Phenomena intersect; to see but one is to see nothing.
– Victor Hugo, from *The Toiler of the Sea*

2. At the Intersection: Existing Measures of Community Vitality
According to the Urban Institute, the idea of developing a set of broad-based, socially oriented, community-level indicators and a system for their ongoing measurement and analysis can be traced back to the 1960s. However, at that time the limitations and costs of technology were largely prohibitive to providing the data required for a community-level analysis and it was not until the 1990s that advances in computer hardware, GIS software, automated administrative data availability, and institutional capacity had reached the point of making such tracking systems viable.

Several things have motivated the development of community-oriented tracking systems, but perhaps most often mentioned are the shortcomings of conventional measures that rely solely on material and economic data, in particular gross domestic product (GDP):

The unwavering pursuit of economic growth – embodied in the overwhelming focus on Gross Domestic Product (GDP) – has left over a billion people in dire poverty, and has not notably improved the well-being of those who were already rich, nor even provided us with economic stability. Instead it has brought us straight to the cliff edge of rapidly diminishing natural resources and unpredictable climate change. No wonder that people are desperately seeking an alternative vision to guide our societies.

In the last twenty years, many efforts have been made to develop alternative measures that capture the complexity and diversity of communities, seeking ways to improve “people’s lives in a way that is sustainable, equitable and socially just”.

In this chapter, we’ll explore the purpose, function and efficacy of existing tools and measures related to community vitality. Seventeen different systems were selected and reviewed, and have been included as examples here. These systems represent several different scales of focus, from neighbourhoods to global, and a variety of different approaches to representing the health of a community.

First, though, what is the purpose of social indicator systems? Kenneth C. Land identifies three primary uses:

1. monitoring to track change over time in a broad range of social phenomena beyond traditional economic indicators, which, as previously mentioned, has been a key principle motivating the social indicators movement;
2. social reporting for public enlightenment, which reflects the belief that social indicators represent a form of social reporting that can lead to public enlightenment on social issues and in time action on these issues, and;

3. social forecasting to identify trends in social conditions and turning points.\(^{22}\)

**Most of the indicator systems** we reviewed have a broad range of measurement categories that aim to provide a holistic view on community well-being. Indexes we reviewed that had a more targeted focus include the Happy Planet Index, the Housing and Transportation Affordability Index, and the Global Peace Index. The Happy Planet Index is a measure of the ecological efficiency with which human well-being is achieved. The measurement is arrived at by multiplying average lifetime by life satisfaction and dividing by ecological footprint. The Transportation Affordability Index explores the wider costs of housing by adding average housing costs to average transportation costs and then dividing by average income. The Global Peace Index describes the statistical relationship between various factors as they relate to peace in order to assign an economic value to peace.

Poverty is a common denominator of many of the indexes we considered, and indeed in a review of community-based indexes, community vitality researchers Denise Whaley and Liz Weaver found that of ten approaches, all included poverty and/or poverty rate, measured in terms of income, employment security and access to housing, as important indicators of well-being.\(^{23}\) Over half of the indexes they studied included indicators for community safety/freedom from crime, access to education, physical health, social support/social cohesion, engagement of citizens, health of the natural environment, culture, community vibrancy, diversity, access to arts and recreation, and economic health of the community (which measured business growth and opportunity as well as access to a variety of goods and services).\(^{24}\)

Different indicator systems present their data in different ways. The first main divide is between non-aggregate and aggregate. Non-aggregated indicators directly present the data being gathered, whether qualitative or quantitative. An aggregated indicator, on the other hand, combines a series of measures or indicators into a single result by means of a mathematical function or a qualitative assessment. The act of combining data sets requires a judgment as to whether each is treated equally or assigned weighted values. Naturally, this gives rise to a critique of aggregate approach being more subjective and less transparent. The advantage of the aggregate approach is that broader trends are more evident as represented in a single figure than a series of indicators which may display contradictory trends. Finally, under the umbrella of aggregate indicators there are two main subcategories: composite (fully combined) and common unit aggregates. A common
unit aggregate approach combines measures that have the same units, the most common unit being money.\textsuperscript{25}

Most of the approaches we reviewed are non-aggregate, composed of anywhere from fifty to over one hundred indicators that fall into several domain categories. For example, the Quality of Life Reporting System measures changes in hundreds of variables that fit within ten domains. This type of index system is generally considered more useful for policy-making as “a single indicator of well-being... cannot identify the underperforming aspects of well-being”.\textsuperscript{26}

Within our survey, the Canadian Index of Wellbeing, the Composite Learning Index, the Happy Planet Index, the Global Peace Index and the Genuine Progress Indicator are all examples of aggregated approaches. The Composite Learning Index, as an example, uses a wide range of learning indicators that are combined to provide individual scores for learning conditions that foster social and economic well-being for 4,500 communities across Canada. It provides an efficient tool for comparing learning performance in different communities and its impact on individuals, communities and the country as a whole. The Genuine Progress Indicator, based on the concept of real cost accounting, uses a capital accounting framework to measure the monetary value of human, social and natural capital.

Second, we found it informative to distinguish between indicators that are developed bottom-up (community-driven) and those that are top-down (indicator-driven). Both have their advantages:

A great advantage of a top-down approach is consistency in the estimation of an index across space. A citizen’s bottom-up index may be useful to track trends over time within a community, but if other communities have not adopted the same variables and methodology, comparisons will not be possible. Advantages of the bottom-up approach include the sense of ownership the community may take in the index if the community develops it itself and, of course, the grassroots understanding of community that can be reflected in the index.\textsuperscript{27}

According to Sean Meagher, one of the people behind the Neighbourhood Vitality Index, “measuring neighbourhoods cannot be done with a simple tally of data. Neighbourhood indicators require an approach to analysis that is informed by the intersection of data and an interpretation based on the specific neighbourhood context”.\textsuperscript{28} In the Neighbourhood Vitality Index, local residents determine neighbourhood priorities and set collective goals.
Vital Signs, which reports on sixteen major cities across Canada, engages communities in the process by allowing them to choose measures for tracking and to select, on a rotating basis, the “snap-shot” indicators used to monitor progress in their annual report cards. For example, “in 2007 the indicator used to describe housing conditions was the ratio of average residential prices to median family income. In 2008, the housing indicator focused on the rental vacancy rate of a 2-bedroom unit.” Vital Signs depends on community volunteers that “act as a reference group to provide report card grades which track positive shifts or identify community gaps or challenges.” To supplement the community-level indicators, Vital Signs uses a top-down approach for the national-level measures, which capture “shared concerns[:] issues that are important to all Canadians”.29

A third way indexes vary is in the type of data they use. In a recent scan of ten community-oriented index systems, Weaver found that “there are generally two types of measurements: quantitative or numeric (hard data) and qualitative or stories (soft data). Most of the approaches collect and report data using both... Qualitative data is often viewed as being less rigorous and by combining it with quantitative data you get a more comprehensive picture of what is occurring in a community”.30

The Community Vitality Initiative uses qualitative data for what they call “perceptual indicators.” In their work they have found that “perceptions, even though they do not provide a scientifically accurate analysis, offer an excellent starting point for reflection and action by communities”.31 The Community Vitality Initiative uses a 95-question survey that asks community members to rate everything from employment to environmental health, from support for the arts to safety on the streets, from public transit to prenatal care.32 It uses a sample size of only 20–80 individuals from a cross-section of the social, cultural, political, business, and recreational subsects of the community.

The Quality of Life Project relies on both qualitative and quantitative data to assess the largest cities in New Zealand. The qualitative data is obtained from biennial Quality of Life surveys which measure perceptions of health and well-being, crime and safety, education and work, the environment, culture and identity.33 These perceptions are combined with quantitative data gathered from secondary sources.

Communicating the results can be challenging, given that there is often significant data involved that relates to geographic space as well as social and economic characteristics. When it comes to presenting the data they’ve collected, almost all the tools we reviewed use a combination of online graphics and reports, and many employ interactive maps and charts that the user can customize to explore specific results. Some were more involved, including Community Indicators Victoria, which
lets users choose criteria and create their own “live reports” which are then available for others to see. The Legathum Prosperity Index has a “personal periscope tool” that enables visitors to measure their own personal prosperity within the findings of the index.

“But how did they do it?” was a question often on our minds as we reviewed different indicator systems. In some cases organizations give a glimpse of the process behind developing and conducting their measurements. For example, to develop the CVI, the Center for Innovative and Entrepreneurial Leadership (CIEL) says it “spent over a year researching, building and testing the CVI, synthesizing more than 60 studies on community wellness, health and quality of life and employing stakeholders and experts from across Canada”.34

We do know that at the neighbourhood level, data availability can be a challenge. Says Meagher:

Not all the data useful to neighbourhood vitality measurement is gathered in comprehensive ways and on a neighbourhood by neighbourhood basis. Particularly in Canada, data is often suppressed for smaller areas, and sometimes for entire census tracts, making information on critical subjects like numbers of lone-parent families, multifamily households and mother tongues unavailable at the neighbourhood level. Even for data released, disaggregating data to provide discrete information by ethno-cultural and linguistic background is impossible.35

The Genuine Progress Index paints a more encouraging picture of its process. The index was developed during extensive year-long consultations with community groups that defined community health and well-being, identified key determinants of community health and well-being, developed a process for selecting priority indicators, and constructed a survey instrument. When it came time to determine where to locate the data needed to respond to the determinants identified, they found that much of it was readily available:

Statistics Canada has already devised excellent measures... assessing both objective conditions and subjective feelings of well-being, so we had little practical difficulty in matching community concerns and interests with specific questions already contained in Statistics Canada’s General Social Surveys (GSS), National Population Health Surveys and Canadian Community Health Survey, Survey of Work Arrangements, the national volunteer surveys and several other established survey tools.36
And while the methodologies behind individual indicator systems weren’t so readily available for us to learn from, there are many resources available about indicator systems more generally, and guides for establishing them. For example, in a collection of essays commissioned by the Canadian Population Health Initiative, eight experts share their perspective on community health, addressing the question: What would an index of healthy communities include?

Before an index of healthy communities can be created, a framework must first be developed that clearly identifies the purpose of the index, specifies how it should be used and defines exactly what makes a community healthy.37

In 2009, the Center for Innovative and Entrepreneurial Leadership (CIEL) published a guide to community vitality that describes their work with over fifty communities in four countries and includes their list of universal indicators and sources.38 And the National Neighbourhood Indicators Partnership (NNIP) produced the document Building and Operating Neighbourhood Indicator Systems: A Guidebook, which is the basis of the Neighbourhood Vitality Index. Furthermore, websites like Wikiprogress.org and the Compendium of Sustainable Development Indicator Initiatives39 offer many more resources and models.

How successful have community-level indicator systems been? And by what measure? (Wait – another measurement?) Their rate of success depends on the objectives, which vary. For some systems, contributing to public information and knowledge is the primary objective. Success in this regard is sometimes quantified by using the number of site visits, downloads or population covered. For example, when this book was written, Community Accounts had been viewed over 325,000 times by almost 40,000 users and the Happy Planet Index, which measures 143 countries representing 99% of the world’s population, has been downloaded in 185 countries.

In Andrew Sharpe’s survey of indicators he observes: “these indexes have been very successful in capturing the public’s attention. While there are potential dangers in the index approach, this development is, overall, an extremely healthy one. While knowledge is not a sufficient condition for social progress, it is a necessary one”.40

The Genuine Progress Indicator (GPI) has led to the creation of eighty reports relating to it and has revealed surprising facts, for example, that volunteering in Nova Scotia adds $1.9 billion to the provincial economy, that transportation is the greatest financial burden for households, and that obesity and poor diet cost the
province $250 million each year. The GPI website claims that this data has succeeded in influencing the approach of Statistics Canada and the Nova Scotia government in measuring progress.41

For other indicators, effecting change is the primary objective and here measuring success can be more challenging. Vibrant Communities, as part of its process, measures the impacts of its indicators in three main areas: depth of impact; systems change (new community resources or structures, new or adjusted policies or improved delivery of existing government programs, and new working relationships in the community); and community capacity (community stories and reflections are part of the evaluation). Vibrant Communities objectively reports on results, citing 322,698 poverty-reducing benefits to 170,903 households in Canada, 164 poverty-reducing initiatives completed or in progress, $19.5 million invested, 1,690 organizations partnering, and 35 substantive government policy changes.42

**Our review of the existing measures** of community vitality has helped us identify the key components, the best means of measuring them, and some idea of how to go about bringing the results together into a meaningful tool to inform and steer our communities. In the chapters that follow, we'll pick up on several different groups of indicators that might comprise a comprehensive study of community vitality. Beginning with health, we'll move on to social capital, followed by specific consideration for two of the more vulnerable groups in our communities (oldest members and the youngest), before shifting to the physical environment (both built and green spaces), and concluding with governance, both a means and an end to sustaining truly vital communities that have the capacity to promote autonomy and meet the challenges ahead.