator is library card holders (as it is in Oakville), then the policy response is to increase library access. Which is a good thing, but it is treating the symptom rather than asking the real questions about what creates and makes for a vital community, and what are some of the critical policy development necessary for its maintenance and enhancement.

The issue with the Quality of Life Index and the community vitality indices is that they are couched largely in economic rather than ecological terms, and to a limited extent, some social indicators. There is a paucity of indicators that are integrated and reflect the sustainable community imperatives of integrating ecological, social and economic considerations. The problem with most indicators work is the Holy Grail of trying to find indicators that are both integrative of the three imperatives (ecological, social and economic) and yet are disaggregated enough to provide meaningful measurement. Generally, the emphasis is on what will attract people to a community to do business, what will lead to a successful economy, rather than what stimulates people within the community to want to achieve success and create a sense of ownership (thrive) rather than merely survive. This will, of course, also attract new people (particularly the creative classes that will further stimulate the economy) in the short-term, but can be stifling in terms of the sufficient and necessary diversity for social innovation over the longer-term (Dale & Newman, 2009).

Our preliminary thinking leads us back to Maslow's Hierarchy of Needs combined with some place/eco-cultural rootedness - a smattering of collective; Gezellig (which is Dutch), and cynefin (which is Welsh). Both of which mean essentially the same and both are largely untranslatable into English, but refer to essentially a sense of homeland where that homeland is as much an ecological/spiritual place as it is a physical place. This leads us to the concept of an index that is more general and more perceptive rather than data point orientated.

Maslow's Self-Actualization Scale

Ultimately community vitality is that spark that enables a community to move from 'getting by' to 'getting ahead' (Dale & Onyx, 2005). Any measure of vitality, therefore, requires consideration of those elements that provide first for the needs of the community and then provide the ability to engage with higher functions of creativity, adaptation and innovation. This has a direct analogy with Maslow's hierarchy of needs.



Maslow's Hierarchy of Needs

While Maslow's needs are linked to a concept of life in a community, they are individual in focus, and often very internally focused. In any community there will be individuals that have more or less of their needs met. However, a community in ecological terms can be seen as a quasi-organism in its own right – and therefore these needs should be able to be adapted for use for a community. If a community is a place in which individuals can move up the hierarchy in their own personal development, while at the same time the community as a whole also 'develops', then it is more likely to be vital.

Proposed community hierarchy

Biological and Physiological needs: The community has the capacity to provide clean air, clean water, has food sovereignty and food security. There should be adequate provision for shelter in terms of a supply of affordable housing, and it can provide energy needs in a sustainable way to the population. In many ways, this is concerned with the quality of the environment, but doesn't go beyond this to wider issues of longer-term sustainability or other landscape/ecological related issues, it is a measurement of the present ecological capital.

Safety needs: The community has a degree of law and order than allows individuals to pursue their lives without significant fear of violence (either physical or emotional) being perpetrated against them. This also extends to levels of governance – the freedom from corruption, knowledge of societal norms, fair and equal treatment regardless of the nature of the individual, freedom of information and so forth. This level of the hierarchy, therefore, represents the blunt end of governance and issues of law and order.

Belongingness and love needs: For individuals, this level of the hierarchy refers to family ties and the place of individuals in society. A vibrant community, therefore, needs to reflect this by both having high levels of social capital, especially bridging capital between sub-communities and vertical capital, allowing members of the community to access power and decision making entities and individuals, as well as physical places that encourage connection.

Esteem needs: The community needs to both provide the opportunity for individuals to succeed in a diversity of ways (for example a diverse economic base providing opportunities for those with diverse talents) and that allows individual 'agency' (Dale & Sparkes, 2010) to flourish. In addition, the community needs to have mechanisms to feel esteem in and of itself for achievement, for example, from the prosaic (i.e. Duncan, BC's biggest hockey stick in the world) to the truly ground-breaking (the success hosting the 2010 Olympics in Vancouver). Essentially, is there something about a community that provides pride and identity, and is this identify a shared identity? Is this identity known outside of the community, for example,Nanaimo BC's identity as a world leader in transparent municipal governance and the sharing of GIS data or conversely, Chemanus, Vancouver Island and its beautiful murals?

Cognitive needs: Is there opportunity in the community to learn and grow? Is there access to a diversity of cultures, opinions? To what extent is the community as a whole exposed, and receptive to outside ideas and opinions in a proactive way that

builds local ownership to those ideas and opinions?

Aesthetic needs: Quite simply, does is the place attractive, but this is more than a commentary on architectural style, it is also a reflection on the connectedness with the natural world and the availability of cultural, public and meeting spaces.

Self-actualization: Essentially this level is about growth, not in the terms that most municipalities measure growth, i.e. tax base (although that may be relevant) but in terms of the lower levels of the hierarchy it is about development– are the trends in the 'right' direction? Is the community getting better, as improvement in and of itself builds positivity and vitality.

Transcendence: To what extent is the community exporting its ideas to the outside world? Perhaps a classic example of this is the Samsø Energy Academy in Denmark building on the successes of the cooperative wind energy movement on that island, or the spread of the CittaSlow movement from small towns in Tuscany and Umbria.

Measurement and perception

While there may be indicators that could be directly measured for all these levels of the hierarchy, arguably more important for community vitality is the perception of community members on the performance of any indicator. Presumably an increase in vitality in one area could lead to a positive feedback into another area even if, in reality, traditional quantitative measures have not changed. Negative effects can also be triggered by perception – the fear of crime is more powerful than the reality of crime. The perception that drinking water is not clean leads people to turn to bottled water in cities with some of the best drinking water in the world and in spite of the fact that many commercial distributors use tap water.

Therefore, an indicator should be based more on perception and opinion than measurable data—this is where vitality differs from GDP, for example, which is based on a long history of measureable data. The indicators to measure the vitality of a community need to be able to capture the perception of the people within the community towards the place that they live, therefore, a measure of 1 to 10 on the perception of the various indicators would be appropriate, rather than a need to derive precise indicators. This could be done in a similar way as for example, the Onyx and Bullen scale, a large suite of parameters could subsequently be trialed and the most 'meaningful' then selected.

This may be preferable to the typical approach of indexes which select indicators that are fairly arbitrary, tend to be more about measuring service delivery from the municipal

perspective and don't really measure what is vital for people and their community. For example, GDP increases as climate change increases, more people buy air conditioners. Similarly, divorce is good for the economy, as people buy the services of lawyers, two accommodations are necessary and so forth.

Use of the hierarchy

Our proposed method of using indicators differs from others in that rather than adding up each section, a community has to reach a threshold in one level before the 'next' level is considered, a hierarchical approach to indicators if you will?

Therefore, for example, a Northern First Nations community with poisoned water, mouldy over crowded housing, poor governance and substantial addiction rates would not likely benefit from increased accessibility to education, unless these fundamental drivers were addressed. This also assists in the development of priorities by the community and for government. Why spend energy and money at the higher order of vitality when lower orders have yet to be addressed, the problem being of course is where to set those thresholds and what practical indicators to use for these levels of the hierarchy?

The importance of place

The more traditional approach to indicators also does not sufficiently take into account place-based measurements, and the spatial aspects of communities. If vitality is a function of both resilience and adaptability, and indeed is linked to sustainability, then connection with 'physical place' is crucial. Most of the above could be achieved in separation from the landscape, yet this would not capture the resilience and adaptability of the community and its ecological capital. This indicator suite would then be reflecting the long term potential for vitality, rather than the hierarchy which demonstrates the current vitality, but which may be substantially at risk from external changes.

As our research suggests there are fundamental links between the nature of place and the nature of the community that inhabits it. It is the relationship between landscape and community that could significantly influence the potential vitality of the place. There are two possible ways of considering place. One is Quality of Life Capital (QoLC), **where** each unit of landscape is considered in terms of the multiple benefits it provides. A high quality of life capital means a unit of landscape has many functions associated with it, a low score means there are few functions associated with it. This supports the potential of diversity and vitality
The other is multi-functionality (Ling, 2007), which is clearly related, but it

predetermines to some extent the categories/parameters that are examined. We tend to use ecological, social, historical, economic, aesthetic, but this could change. Each landscape unit is then assessed in this way.

Deadspace/Livespace

Dead space would be either an area that has no functionality (or extremely low, as nowhere has no functionality at all, even derelict buildings have ecological and (anti-social value) or has a very low number of functions that could be identified for community vitality. These could in theory be mapped, potentially using community mapping techniques, and a community's vitality assessed based on the number of areas of the community considered dead.

Alternatively, 'vitality hot spots' could be identified by the community. The question remains, which impacts a community more, a focal point of artistic endeavor, or a notorious corner; a barren and failed strip mall or a multi-centers of successful independent stores? Is there a relationship between dead space, or conversely, live space and community vitality? What about scale?

Suggested index

Perception question On a scale of 1 to 10. May need to be calibrated to ensure scale is all in the same direction	**Indicator Data** Using numerical data?
Biological and Physiological needs	
Our environment is clean – the air is pure, the water is good to drink, the land is un-contaminated	Air quality Water quality Contaminated land
People in the community have adequate housing	Homelessness Overcrowding Condemned properties
There is adequate healthy food for all available in the community	Hectares of productive farmland / person within [100mile]

Safety Needs	
The community is free of violence	Crime figures
Our government (scale?) is open and transparent	Some measure of openness and transparency
Access to power and investment is equitable for all sections of society	Some measure of equal opportunity
Belongingness and love needs	
The is a high degree of community spirit	Attendance at community events
All members of the community are part of the community	Diversity of (those attending) community events
All members of the community have the ability to influence decisions	Diversity of elected bodies (municipality, school boards)
Esteem needs	
Successful people in this community come from all walks of life	
This community has something about which it can feel proud	
This community has a shared identity	
Cognitive needs	
My community is diverse	Ethnic diversity and Socio-economic diversity
My community is well connected to other communities	Twining, official exchanges, visitor counts
There are plenty of opportunities to learn in my community	Training and education programs

Aesthetic needs	
My community is well designed	Density
My community is connected to the environment in which it is located	Access to non-built landscapes
There are plenty of places for public gathering in my community	Meeting and performance spaces
Self-actualization	
Our community is getting better all the time	Trends in the other indicators
The opportunities available to people in our community are getting more numerous and varied	
Our environment is improving	
Transcendence	
Our community can teach other communities about...	Number of case studies found on Google about the community
People come to our community to find out about...	

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