



AN INTRODUCTION TO COMMUNITY INDICATOR PROGRAMS

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Organization of Reports

The reports developed for the Fort St. John Community Indicator Program include:

- Introduction Report
- Research Report

The reports are available on the Community Development Institute website at www.unbc.ca/community-development-institute and the City of Fort St. John website at <http://www.fortstjohn.ca/>.

About the Community Development Institute

The Community Development Institute (CDI) at the University of Northern British Columbia (UNBC) was established in 2004 with a broad mandate in community, economic, and regional development. Since then, it has worked in partnership with communities across north and central BC to identify and adapt to changes, opportunities, and challenges emerging in the new global / rural economy.

The CDI Office and Research Program in Fort St. John, located at The Forge, was established to work with the community to identify and take action on strategies for economic diversification and community resiliency. The CDI works in partnership with the City of Fort St. John and in collaboration with the community, industry, local business, community organizations, First Nations, and all levels of government with the objective of achieving greater impact of research, planning, and innovation at the community, regional, and program level. This community-based work will focus on enhancing the quality of life and growing a sustainable economy in Fort St. John.

For further information about this program, feel free to contact Greg Halseth or Marleen Morris, Co-Directors of UNBC's Community Development Institute.

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Introduction

Community indicators are used to measure and track the social, economic, and environmental issues that are significant to citizens living in a particular geographic area. Community Indicator Programs (CIPs) fulfill multiple roles as:

- democratic tools that engage citizens through dialogue and debate about community values, needs, and priorities;
- reporting tools that track and communicate progress towards community goals; and
- policy tools that identify local issues and inform evidence-based policy making (Dluhy and Swartz 2006; Cox et al. 2010).

Such evidence-based information is also often needed for developing programs and plans, setting priorities, pursuing senior government funding and industry contribution agreements, as well as to support participation in environmental impact assessment processes.

The City of Fort St. John recently adopted a CIP with the Community Development Institute (CDI). This is a crucial first step as the CDI is both a “neutral convener” and “backbone organization” that can provide overall direction, discussion venues, and reliable data collection and analysis (Wood 2016). Having the CDI plan and implement the CIP for Fort St. John will encourage broader citizen and stakeholder engagement, as the CIP will be perceived as neutral and non-partisan.

This Introduction begins by briefly contextualizing the community indicator movement, situating it between the social indicators movement and the Big Data revolution that is now underway. The discussion then proceeds to address key principles, best practices, and common challenges of CIPs.

History of Community Indicators Programs

The bottom-up approach ‘community indicators movement’ can be contrasted with its predecessor. The top-down ‘social indicators movement’ emerged in the 1960s in response to widespread criticism of the reliance on economic indicators, especially the Gross Domestic Product (GDP), to measure societal progress (Dluhy and Swartz 2006). In the 1970s, government agencies developed ‘intra-city indicators’ which are the precursors to community indicators (Gahin and Paterson 2001). Despite the initial enthusiasm of federal governments, the 1980s saw budget cutbacks to data collection agencies, and mounting criticism that the social indicators movement had not only failed to reach a consensus on a unifying indicators framework, but also that the data provided had only a minimal influence on policy (Barrington-Leigh and Escande 2016).

The original and longest-running CIP, the non-profit Jacksonville Community Council Inc. (JCCI), is based in Jacksonville, Florida (the JCCI was recently reorganized due to insufficient funding, see Cravey 2017). Between 1985 and 2016, the JCCI annually reported on Quality of Life (QoL) Indicators for the purposes of benchmarking and tracking community progress over time. On the basis of the JCCI’s QoL Indicator reports, community working groups conducted in-depth studies of specific issues and advocated for policy change with decision-makers (Citizen Engagement PACT of Jacksonville 2017). This reflects the key difference between the social indicators and community indicators movements, as citizens sought to plan and direct the future of their community (Gahin and Paterson 2001).

Alongside the withdrawal of national governments from social indicators, the community indicators movement arose in the context of the growing influence of the concept of sustainable development. The Rio Summit in 1992 introduced a framework from which to develop indicators for sustainability (Gahin and Paterson 2001). The sustainability movement influenced many CIPs which were concerned with inter-generational equity, intra-generational equity, and the natural environment. As shown in the discussion on common challenges with CIPs, sustainability compounds the problem of data messiness of CIPs.

By the end of the 1990s, the community indicator movement was well established internationally, and at least 24 CIPs were operating in Canada (Maclaren 2001). The Canada Mortgage and Housing Corporation made the first attempt at a standardized CIP for use by Canadian municipalities; the Community-Oriented Model of the Lived Environment (COMLE) consisted of 100 indicators in 10 domains. In 1999, the Federation of Canadian Municipalities (FCM) issued its first report based on a standardized CIP, with 41 indicators in 8 domains. Currently, the FCM tracks 87 indicators in 10 domains. Both of these CIPs were disaggregated: indicators were not weighted and indexed. The first attempt at the latter in Canada was made by the Ontario Social Development Council in 2000, with a QoL index for an aggregation of 12 indicators in four thematic areas (Maclaren 2001).

The 2000s saw the continued proliferation of standardized and non-standardized (or location-specific) CIPs, with proponents celebrating the democratization of public data as the community decides what data should be collected and acted upon. While the eclecticism of the community indicator movement is widely accepted as a given, there is growing evidence that CIPs seldom influence local decision making and

that CIPs generally have a low survival rate (Barrington-Leigh and Escande 2016). Added to this, the Big Data ‘revolution’ threatens to make CIPs appear as a slow, unresponsive, and costly means of collecting local data (Pires et al. 2017).

Key Principles

As the community indicator movement has accumulated over two decades of experience, there are now a number of well-established principles that should be adhered to in the development of a CIP.

- ***CIPs are inherently normative***

Selecting indicators involves decisions about what is and what is not important to measure. CIPs also report on whether an issue is improving or getting worse. This reporting is not neutral, but involves normative value judgments (Dluhy and Swartz 2006; Holden 2009,). In the development of CIPs, the literature stresses the importance of being transparent about the value judgments that are made in indicator selection and interpretation (Cobb and Rixford 1998).

- ***CIPs need a theoretical framework***

CIPs should be able to make sense of why community problems are getting better or worse. The literature emphasizes the need for theory-driven community indicators that reveal the causes of problems, not the symptoms (Cobb and Rixford 1998). The theory should be able to explain how public and private actors affect different social, economic, and environmental issues, and how various issues are linked to each other (Dluhy and Swartz 2006; Sawicki 2002). The theory should also allow for hypothesis testing in order “to gain some clarity about what one expects an indicator to ‘do’ once it has been developed” (Cobb and Rixford 1998). CIPs have often been criticized for lacking a coherent theoretical framework (Sawicki 2002). Thus, theoretical eclecticism appears to be the norm in most CIPs (e.g., Davern et al. 2016). In a widely-cited article, Innes and Booher (2000) apply complexity theory to understand cities as a complex, adaptable organism with a collective intelligence. CIPs provide key actors in the city-organism with feedback so that they can act differently, thus making the city into a more adaptive and sustainable learning system. As discussed below, Innes and Booher helpfully offer a hierarchy of community indicator types.

- ***CIPs should focus on a specific issue or policy area***

In practice, CIPs have often overloaded stakeholders with too many indicators that often collectively take no strategic focus (Wong 2002). This approach assumes that policy and decision-makers will consult the data and take the appropriate action. The literature is emphatic that a targeted approach to CIPs is most effective (Sawicki 2002). That is, clear linkages between community indicators and actual policies are required in order for a CIP to be successful in translating knowledge into action. As Innes and Booher (2000, 176) point out, while CIPs should be linked to specific policies, they cannot be used to evaluate policy interventions, as this “involves measurement and analysis of all the factors that may contribute to a policy’s success or failure, along with careful design of research to isolate the policy variable from the other factors.”

- ***CIPs require collaboration among diverse groups***

‘What’ gets measured in a CIP is dependent upon ‘who’ is involved in the indicator selection. Practitioners must ensure broad stakeholder involvement, remove barriers to citizen participation, and seek consensus among diverse stakeholders (Wood 2016). For CIPs to be democratic tools empowering citizens in shaping the future of their communities, and for them to be effective in policy change, they must be participatory and inclusive. Ultimately, CIP processes are successful if they are collaborative and create a broad sense of ownership across the community. Holden (2009) identified four distinct ‘communities of practice’ that are involved in CIP delivery: elected officials, engaged publics, ethnic and cultural groups, and professionals. The backbone organization administering a CIP is responsible for achieving value alignment and for resolving any conflicts that may arise between these communities. CIPs can change the way participants think, and this intervention can lead to new understandings of community values.

- ***CIPs can have different levels of indicators***

Innis and Booher (2000) have identified a hierarchy of indicators: 1) System performance indicators; 2) Policy and program indicators; and 3) Rapid feedback indicators. Developing three to five system performance indicators is difficult and time-consuming as it requires consensus among broad stakeholders about “what kind of city they want.” System indicators are intended to give a shared sense of direction to both CIP stakeholders and the community at large. They are the “headline” indicators that will appear in the local media as they tell an interesting story (Maclaren 2001, 289). At the next level of importance, policy and program indicators are those measures that will be used by local government to make adjustments to their priorities and everyday actions. Finally, rapid feedback indicators are those that measure conditions affecting the everyday life of residents, such as traffic and weather reports.

Best Practices

CIPs involve an incremental and iterative process, and practitioners have often found that it takes several years before CIPs yield results. The CIP process typically involves three practices: initial planning, indicator selection, and indicator interpretation.

- ***Initial planning***

As bottom-up initiatives, the success of CIPs depends not just on the indicators, but on meaningful and transformative citizen engagement. Moreover, extensive citizen engagement ensures that there is a vested interest in the outcomes of a CIP.

At the outset of the CIP, there needs to be a common vision about what kind of community change is desired. This strategic visioning exercise will involve citizens, experts, city staff, elected officials, and others in a wide-ranging discussion about the existing issues facing the community and what needs to be changed. Through this strategic visioning, three to five system level indicators can be identified with discussion facilitated around the policies that may be linked to them. Wood (2016, 196) has referred to this strategic visioning exercise as a “Deliberative Learning Forum” as it builds value alignment, specifies goals, and identifies the main issues to be addressed in a CIP.

- ***Indicator selection***

There is considerable variation in the process through which indicators are selected, which reflects the widely held principle that CIPs should be ‘place-based’, that is, designed around the needs of the host community. Nevertheless, indicator selection in most CIPs can be characterized as democratic and transparent.

A CIP administered by the Regional Vancouver Urban Observatory began indicator selection with a volunteer working group; its initial indicator set was then sent for feedback from city officials and revised by the working group. Following this, speakers were invited from three ‘communities of practice’ to provide additional comments on the indicators. The speakers included elected local officials (past and current), Aboriginal leaders, and representatives from local and regional governments. There was opportunity for dialogue between the invited speakers and audience/CIP stakeholders (Holden 2009).

Another Canadian CIP, Edmonton LIFE (Local Indicators For Excellence), took a committee-based approach to indicator selection. Having identified four key elements contributing to quality of life (healthy economy, healthy people, healthy environment, and healthy

community) through its common vision, a steering committee then developed principles, reporting formats, and criteria for indicator selection. Working groups for each of the four elements were responsible for identifying indicators that would give an overall picture for their element. The working groups were composed of experts in the different fields (Edmonton Life 2002).

The rationale for including citizens, city officials, experts, and a variety of ethnic and cultural groups to validate indicators has already been mentioned. The chosen indicators must be relevant and understandable to these different user groups. Other considerations that must be taken into account during indicator selection are the links to community goals and values, as well as links to policy and potential actions. Consideration should also be given to data availability, because if the data is not already regularly collected by an agency then the cost in time and resources will be substantially higher for that particular indicator. Finally, indicators may not be selected because local officials do not want to be held accountable for their performance (Maclaren 2001).

- ***Indicator interpretation***

Cobb and Rixford (1999) view CIPs as having an “enlightenment function,” as they have the capacity to change the definition of what causes a problem. This goes back to their earlier point that the data does not speak for itself but is interpreted through a theoretical framework. The approach taken by the Jacksonville Community Council Inc., continues to be regarded as the best practice for indicator interpretation (Dluhy and Swartz 2006). Following the release of the research report describing the data, volunteer working groups identify issues in need of further study and analysis. Indicator interpretation can not only keep issues on the public and political agenda, but can also drive advocacy (Davern et al. 2016).

Common Challenges

- ***Understanding context***

A look at any type of data or indicator must be situated within a broader understanding of the community context. Resource regions, such as those in northern BC, have experienced a long period of restructuring due to the consolidation of industry and adoption of labour shedding technology. At the same time, many places are dealing with the ongoing impacts of the Mountain Pine Beetle epidemic. Such pressures can drive concerns about population change in resource regions. At the same time, new opportunities such as the expansion of mining activity, LNG developments, and hydro developments in northern BC, as well as opportunities associated with the service sector can lead to speculation about growth. There are also many changes to household structures, and to the community population as a whole, as the population ages, as communities experience different migration trends, and a host of other demographic changes.

All of these activities can produce pressures on community indicators in very different ways. For example, there can be fluctuations in the housing market, as well as changing vacancy rates in rental properties. One important thing to keep in mind is that there can be a lag period for trigger events, such as industry closures, before they have an impact on the local population and issues related to topics such as the housing market, may not adjust immediately to changing circumstances.

- ***Data messiness***

The literature has devoted considerable attention to the problem of the different types of data that populate CIPs, that is, the problem of data messiness. Sawicki (2002) advances five different types of CIPs: quality of life, quality of place, liveability, sustainability, and performance. The fact that most CIPs draw from the full range of data types results in challenges for interpretation and analysis. For instance, while quality of place might appear to be a more objective measure than quality of life, the former cannot be completely disassociated from the latter: “The provision of parks in cities may improve the quality of neighbourhoods, but if residents do not perceive this as very important to their QOL, that indicator of place quality has little value” (Sawicki 2002, 17). Another challenge to arise from the collection of subjective and objective data is that discrepancies arise between what people say and what objective measures indicate (Dluhy and Swartz 2006). For example, hospitalization rates frequently show that survey respondents underreport mental health problems.

- ***Understanding what data represents or does not represent***

Users of indicator data must always be aware of what the data represents, as well as what the data does not represent. A first common error that some tend to make is that they assume what a category includes. For example, when looking at employment data by industry, some assume that the category called ‘agriculture, forestry, fishing and hunting’ includes all forestry related employment. It does not. Data for employment in forestry is split between logging activity captured in the first category mentioned, as well as jobs associated in the manufacturing sector, such as pulp and paper manufacturing.

There are also limitations with the extent to which data depicts jobs tied to a specific sector. Again, using forestry as an example, those working as administrators, planners, and technicians for the Ministry of Forests are not classified as forestry jobs by Statistics Canada. Instead, these jobs are captured in other categories such as professional, scientific, and technical services.

Some data, particularly in older census periods, may not capture new activities, such as aquaculture, non-timber harvesting activities, or retirement industry activities.

Low unemployment rates do not always indicate a stable or good economy as it can mask high out-migration trends. Again, the key lesson is that CIP users cannot look at variables in isolation of one another.

Perhaps most importantly, users of indicator information need to understand the definitions of variables published by various institutions. For example, data transfer payments produced by Statistics Canada does not only include social assistance or employment insurance payments, but also pensions. There is an online glossary that provides detailed descriptions of all the items that are tracked by Statistics Canada.

- ***Limitations with data***

There can also be a number of limitations with data used in community indicator programs. First, the census is only conducted every five years. As such, it really only provides ‘snap shots’ of a particular time. There can be many changes that a community experiences between census periods. For example, in Tumbler Ridge, two major mines announced their closures in 2000 – just before the 2001 census period. While the 2001 census in that community shows a significant population decline, it does not capture the huge influx of residents and seniors who purchased housing at very low prices during the housing sale shortly after, nor does it capture the large influx of workers and families once mining restarted. In this context, a longitudinal approach is needed to understand trends.

The timing in which census data is collected can also produce limitations. For example, seasonal workers, such as loggers, may be unemployed during the spring break up when the census is conducted. There may be time lags before trigger events, such as recessions or fluctuations in resource production, have implications on other characteristics such as population levels, income levels, employment levels, etc. As mentioned earlier, census data is also released slowly over time, so it becomes outdated very fast.

Categories that are used may change over time due to changes in technology for example. The categories used for education may also change over time. If stakeholders use the community profiles, educational data is available for persons 15 years of age and over for the 2006 census period, but then only for 20 to 64-year-olds in the 2001 community profile. Comparable data is available and can be obtained from the special tabulations topics page of the Statistics Canada website.

Classification schemes have also changed over time. Prior to 2001, the Standard Industrial Classification scheme was used to organization occupational data in the Census – this had separated primary sector industries; but since then, Statistics Canada adopted the North America Industrial Classification Scheme (NAICS). The NAICS clusters renewable sectors (such as agriculture and forestry) into one category and non-renewable sectors into a different category. Unfortunately, it is very expensive to get special tabulations done to obtain comparable data.

When working with data provided by both community organizations and Statistics Canada, one should be aware that the reporting boundaries of agencies do not always correspond with census subdivision boundaries (which in BC have been harmonized to local government boundaries). A good example is the reporting boundaries for tracking crime statistics such as break and enters. One should also be aware that thresholds can change over time, such as income thresholds to qualify for BC Housing units or CMHC home renovation grants. Furthermore, some households may under report certain types of data, such as income, as they fear it may impact their access to supports.

As noted throughout this Report, there are many other potential sources of information that can provide some further context for community indicators. These may range from special task force or consultant reports to statistics or data tracked by specific organizations about their clientele. When drawing upon data produced by other agencies or organizations, it is also important to carefully consider some of the meanings or limitations that may exist with such information. For example, a decline in the social assistance rate may not always reflect a movement out of poverty, but that people simply no longer qualify for support. Stakeholders may obtain access to waiting lists for housing, but not everyone needs services or housing puts their name on a list.

A final caution concerns the very important initiative of homeless counts that have been undertaken in some communities as it can be difficult to track people during the winter. There may be undercounting with homeless counts due to the mobile nature of the

population, issues with couch surfing, temporary forms of accommodations, and the extent of rough sleeping that may be taking place create difficulties for counts and definitions. Also, some people may simply not yet consider themselves “homeless.”

- ***Institutional support***

The literature has documented the low survival rate of CIPs, citing a lack of institutional support as the main contributing factor (Barrington-Leigh and Escande 2016). CIPs require long-term institutional recognition and support in order to be effective, otherwise their survival can be put at risk with every election cycle (Pires et al. 2017). The challenge of institutional support extends to the receptiveness of government officials as CIPs make their work more transparent and accountable. It has been suggested that CIPs should be coordinated by a “backbone organization,” one that is independent of local government and serves as a “neutral convener” (Wood 2016, 198).

- ***Unintended consequences***

CIPs often have unintended consequences that can raise ethical issues. For instance, Canadian Aboriginal groups have often raised the issue of being “measured up” against non-Aboriginal people on health and crime indicators. As one Indigenous activist explained: “When you actually apply standards that relate to our belief system, relate to the fact that our people have more family ties than non-Aboriginal people, when you understand that our people have better relationships within families than non-Aboriginal people, have better relationships to the land and understanding of the land, if you were able to quantify that in a study, you would see that our numbers are better than non- Aboriginal people” (cited in Holden 2009, 441). To give another example of unintended consequences, a CIP collected data at a neighbourhood level and revealed a spatial pattern of socio-economic disparities between adjacent neighbourhoods that was not widely known nor acknowledged, prompting local government officials to prevent the disclosure of the data (Maclaren 2001).

Conclusion and Next Steps

Indicators do not show the causes of problems, only their existence. They show trends in conditions but they do not tell us what to do. They are indicators, not answers. They are the starting place for discussion and exploration of potential action. Their purpose is to help all of us reflect, experiment and improve. (Innes and Booher 2000, 183)

This Introduction set out the history, principles and best practices of Community Indicator Programs. Further, the Introduction highlighted why CIPs are critical to the functioning of local democracy and are integral to community development. The discussion also pointed to the persistent challenges facing the operation of CIPs, with issues arising from data messiness, a lack of institutional support, and unintended consequences from identifying a community's key issues and discovering new problems. Through this discussion we have dispelled the notion that indicators provide neutral and objective data so that local government can then make the "right" decisions and policies. This discussion underscored how CIPs, whether implicitly or explicitly, rely on theory and normative value-judgements about what is measured and why it is being measured. Another assumption that the preceding discussion helps dispel is that CIPs should be comprehensive in their data collection efforts. This assumption has been carried over into practice as evidenced by the CIPs with dozens (sometimes hundreds) of indicators, and with no conceptual differentiation of indicator levels.

The CIP for Fort St. John has recently completed its first design and data collection cycle, with the initial development of an "Indicators Basket" in collaboration with The Forge Advisory Committee and the City of Fort St. John's Executive Leadership Team. This Introduction is complemented by a Research Report and the publication of the indicator data. Fort St. John's CIP will help with goal alignment and guide policy and decision-makers.

Appendix I: Indicators from the FCM

The Federation of Canadian Municipalities (FCM) represents municipalities across Canada. Until recently (2017), the FCM operated a Quality of Life Reporting System (QOLRS). Appendix I shows how the QOLRS is organized in terms of domains and indicators.

Demographic Background Information (DBI)	Affordable, Appropriate Housing (AAH)	Civic Engagement (CE)	Community and Social Infrastructure (CSI)	Education	Employment and Local Economy (ELE)	Natural Environment (NE)	Personal and Community Health (PCH)	Personal and Financial Security (PFS)	Personal Safety (PS)
DBI01 Population Growth	AAH01 Rental Housing Affordability	CE01 Voter Turnout	CSI01 Social Housing Waiting Lists	ED01 Education Levels	ELE01 Business Bankruptcies	NE01 Air Quality	PCH01 Low Birth Weight Babies	PFS01 Families Receiving Social Assistance	PS01 Youth Crime
DBI02 Household Size	AAH02 Homeowner Affordability	CE02 Women in Municipal Government	CSI02 Rent-Geared-to-Income Housing	ED02 High School Completion	ELE02 Consumer Bankruptcies	NE02 Commuting Distance	PCH02 Teen Birthrate	PFS02 Employment Insurance	PS02 Violent Crime
DBI03 Family Composition	AAH03 Core Housing Need	CE03 Volunteering	CSI03 Subsidized Child Care	ED03 Student-Teacher Ratio	ELE03 Hourly wages	NE03 Mode of Transportation	PCH03 Premature Mortality	PFS03 Incidence of Low Income	PS03 Property Crime
DBI04 Average Income	AAH04 Substandard units	CE04 Charitable Donations	CSI04 Social Services-Culture Occupations	ED04 Composite Learning Index Score	ELE04 Change in Income	NE04 Density	PCH04 Infant Mortality	PFS04 Children Living in Poverty	PS04 Criminal Code Offences
DBI05 Renters & Owners	AAH05 Changing Face of Homelessness	CSI05 Recreation Facilities		ED05 Education Occupations	ELE05 Building Permits	NE05 Water Consumption	PCH05 Body Mass Index	PFS05 Income Gap	PS05 Police Per Capita
DBI06 Population Mobility	AAH06 Vacancy Rates	CSI06 Cultural Facilities			ELE06 Unemployment	NE06 Wastewater Treatment	PCH06 Smoking Status	PFS06 Social Assistance Rates	PS06 Weapons Violations (non-violent)
DBI07 Immigration	AAH07 Rental Housing Starts	CSI07 Long Term Care Facilities			ELE07 Immigrant unemployment	NE07 Waste Diversion	PCH07 Life Expectancy	PFS07 Working Poor	PS07 Drug Violations
DBI08 Language Spoken at Home	AAH08 Monthly Rent	CSI08 Recreation Programs			ELE08 Quality of Employment	NE08 Recreational Water Quality	PCH08 Physical Activity	PFS08 Community Affordability	PS08 Traffic Violations Causing Death
DBI09 Visible Minorities	AAH09 Cost of Housing	CSI09 Libraries			ELE09 Labour Force Replacement	NE09 Drinking Water Quality	PCH09 Prevalence of Asthma	PFS09 Transit Affordability	PS09 Emergency Services Occupations
DBI10 Aboriginal Population	AAH10 Over-crowding	CSI10 Health Care Professionals				NE10 Ecological Footprint	PCH10 Mental Health	PFS10 Food Insecurity	

Source: https://fcm.ca/Documents/reports/FCM/QOLRS_Indicators_EN.pdf

Appendix II: Indicators from PEG Winnipeg

Of the CIPs in operation (see also Community Indicators in Victoria, www.communityindicators.net.au), Winnipeg's "PEG" stands out, particularly for its description and representation of indicators. Every indicator has information on the data source, the rationale behind the indicator selection, and the indicator's connection to policy. Further, there is an explanation of indicator measurement protocols and data limitations. PEG's website also offers data visualization at a neighbourhood level.

Built Environment	Basic Needs	Economy	Education & Learning	Governance	Health	Natural Environment	Social Vitality
Building Permits Value	Market Based Measure (MBM)	Businesses Per Capita	Readiness for School	Voter Turnout	Perceived Health	Waste	Group Participation
Waste	Food Bank Use	Building Permits Value	Low Maternal Education	Political Voice	Substance Abuse	Water Use	Social Network Diversity
Housing Starts	Personal Safety	Unemployment Rate	Child Care Spaces	Volunteerism	Mood and Anxiety Disorders	Active Transportation	Readiness for School
Collision Victims	Household Income	Youth Unemployment Rate	Educational Attainment	Charitable Donations	Premature Mortality Rate (PMR)	Air Quality	Substance Abuse
Dwelling Condition	Gini Coefficient	Household Income	High School Graduation		Body Mass Index	Automobile Use	Sense of Belonging
Dwelling Density	Dwelling Condition	Housing Starts			Diabetes Prevalence	Public Transit Use	Personal Safety
Active Transportation	Low Employment	Gini Coefficient			Smoking Rate	Parks & Open Space	Quality of Life
Automobile Use	Consumer Price Index	Gross Domestic Product (GDP)			Teen Pregnancy Rate	Community Gardens	Participation in Arts
Parks & Open Space	Children in Care	Personal Disposable Income			Potential Years of Life Lost	Greenhouse Gas Emissions	Perception of Safety
Activity Limitation	Homelessness	Low Employment			Life Expectancy		Neighbourliness
	Core Housing Need	Retail Sales			Immunization Rate		Volunteerism
	LICO-AT	Average House Price			Heart Attack		Charitable Donations
		Participation Rate			Pregnancies with Multiple Risk Factors		Residential Stability
		Consumer Price Index			Stroke		
		Educational Attainment			Hospital Days – Long Stays		
		High School Graduation			Active Leisure Time		
					Children's Injuries		

Source: <http://www.mypeg.ca/explorer/WellBeing/>

References

- Barrington-Leigh, C., and Escande, A. 2016. "Measuring Progress and Well-Being: A Comparative Review of Indicators." *Social Indicators Research*. DOI: 10.1007/s11205-016-1505-0.
- Citizen Engagement PACT of Jacksonville. 2017. "History of JCCI." Available at <http://jaxpact.org/history/>. Last accessed on 10 November 2017.
- Cobb, C.W. and C. Rixford. 1998. *Lessons Learned from the History of Social Indicators*. San Francisco: Redefining Progress.
- Cox, D., Frere, M. West, S. and J. Wiseman. 2010. "Developing and using local community wellbeing indicators: Learning from the experience of Community Indicators Victoria." *Australian Journal of Social Issues*, 45(1): 71-88.
- Cravey, B. 2017. "JCCI transition could lead to collaborative group to study Jacksonville issues, promote civic engagement." *The Florida Times-Union*. Available at <http://jacksonville.com/news/2017-02-20/jcci-transition-could-lead-collaborative-group-study-jacksonville-issues-promote>. Last accessed on 10 November 2017.
- Davern, M.T., Gunn, L., Giles-Corti B., and S. David. 2016. "Best Practice Principles for Community Indicator Systems and a Case Study Analysis: how Community Indicators Victoria is Creating Impact and Bridging Policy, Practice and Research." *Social Indicators Research*, 131: 567-586.
- Dluhy, M. and N. Swartz. 2006. "Connecting Knowledge and Policy: The Promise of Community Indicators in the United States." *Social Indicators Research*, 79: 1-12.
- Gahin, R. and C. Paterson. 2001. "Community Indicators: Past, Present, and Future." *National Civic Review*, 90(4): 347-361.
- Holden, M. 2009. "Community interests and indicator system success." *Social Indicators Research*, 92: 429-448.
- Innes, J.E. and D.E. Booher. 2000. "Indicators for Sustainable Communities: A Strategy Building on Complexity Theory and Distributed Intelligence." *Planning Theory & Practice*, 1(2): 173-186.
- Maclaren, V.W. 2001. "Blighted or booming? An evaluation of community indicators and their creation." *Canadian Journal of Urban Research*, 10(2): 275-291.
- Pires, S.M., Magee, L., and M. Holden. 2017. "Learning from community indicators movements: towards a citizen-powered urban data revolution." *Environment and Planning C: Politics and Space*, DOI: 10.1177/2399654417691512.

Sawicki, D.S. 2002. "Improving Community Indicator Systems: Injecting More Social Science into the Folk Movement." *Planning Theory & Practice*, 3(1): 13-32.

Wong, C. 2002. "The Crossroads of Community Indicators." *Planning Theory & Practice*, 3(2): 259-260.

Wood, D.M. 2016. "Community indicators and collective impact: facilitating change." *Community Development*, 47(2): 194-208.