Meg Holden
Rhonda Phillips
Chantal Stevens *Editors*

Community Quality-of-Life Indicators: Best Cases VII

Springer

Community Quality-of-Life and Well-Being

Series editor

Rhonda Phillips, Purdue University, West Lafayette, IN, USA

The Community Quality of Life and Well-being book series is a collection of volumes related to community level research, providing community planners and quality of life researchers involved in community and regional well-being innovative research and application. Formerly entitled, Community Quality of Life Indicators: Best Practices, the series reflects a broad scope of well-being. Next to best practices of community quality-of-life indicators projects the series welcomes a variety of research and practice topics as related to overall community well-being and quality of life dimensions, whether relating to policy, application, research, and/or practice. Research on issues such as societal happiness, quality of life domains in the policy construct, measuring and gauging progress, dimensions of planning and community development, and related topics are anticipated. This series is published by Springer in partnership with the International Society for Quality-of-Life Studies, a global society with the purpose of promoting and encouraging research and collaboration in quality of life and well-being theory and applications.

More information about this series at http://www.springer.com/series/13761

Meg Holden · Rhonda Phillips
Chantal Stevens
Editors

Community Quality-of-Life Indicators: Best Cases VII

 Springer

Editors
Meg Holden
Urban Studies Program
Simon Fraser University
Vancouver, BC
Canada

Rhonda Phillips
Honors College
Purdue University
West Lafayette, IN
USA

Chantal Stevens
King County Auditor's Office
Seattle
USA

Contents

About the Editors

Meg Holden (Ph.D., New School for Social Research) is a social scientist whose research investigates the promises and results of sustainability planning in cities around the world. She is an Associate Professor of urban studies and geography at Simon Fraser University in Vancouver, Canada. Meg served as a board member of the Community Indicators Consortium from 2011 to 2016 and she currently serves as editorial board member of the journal *Applied Research in Quality of Life* as well as the Springer book series on Community Quality of Life and Wellbeing. Meg is the author of *Pragmatic Justifications for the Sustainable City*: *Acting in the common place* (Routledge, 2017).

Rhonda Phillips Ph.D., FACIP, has research and outreach efforts that focus on the quality of life and well-being related to community and economic development. At Purdue University, she serves as inaugural Dean of the Honors College and Professor in the Agricultural Economics Department. She is author or editor of over 20 books, including *Sustainable Communities: Creating a Durable Local Economy*, and *Introduction to Community Development*. Formerly a Senior Sustainability Scientist with the Wrigley Global Institute of Sustainability, Rhonda also served as Director and Professor in the School of Community Resources and Development at Arizona State University. She is a member of the College of Fellows

of the American Institute of Certified Planners, and immediate past president of the International Society for Quality-of-Life Studies.

Chantal Stevens is the Executive Director of the Community Indicators Consortium, an open learning network and global community of practice among persons interested or engaged in the field of indicators development and application. Her interests and expertise in sustainability, community indicators, public engagement and performance management were honed over a 25-year career as the Executive Director of Sustainable Seattle, a pioneer in the field of community-generated indicators, and People for Salmon, a state-wide public engagement initiative, as well as Performance Management Analyst and Legislative Auditor with King County, Environmental Division Manager with the Muckleshoot Indian Tribe, and several terms on the Issaquah Planning Commission and many position and diverse boards or commissions. She holds a Master's Degree in Marine Affairs from the University of Washington.

Chapter 1
The History, Status and Future of the Community Indicators Movement

Lyle Wray, Chantal Stevens and Meg Holden

Abstract This introductory chapter to the volume provides an overview of the history of community indicators, beginning with a grant provided by the Russell Sage Foundation in 1910 to the Charity Organization Society (of New York) to survey industrial conditions in Pittsburgh, and moving to present day. As a social movement, we present community indicators efforts as being grounded in challenges and innovations within the distinct but overlapping domains of public administration, social work and philanthropy, community development, sustainable communities and environmental justice, happiness and wellbeing studies, and data analytics. Each frames and pursues the task of crafting and disseminating indicators of community conditions in a different way, resulting in a richly diverse field of practice and theory, that the Community Indicators Consortium seeks to serve and promote. In so doing, the Community Indicators Consortium recognizes that uniting these diverse approaches in community indicators provides a forum in which to pursue common themes of work, including the need to amplify the voice of disadvantaged communities, to seriously explore the increasing use of information technology, to produce positive community change and to sustain these efforts over time. Each chapter in this volume is also summarized here.

L. Wray
Capitol Region Council of Governments, Hartford, CT, USA

C. Stevens
Community Indicators Consortium, Issaquah, WA, USA

M. Holden (✉)
Simon Fraser University, Vancouver, Canada
e-mail: mholden@sfu.ca

1.1 History of the Community Indicators Movement

While data and statistics have been used for centuries by governments and businesses, the origin of community indicators is associated with a grant provided by the Russell Sage Foundation in 1910 to the Charity Organization Society of New York to survey industrial conditions in Pittsburgh (Smith 1991, 40–41). After the study was released in 1914, the Russell Sage Foundation provided technical advice to many other cities to complete similar work. Partly because of this initiative, over two thousand local surveys were taken on education, recreation, public health, crime, and general social conditions.

In the second half of the 20th century, the evolution of the indicators field paralleled, and sometimes triggered, the evolution of consciousness about what constitutes quality of life in community. The 1960s and 1970s saw the rise of the social indicators movement. In 1974, the academic journal *Social Indicators Research* was founded and started publishing research results dealing with measurement of the quality of life that encompassed the whole spectrum of society at scales ranging from the individual to international systems.

In 1985, the charitable organization JCCI in Jacksonville, Florida initiated a set of quality-of-life indicators that tracked a variety of issues to understand progress. With Sustainable Seattle in 1992 and others, sustainability indicators came into existence at about the same time as sustainability became a concept in public discourse, often associated with the work of the Brundtland Commission (the World Commission on Environment and Development) in 1987 and affirmed by the 1992 Rio Earth Summit in Rio de Janeiro, Brazil. Along with their focus on sustainability, this approach to indicators, in contrast with previous efforts, was grassroots and bottom-up. As such, they established a new base for social indicators, where the community is the originator, the guardian and the audience of the project. The community indicators movement was born.

With precedent-setting work by the Reno, Nevada-based indicators initiative Truckee Meadows Tomorrow, modern indicator projects are leading movements in their communities based on a commitment not merely to measure trends but to act on trends of concern, via cross-sector collaboration. SA2020, in San Antonio, Texas, along with many contemporary projects, took to heart the criticisms directed at their predecessors that indicators initiatives were investing the bulk of their time to establish strong and defensible measurement systems, leaving far too little time for considerations of either how to publicize and generate an audience for their work, or how to act to change undesirable trends. SA2020 now outsources data collection and analysis to a third party. Instead of assembling data, the indicators initiative focuses on communicating information and engaging the community in steps toward positive change.

Building on the "Beyond GDP" approaches of the 1990s, the well-being movement emerged explicitly in this century. Recent years have seen community

indicator projects evolve with greater focus on the importance of the individual, happiness and well-being, within community change. This has meant a concomitant expansion of the measures taken to include the realm of individuals' subjective experiences within community and the impact these experiences have on their assessment of life in their community. The measurement frontier of community indicators work now engages the particular challenge of identifying valid, comparable measures of happiness, mental health, and the experience of equity and fairness.

Barrington-Leigh and Escande (2016) constructed a database of well-being and progress indicators with the key elements being: material living standards, health, education, governance and civic participation, social connections, relationships and community, environment, culture, accounts of time-use, and various types of security. This list overlaps a good deal with the earlier commissioned work of Stiglitz et al. (2009) who proposed eight indicators for well-being and progress.

1.2 Evolution of the Community Indicators Consortium

The Community Indicators Consortium (CIC) started as an umbrella of nine organizations producing indicators, that came together to help provide some overall coherence, coordination, and mutual support within the burgeoning international community indicators movement. The idea for the Consortium germinated at the 2003 International Society for Quality-of-Life Studies (ISQOLS) conference on community indicators in Williamsburg, Virginia and led to the first CIC conference in 2004 in Reno, Nevada on the theme "Advancing the Science and Practice of Community Indicators." The 2004 conference in Reno drew together an unexpectedly large group of participants, who brought their diverse perspectives, skills, knowledge, and experience in community indicators work. The conference buzzed with the shared passion of attendees to improve the quality of life in communities through approaches that utilize measurable indicators of progress.

Due in part to the success of the conference and the positive interest it generated, CIC incorporated with the goal of becoming a "learning community" and offering resources and connections necessary to any group aiming to develop and implement a community indicators project that is aimed at "making a difference" in community. Now in its thirteenth year, CIC is led by a 15-member board and an executive director and counts about 300 dues-paying members.

CIC's mission is to advance and support the development, availability and effective use of community indicators for making measurable and sustainable improvements in quality of community life. CIC works to fulfill its mission by hosting an annual international conference, organizing educational and networking events, providing on-line classes, and sharing information in a timely and dependable way. CIC built and maintains a comprehensive online database of past

and active community indicator projects all over the world (www.communityindicators.net/projects). In addition, over the dozen years of its existence, CIC has taken on several special projects, led by the interests and opportunities identified by members. One notable project dealt with the intersection of community indicator projects and the use of systems of performance measures in organizations, including local governments. This work resulted in a set of guidelines for the integration of performance measures and community indicators, and the development of a community indicator-performance measurement maturity model which puts these guidelines to the test of practice.

1.3 What Are "Community Indicators"?

The definition of 'community indicators' is often in the eye of the beholder. Breaking the term into its two component parts, it involves indicators, metrics that represent a level or a condition and that often can be expressed as a rate or a count. Just as importantly, it involves 'community', a grouping of people based on a geographic, demographic or social criterion, such as a neighborhood, ethnicity, income level, etc. As a social movement, community indicators groups are often expected to function with some input or leadership from the community, acting outside of or in parallel with formal local government, and to include a process for reporting to the community in a format that is public and accessible to non-experts.

Community indicator projects are developed to serve as a map to guide priority and agenda-setting for the work of multiple responsible groups in improving community-level conditions across the full spectrum of challenges affecting a community. The indicator format allows for progress on each measure of significance to be tracked over time and compared to conditions experienced by comparator communities. Sometimes, an additional step taken within community indicators work is to set numeric targets for indicators, where the intent is to motivate interventions toward achieving a community goal. Targets may be chosen by decision-makers or the community, and can be drawn from science or policy (e.g. acceptable levels of air pollutants established by the World Health Organization), based on the best practices of other communities (e.g. to achieve the same rate of persons with a family doctor as community "x"), or based on the aspirations of the community (e.g. to be the first greenhouse gas neutral community). A city may work to decrease the ground level particulates in the air based on a reference to scientific research that shows at what level that pollutant will impact the health of the most vulnerable, or threaten community health generally; or it may compare the poverty level to that of peer cities or that of the state, province or country, with a view either to addressing inequities in conditions or to building capacity to address poverty overall.

In addition to individual indicators or frameworks, several **indices** have been proposed to summarize a portfolio of measures. When a portfolio of indicators is needed to tell the full story of a community, indices offer an easy to understand solution, hence the popularity of a summarizing index such as the Dow Jones Industrial Average, for example. Interactive indices such as the Ecological Footprint (Wackernagel and Rees 1996), the Walk Score (walkscore.org) and the Livability Index (AARP) have captured the popular imagination because they distil complex ecological or social-economic considerations into a single digit that allows for manipulation and comparisons based on changes in locations or aspirations. The Prosperity Index of the Legatum Institute (http://www.prosperity.com/#!/) is a high-level index of well-being indicators. Its eight dimensions overlap in good part with the Stiglitz et al. (2009) model for measurement of well-being: economy, entrepreneurship and opportunity, governance, education, health, safety and security, personal freedom, and social capital.

Barrington-Leigh and Escande (2016) lament the fact that existing indices with many components often lack transparency as to how the index is formed and thus lack staying power as they may fail to persuade those who will not simply accept the wisdom of the choices implicit within an index.

1.4   Framing Community Indicators Projects

Community indicators span a wide range of dimensions, levels of generality and precision, geography and time series depth. Applicability to the community as a whole or to specific interests and identities, and those that indicate objectively measurable phenomena as well as those that reflect subjective perceptions all may feature together in the indicator system. Some community indicator systems scale their focus at the postal or zip code level, others at the level of the neighborhood or block group, others around the landscape scale such as a watershed or a geopolitical construct, such as a metropolitan region. Many are designed as multipurpose data-rich tools for local understanding and community work, which can be tailored according to different geographies, time periods, interest groups, policy areas of focus, or other specificities.

Just as in performance measurement, it often helps to have an organizing framework for a portfolio of indicators in a given community. Many projects organize community priorities as "domains" and populate each domain with indicators. One of the more popular frameworks groups indicators into environment, economy and equity. The term "triple bottom line" was first coined in 1994 and has been used extensively not only in the community indicator field but beyond (Hindle 2012). Based on Putnam's seminal work, the four basic types of capital—human, social, built, and natural—provide another useful framework well adapted to tracking well-being at the community level. Cultural, political and financial capitals

were added by Flora and Flora (2004) to constitute their community capitals framework. Other frameworks employed, particularly in the public sector, are known as the balanced scorecard approach (Kaplan and Norton 1996), the social return on investment (Millar 2012), and results-based accountability (Friedman 1997).

1.5   Situating Community Indicators Work

The work of designing, framing, reporting on and implementing action from a basis of community indicators today is conducted by people from a range of different professions. Over the history of the movement, as different groups of professionals have recognized value in community indicators work, they have also adapted the work involved in creating and using community indicators to suit their own professional norms and capacities. This has added to the richness of debate and diversity in the field. Figure 1.1 presents a diagrammatic understanding of the major professional fields currently engaged in community indicators work, from our perspective within the Community Indicators Consortium. Each field's different engagement with community indicators will be discussed in turn.

   Public Administration and Performance Management. Public administration is the implementation of government policy and also an academic discipline that studies this implementation and prepares civil servants for work in the public service. Heavily influenced by organizational management as well as policy analysis theory, indicators within public administration appeal with their promise of reconciling values and high level goals of public service with the instrumental demands of implementation and measuring results. That is, within a typical public administration frame, an indicators initiative, theoretically speaking, can be broken down into four sequential stages of work and pursued in a systematic, efficient manner. Namely, these stages consist of:

Fig. 1.1 The intersection of professional fields involved in the work of community indicators
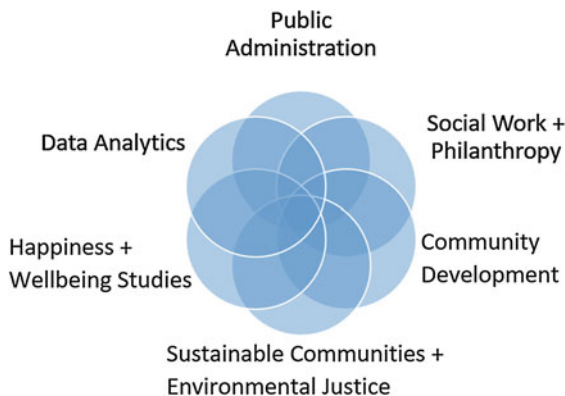
- Selecting indicators to meet the need to measure progress toward particular goals;
- Measuring indicators based upon existing or new data;
- Analyzing and reporting on indicators to communicate trends; and
- Designing actions to improve deteriorating trends in communities.

In the field of public administration, indicators find considerable resonance with the practice of performance measurement, which emerged as an initiative to make more systematic the evaluation of government and public service work. The use of indicators within a performance measurement approach to public administration has not been without its critics, who have pointed out that modelling public and community work based upon private sector models is not always suitable for meeting community goals (e.g. Hartley 2010). Different iterations of new frameworks have evolved, as have understandings of how to attribute value to relationships between the observed conditions, the actions taken, and the outcomes that have transpired.

CIC, with the support of the Alfred P. Sloan Foundation, identified benefits, barriers and strategies for better community indicator/performance measure (CI-PM) integration, highlighting the importance of integration and collaboration to improve citizen engagement in using information for better community decision-making. CI-PM integration leads to better assessment of communities' quality of life and to better engagement of community members and other key stakeholders in the development and use of community indicators and performance measures. The work of CI-PM engages both governmental and non-profit organizations, along with community members.

According to one of the leaders of the field of performance measurement, Harry Hatry (2014) of the Urban Institute, "performance measurement" is a process in which a governmental or non-governmental public service organization undertakes regular collection of outcome and/or output data (preferably both) throughout the year (not only at the end of the year) for its programs and services. One emerging theory within public administration is that of the "public value". Moore and Khagram (2004) coined the term "public value" as the public sector equivalent of shareholder value in the business sector. The goal is to produce socially desirable outcomes for a community. Community indicators are one way to track such progress.

Social Work and Philanthropy. Not far removed from the interests and objectives of public administration, social work and philanthropy sectors use indicators as means to better track and measure success in interventions in communities. Indicators work within this sector emphasizes tracking the success of efforts to improve conditions in poor and marginalized communities, and to learn from the results of interventions. Compared to the domain of public administration, this work is less tied to notions of efficiency, and has demonstrated exciting innovations in recent years related to finding better frameworks for understanding

and measuring "collective impact" rather than insisting upon strictly statistical models of causation (Kania and Kramer 2011). Much work is being conducted within private as well as community foundations and social organizations working to redress inequities around the world. The work of the community foundation Jacksonville Community Council (www.jcci.org) is widely recognized as the longest running contemporary community indicators initiative.

Community Development. Community development work can be distinguished from the preceding initiatives by its emphasis on the need for engagement and empowerment of non-expert community members to diagnose and address their own problems. Indicators initiatives have proven a valuable tool for numerous groups, particularly in making a case for the change that they advocate based upon comparing trends with other communities. There are also intersections between the work of community development organizations working with indicators and the public administration strain of indicators work, as these groups too need to prove the method, efficiency, and impact within their work with public and other grant funds.

Sustainable Communities and Environmental Justice. Indicators for sustainable communities and environmental justice groups can be thought of as a special case of community development-based indicators. Emerging from the internationalization of a sustainable development agenda in the early 1990s, many community-based groups took up an indicators approach as a means of coming to terms locally with the meaning and implications of this new frame for thinking about human progress and environmental protection. Like the work of community development organizations more broadly, sustainability and environmental justice indicators efforts have placed a strong emphasis on the process of orienting, framing, selecting, and presenting the indicators. For the community indicators field as a whole, this has brought to light the social learning as well as communicative roles played by indicators, recognizing the limits of the expectation that good data "speak for themselves." The environmental justice movement, sometimes more oriented toward a rights-based argument for action as opposed to one of demonstrating indicators and trends, has found particular utility in indicators work where indicators can be used to visualize and map stark inequities that go unaddressed in policy and practice.

Happiness and Wellbeing Studies. US President John F. Kennedy is often remembered for raising questions about the utility of the single indicator of the Gross National Product or Gross Domestic Product to refer generally to the progress of society. In addition to being taken up as a mantra within many community indicators efforts aiming to diversify and qualify arguments about conditions and trends in local communities, the field of happiness and wellbeing studies has taken off with a key goal being to find better ways to characterize, communicate and support human progress.

Famously, the Kingdom of Bhutan prioritized Gross National Happiness as a national policy priority in the early 1970s, and since this time a growing number of nations and local communities have invested in thinking harder about how to promote what makes people happy and well, rather than or in addition to what

makes them rich, or safe, or less vulnerable. In this field, key debates flow around questions of how best to measure subjective concepts such as happiness and wellbeing, how to compare these measurements, and how to interpret differences.

Data Analytics. Analysis and display of data in ways that effectively communicate the story behind a trend in data have always been key to good community indicators work, of any variety. Although community indicators work began well before the use of internet and mobile technologies had become a daily necessity, the field has been part of the evolution of better approaches to data visualization and display as informatics and geographic information systems technologies have evolved.

The field of data analytics has emerged as information and internet technologies have greatly increased the velocity and volume of so-called "big data" available in cities and communities (IBM 2015). At the same time, this has increased the opportunities for data entrepreneurs to create new means to collect data, often via mobile and internet-of-things technologies. With this technological shift, the private sector has become interested in the indicators field in a major way, with information technology companies such as IBM, Siemens and Cisco now promoting "smart cities" and the benefits of living environments that are embedded with sensors and means to collect and track data at every turn, promising to use this data to create a more efficient, comfortable life.

The rise of the big data and the smart city concepts may present opportunities within community indicators, but also present a stark contrast and challenge to the way in which the community indicators movement has traditionally operated in a context of data scarcity, not data overabundance. Community indicators projects have long emphasized the need to collect new and better data to reflect more acutely upon on-the-ground conditions in overlooked communities and trends. Big data promoters promise that, with interconnected networks of continuous flows of data swirling all around our communities, this need for communities to collect their own data will become obsolete, replaced by the need to acquire the technology and expertise to mine the abundant digital data for patterns that matter. As such, trends in big data and data analytics raise many significant questions for the community indicators movement.

In addition to this basic question about whether the work of community indicators needs to change its overall orientation and approach in order to work with abundant, fast data, are other questions about the work of ensuring the openness, transparency, and public nature of data, questions about protection of personal privacy, and questions about whether the flows of big data do anything, in fact, to address data scarcity when it comes to the measures that matter to communities.

1.6 New Research in the Field of Community Indicators

Across this diverse field of interests and approaches in community indicators work, these efforts share a common belief that transparency about specific community trends and their impacts on overall community conditions will lead to positive

change that will improve outcomes overall. This belief has been put to the test time and time again within political battles waged by indicators initiatives, in which the superior data and the superior argument do not always hold sway. Through a classical, rational lens of thinking about information and policy change, making a community and its elected decision-makers aware of negative trends and inequities should be sufficient to motivate and mobilize action to turn these trends and inequities around. History tells a different story.

Not unlike the story in other realms of voluntary and community work, efforts in community indicators have been plagued by the short lifespan of many initiatives. All too often, the cycle is one of a burst of investment of enthusiasm, dedication, skill, and resources, a hard slog to establish an initial reputation and reporting system, some small triumphs of media, community, and perhaps even political attention, followed by a series of disappointments in efforts to repeat, accelerate, or institutionalize the work, and ultimately by the decline or disappearance of the initiative. From a capacity-building, social capital and social learning approach, this cycle is not a condemnation of community indicators work, because it serves to launch new careers, political and justice agendas and plant new ideas in community —this is seeding work. From a perspective of institutional change and the development of better habits around the use of data in decision making and community action, this is an unfortunate state of affairs, holding community indicators efforts back from attaining their most significant impacts through a lack of time to measure and argue for the needs that arise from observed trends over time.

Different perspectives exist on the reasons for this cycle, and how it might be broken to produce more stability in the community indicators field. In his chapter in this book, Barrington-Leigh (2017) takes a longitudinal view of community indicators initiatives since the 1970s, and asks what factors may have played the biggest role in determining the resilience of those that have survived to date. His message is one of caution about rushing to generate indices from key indicators and data, because it is the unaggregated and subjectively-oriented indicators initiatives that seem to have out-survived composite indicators work. Grounded within the field of happiness and wellbeing studies, Barrington-Leigh makes a case for subjective measures of life satisfaction, drawing from new understandings of how collective well-being in community can be derived from individual survey responses to questions about individual life satisfaction.

Latching on to the work within the realms of philanthropy and social work, as well as the community development realm of indicators work, a more realistic story about how better information can guide better decisions involves the recognition that additional phases of work are needed to mobilize action. Momentum is growing around the notion that the most effective action is collective—that is, based upon partnerships of different kinds of organizations that agree to join forces in a targeted way around a particular trend, or the need for more information in decision-making more broadly (Kania and Kramer 2011).