

Can Efforts to Integrate Community Indicators with Performance Measurement Systems Succeed? Lessons from Current Attempts

Patria de Lancer Julnes, PhD, Penn State Harrisburg,
School of Public Affairs
Cheryle Broom, King County Auditor (Retired)
Soyoung Park, DPA, Korea Public Finance Information
Service

January 2017

Community
Indicators
Consortium



Abstract

The Community Indicators Consortium (CIC) promotes the integration of community indicators with performance measurement systems as an important step toward improving community outcomes and the well-being of citizens. A number of organizations have experimented with integration and some of their experiences have been documented; but there is little empirical evidence that can guide strategies to support such efforts. Also, little is known about the impact, if any, of current integration efforts. Here we discuss an exploratory case study that helps fill this knowledge gap. Analysis of interviews with representatives of organizations considered exemplars of integration by the CIC suggests that political leadership and collaboration with stakeholders may act as both drivers and challenges to integration. The information derived from CI-PM integration efforts gets used primarily for reporting out and in some cases helps to inform budget decisions. Reported impacts of integration include greater trust and credibility, change of behavior within agencies involved, and changes in service delivery. Though most of the integration efforts studied continue to advance, their sustainability is not guaranteed and at least one of the efforts has ceased.

Community Indicators and Performance Measurement at Crossroads

Pressure on public and non-profit organizations to track and provide evidence of outcomes or results of their actions on the citizens they serve continues to mount (Perrin, 2015; de Lancer Julnes, 2009). Along with demands for efficiency, effectiveness and accountability this pressure has led public, and increasingly, nonprofit organizations to develop performance measurement systems. These systems are characterized by the ongoing monitoring and analysis of quantitative data with regard to a program input, outputs, and outcomes.

A parallel movement, community indicators projects have taken hold as citizens seek ways to better assess and demonstrate progress toward improving the quality of life of their communities. Community indicators projects are concerned with making communities sustainable and supporting policy change (Dulhy and Swartz, 2006; Innes and Booher, 1999; Murphy-Green and Blair, 2004). Community indicators projects (CIP) gather and analyze quantitative data to report on indicators that show past, current, and future trends reflecting the interplay between social, environmental, and economic factors affecting a region's or community's well-being (Phillips, 2003, p.1.).

Although performance measurement focuses on the clients that programs serve and community indicators projects focus on community-level outcomes, their shared core interest has led some to believe that the integration of these two tools could improve their use by decision makers and citizens (Greenwood, 2008). This promise has guided the efforts of governments, quasi-governmental and nonprofit organizations in the U.S., Canada, and Australia to attempt to integrate these tools. Leading these efforts in the U.S. is the Community Indicators Consortium

(CIC). Created in 2000, CIC is a network of organizations and individuals engaged in the development, dissemination, and understanding of community indicators worldwide. Since 2006 CIC has been actively working to understand, encourage and support the integration of community indicators with performance measurements (CI-PM) through its integration project (CIC, 2007). As expressed in CIC’s Briefing Notes (CIC, 2012), “Integration can help communities optimize resources—public, private and nonprofit—to best address local demands and improve the wellbeing of residents.”

To promote integration CIC has developed a maturity model, described below, that shows the *what, why, when and who* required to move CI and PM from separate (Stage 1) endeavors to integration (Stage 4) (CIC, 2010). Though not specifically articulated by CIC, full integration occurs when community indicators drive government/agency’s performance measurement efforts in a transparent and results-based governance and decision-making system that is consistent with citizens’ priorities (CIC, 2010).

A number of entities have recognized CI-PM integration efforts; but no systematic research has been conducted to assess how these efforts have fared and whether or not they are achieving their intended purpose. This report describes the results of an exploratory case study designed to understand the process and outcomes of integration of CI-PM in organizations CIC recognized as exemplars of integration. In the sections ahead, we state the case for integration; the methodology used in this study; analysis and findings; and a conclusion with suggestions for advancing the practice and understanding of CI-PM integration.

Toward Integration

CI and PM have a number of characteristics in common that make them candidates for integration. These include: (i) a long legacy and lessons learned from experiences in the United

States and other countries; (ii) quantifiable in nature; (iii) typically aligned with policy or program goals and objectives, in the case of PM, and community dreams, visions and goals, in the case of CI (Swain, 2001).

They also face common challenges (CIC, 2007; de Lancer Julnes, 2009; Innes and Booher, 1999; Smith et al., 2008) including lack of use of the information derived from these systems; methodological difficulties; and properly representing the values that citizens hold. In addition, the integration of these tools creates greater levels of complexity and requires change in behavior. Integration calls for including a wider array of individuals, organizations, activities, and relationships, which necessitates greater coordination and effort (Ditillo Liguori, Sicilia, & Steccolini, 2015; Miller, Kurunmaki, & O'Leary, 2008).

Integration efforts not only must confront the challenge of reconciling values of multiple actors, but also of the different units of analysis that CIs & PMs entail. Community indicators reflect “a high-level view of the world” and performance measures reflect a “lower-level view” (Greenwood, 2008, p. 59). In these parallel worlds there are different actors driving the selection of indicators (mostly government staff in the case of PM and civil society in the case of CI) who tend to espouse different values and who collect data at different levels--the program level for performance measures; at the community level for community indicators.

In spite of the apparent disconnect, CIC believes that CI and PM can not only complement each other but also be integrated into a more powerful tool for citizens and decision makers to effect policy change. Thus, CIC's proposed maturity model portrays stages that move CI and PM from separate endeavors (Stage 1) to integration (Stage 4) (CIC, 2010). In Stage I the *what* are two systems of metrics: 1) Community indicators metrics quantifying values, conditions, and outcomes important to residents in the community, and 2) Performance

measurement metrics documenting the outputs of services provided by a government entity.

Whereas in Stage IV citizen-driven CIs determine the desired impact that a PM system is working toward. As Greenwood reflected, *how shall the twain meet?*

Responding to the *how*, Broom and Lomax (2012) argued that an integrated CI-PM system that will ultimately help to achieve a community's desired outcomes should be comprised of at least five components: engagement, strategic planning, alignment, evaluating and reporting, and information use. Figure 1 below, is a generalized representation of such a system. By citizen engagement we mean that citizens are equal partners and are allowed to be part of setting priorities through a process such as community visioning, a process similar to strategic planning in an organizational setting (Bryson, 2011). Moreover, goals, targets and measures developed are consistent with community aspirations and indicators (Martin and Ketner, 2010). The figure also conveys the notion that integration requires that government or other decision-makers align the budget and the strategic plan so that agreed-upon action to achieve community-related goals can be successfully implemented.

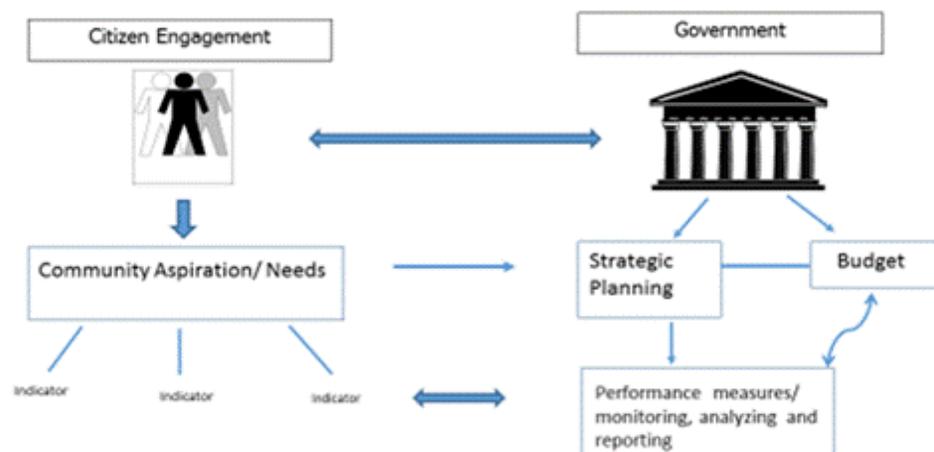


Figure 1. Generalized CI-PM Integrated System

Monitoring achievement of performance targets, which track back to the CIs, is a critical link. Likewise, analyzing and reporting regularly helps to determine whether the community conditions are improving and what may be contributing to those results. This component provides accountability to the community and evidence for the public and decision-makers to use in policy-making budget decisions. Moving through the iteration again, the community, policy makers, and implementers build on what they have learned. The cases we studied reflected applying most of these components in a way unique to their circumstances, and to varying degrees with varying results.

Methodology

The study presented here used an exploratory approach to understand the process, challenges, drivers, and achievements of a new phenomenon--the integration of CI-PM. We used a purposive sample in that we studied organizations considered exemplars by the Community Indicators Consortium (CIC). We contacted all the organizations for whom the CIC had developed “real stories” (six entities) detailing their integration efforts, regardless of the extent of sustainability of their success. We also contacted the most recent CIC’s integration award winners, and those with honorable mentions (three entities^{1,2}).

We gathered data by means of in-depth telephone interviews conducted from July to September 2013 with key representatives who were responsible for doing the work related to CI-PM integration. Interviews with individuals knowledgeable about the subject in question helps

¹ We were not able to reach representatives from the Government of Australia, a CIC award winner.

² In some cases, those for whom the CIC had developed “real stories” were also award winners.

the researcher understand “complex phenomena within their contexts” (Baxter and Jack, 2008, p. 544) and to discern the “how” and “why” of the situation under study. Information was also culled from the stories on the CIC website and from documentation publically available on each of these entities’ websites. Additionally, one of the authors of this report had firsthand knowledge about these integration efforts.

We conducted 11 interviews, lasting approximately one hour; there were two different interviews for two of the entities studied. The appendix lists the participants and entities studied. The interview protocol consisted of open-ended questions. These questions, guided by our analytical framework and the “real stories,” examined several domains including: 1) drivers for integration; 2) the process of integration (actors, challenges, etc.); 3) how the system is used; 4) its impact; and 5) sustainability.

Analysis of Interview Data

Interviews were recorded, transcribed, and coded for analysis. We used Nvivo (9.0 version) to identify repetitive patterns and conduct descriptive analysis. For this, we identified key concepts based on the literature and coded each sentence or paragraph into multiple categories for in-depth analysis. A draft of the final report was submitted to the participants for their review. Participants agreed with our interpretation and representation of the interview data.

Findings

Table I presents a summary of findings from the interview data. It shows the dimensions we used for our inquiry as well as the percent of times each theme (factors and outcomes of integration) appeared during the interview. Drivers of PM-CI integration efforts and their sustainability highlight the importance of cultural and political factors described in the literature (e.g., de lancer Julnes 2009) as exemplified by the percentage of times leadership and

collaboration were mentioned during the interviews. Also, the efforts show some level of integration along the continuum of CIC’s ideal model.

Dimensions Analyzed	Themes	Number of Comments	Percentage
Drivers	Political leadership	12	48
	Collaboration	8	32
	Organization needs	5	20
CI-PM Uses	Reporting and monitoring	9	39
	Linking goals and indicators	8	35
	Budget considerations	6	26
Impact of CI-PM	Changes in attitudes and behaviors	10	56
	Changes in service delivery	8	44
Challenges and Sustainability	Political leadership	22	32
	Collaboration	21	31
	Process	15	22
	Resources	10	15

Table 1. Summary of Findings

Drivers for Integration of Community Indicators and Performance Measurements

Key drivers for developing functional CI-PM systems vary but the three most critical, based on a total of 25 comments are: Political leadership (12 or 48 percent); collaboration (8 or 32 percent); and organization needs (5 or 20 percent).

Political Leadership refers the political will to support integration and includes having buy-in and leadership of top elected officials and key staffs, such as senior managers. For Virginia, the only state with a one-term governor, this means that after each election they need to get, rather quickly, the support of the governor, who serves as chair of the Council on Virginia’s Future. This council was created by legislation at the urging of the business leaders and others who wanted to see the government do a better job tackling and measuring longer term issues. To fulfill this need, they created a “performance leadership and accountability system for the state

government –Virginia Performs” (Council on Virginia Future, 2014). Also critical for Virginia is the support of the top leadership of state House and the Senate, as they are part of the Council along with six or seven business or community leaders from around the state and two members of the Cabinet—the Secretary of Finance and the Chief of Staff of the Governor. The Council is supported by a staff of five, including a director and a deputy director.

In King County, this impetus came from some council members, one of whom later became county executive. With elected official interest in the legislative and executive branches, lead staff collaborated on developing legislation and approaches to pursue a countywide vision for addressing public priorities strategically. Moreover, other county public officials also had representatives serve on a countywide work group which was led by the Auditor’s Office.³ This approach provided an opportunity for participation of all elected officials’ offices in the planning process. That King County was able to accomplish such collaboration is significant given that the county has 14 elected officials in the legislative and executive branches plus 78 elected judges in the judicial branch.

Collaboration relates to public involvement in partnerships with diverse actors, including governmental and nongovernmental actors (e.g., nonprofits, businesses), to develop community indicators that reflect the community’s conditions as well as citizens’ priorities and to use the information to drive decisions. In the City of Jacksonville, for example, the JCCI, the longest running community-driven community indicators project in the U.S. (created in 1985), partners with other groups in the community such as the Chamber of Commerce, the city council, the school superintendent, the head of the transportation authority, and numerous other external business and nonprofit leaders to discuss what is important and what indicators should be

³ The County Auditor’s Office is an independent function with the County Auditor appointed by the County Council.

measured. This type of collaboration, driven by an independent community indicators project, was also observed in Nevada.

The Truckee Meadows Tomorrow (TMT) was originally a partnership with a private nonprofit to respond to legal mandates. The partnership was an outgrowth of a regional planning effort that began in the 1980s and later expanded in 1991 to include quality of life indicators in the local government plans mandated by state laws (Besleme, Maser, and Silverstein, 1999). The goal of the effort was to guide development and to have an “orderly management of growth for the region” (Marsh, 2012, p. 5). This desire led the Truckee Meadows Regional Planning Agency to partner with the Economic Development Authority of Western Nevada’s community-based nonprofit Truckee Meadows Tomorrow to “Create and promote public consensus on the concept of quality of life...to assist in economic development efforts” (Besleme et al., 1999, p. 23). TMT was able to operate with funding provided from grants, especially from the Washoe Health System, a private non-profit corporation. Since taking the lead for the community’s CIs, TMT “has developed community indicators through extensive public engagement and Washoe County has ensured the indicators are integrated into their performance measurement system,” said Karen Hruby former executive director of TMT.

Instances of intense collaboration with multiple actors were also evident in integration projects led by government. Examples include the Council on Virginia’s Future and King County, described earlier. Another example is Albuquerque where, in 1998, the mayor introduced a resolution, that was unanimously supported by the council, to establish its Indicators Progress Commission (IPC). This was two years after the city had published its first progress report on community conditions and indicators, and 23 years after a revision to the City charter that “mandated a link between annual operating budgets and the city’s long-term goals”

(Schnaible and Shogry, 2012, p. 4). The IPC is composed of 12 city residents charged with overseeing a process for developing community goals and desired community conditions, and then measuring the City's progress toward those ends.

In Calgary, probably the furthest along in the CIC ideal integration model, the Office of Sustainability, under the imagineCalgary Plan, developed its 100-year community vision by means of a process of strong public engagement with more than 18,000 citizens participating. This high-level plan was then taken and used to help align the work of the city all the way down to departments' business plans. To bridge the city's three-year budget cycle with the 100-year vision plan, "We have created a 10-year plan, our 2020 Sustainability Direction, that has objectives and targets and indicators in there that are trying to help us achieve that line of sight to our community targets" stated Carolyn Bowen, at the time manager of the city's Office of Sustainability. This community vision was then integrated with land use and transportation plans.

Organization needs represents a rational/technocratic factor that refers to obtaining organizational goals (de Lancer Julnes 2009). For example, Denise Carbol, senior planner in the Citywide Planning and Design in the City of Calgary, felt that integration was necessary because they saw the need to connect population growth and financial costs. Ms. Carbol stated, "We have to bring the financial numbers forward to the Council and to the citizens of Calgary to let them understand the cost of growth." For Calgary, a key goal for integration was balancing growth and sustainability goals from the "triple bottom line" perspective adopted by the City, which entails "an approach that considers economic, social, environmental, and smart growth and mobility implications in the decision-making processes" (City of Calgary, 2014, n.p.n.).

Having a strategic plan and a mission statement also seemed to encourage integration as the strategic plan can serve as a vehicle to integration of PM with CI through the linkage of long

term to short-term goals. This is what the ‘imagineCalgary’ plan in works toward by using both performance measures and community indicators; their system emphasizes their 100-year vision linked to a 10-year plan to achieve related goals and targets (the 2020 Sustainability Direction).

Likewise, in King County, Chantal Stevens, principal performance management analyst in the Auditor’s Office and CIC Executive Director, said that the county developed a strategic plan with mission and goals based on public input. The county had earlier established a system to track agency goals and targets (AIMs High). That system needed to be broadened to include tracking community priorities reflected in the strategic plan. King County’s Deputy Director for Performance, Michael Jacobson, outlined an approach for moving from the “desires of our community that we are trying to achieve to a set of strategies for how we are going to achieve them.” He indicated that organizationally King County needed to establish levels of plans in its management system down to the business plan tactical level. At that point, agency budgets are proposed, which are supposed to reflect that they “need to deliver this kind of program and performance,” said Mr. Jacobson.

Uses and Impact of Integration

Questions on the uses of the information from CI-PM integration yielded 23 comments. The highest use mentioned was reporting and monitoring (9 or 39 per cent). The second highest use was to link goals and indicators (8 or 35 per cent). The least mentioned use of information was to support budget considerations (6 or 26 per cent). The relatively small number of comments is not surprising. Previous studies have shown a tendency by government entities toward symbolic use of the information (e.g, Charbonneau and Bellance, 2015; de Lancer Julnes 2009) and critics such as Perrin (2015) often bemoan the lack of evidence that performance measurement influences decision-making.

Although there wasn't much elaboration on the part of participants in terms of specific examples of uses or impacts, for some (JCCI, for example) monitoring provides insights on what is working or not. In addition, reporting results publicly helps to provide transparency, accountability, and sense of ownership. Also, some participants suggested that reporting the information may increase community understanding and interest in participating in community indicators projects. Moreover, JCCI's Ben Warner stated that this openness can lead to trust in the information. This trust, said Mr. Warner, is reflected in the fact that stakeholders in Jacksonville use the information produced by JCCI. For Karen Hruby from TMT, reporting the status of achieving a performance measure that is linked to an indicator may also boost the chances of the results being taken into consideration for budget allocation.

The second most often use refers to linking the indicators to already established goals and targets. In Albuquerque, for example, the IPC holds a goals forum every four years to confirm desired community conditions. These goals become the top tier of the city's performance measurement and budgeting system. Thus, for example, a top tier goal is human and family development. This has the sub-goal that residents are to be literate and educated. A related community indicator is adult educational achievement rates. This is linked to performance measures for city services such as tracking circulation and visitation at libraries and involvement in reading programs. As described by Chris Payton, former Executive Budget Analyst in Albuquerque, this example shows "full integration between the performance measures and community indicators."

Related, King County adopted a framework with community priorities, the driver for its strategic plan goals and AIMs High performance measurement tracking and reporting program. One of these priorities is environmental sustainability; the goal is to safeguard and enhance King

County's natural resources and environment. It has four objectives for which performance data such as reduction of greenhouse gas emissions is regularly tracked.

The fewest comments on use of information were about linking the information from the integrated system to budget requests and, hopefully, support budget decisions. One example is the Children's Service Council of Broward County (CSC), a special purpose district that receives funding from property taxes. The council allocates resources based on its strategic plan.

According to CSC's president and CEO Cindy Arenberg Seltzer, the plan "provides the credible linkage between community indicators and performance measures." In addition, this linkage helps to provide justification to support grant applications. In another example provided by the JCCI participant, Jacksonville's sheriff used community indicators to illustrate how budget cuts and reduction in the number of sworn officers per capita, along with increased costs, led to higher response times. The sheriff used that information to propose restoration of some positions in his budget.

In most cases, however, the influence of performance measures and community indicators remains rather tenuous. In spite of current expectations for outcome-based and performance-based budgeting, participants felt that it would be very difficult to get to that point, even when CI-PM integration efforts are backed by legal mandates. Nevertheless, some of the participants said that their entities continue to attempt to link CI-PM to the budgeting process and reflect some, albeit limited, progress in making that connection (e.g., Albuquerque, Virginia, King County). But, in general, most participants agreed that budget decisions are understandably driven primarily by political considerations as each elected official has his/her own priorities and constituents they need to respond to.

The questions about the impact of CI-PM integration generated a total of 18 comments. The reported impacts were primarily related to changes produced in attitudes and behavior of government officials and other stakeholders (10 comments), as well as changes in service delivery (8 comments).

With regard to attitudes and behavior, one of the participants from Calgary stated that the integration effort has helped staff in the agencies to understand how their projects contribute to the community as a whole. They now look at the impacts of their decisions from a broader organizational-wide perspective rather than an individual department perspective. An example given was that of the waste and recycling group who “are not just concerned about achieving the waste target, but also concerned about how it influences the environment and broader society.”

Similarly, the participant from TMT said that before the integration system, departments in certain agencies did not talk to each other, but now more of them pay attention to indicators and work together to examine the collective impacts of their individual department’s actions. She said:

We’re providing environmental health spraying for mosquitoes. Typically, decision-making to do that was strictly for environmental health decision-making. Now they look at it in terms of what it means for other health elements such as how it impacts people’s ability to continue to make it to their jobs instead of staying home because they are sick.

In another example, Cindy Arenberg Seltzer of CSC in Florida, said that their data collection methodology, analysis, and reporting approaches, the results of which are shown in their budget document, have helped build their credibility. In turn, this has translated into attracting funding for their programs and those of their providers and, thus, improving the outcomes for the recipients of their programs. As an example of this she mentioned the creation

of the Kingship Care services, which she said was “really a work of art. It is actually a really good example of community indicators turning into action.”

In Virginia, Virginia Performs has focused on root causes of social problems and pushed through some legislation to alleviate these problems. The deputy director, Gerald Ward, said that this took some work internally as agencies needed to take more ownership of “these things that they normally say, ‘I can’t be responsible for obesity rates, or teen pregnancy rates, or infant mortality rates, for example, because there are so many factors that impact that.’” He also added that getting to that point requires a continuous process of dialogue and education and an understanding that if “this is important for the State you need to find a way to execute this role.” This is a good example of integration, said Mr. Ward, in terms of “people lining things up...discussions are different now.... the agency is taking ownership for things like high school graduation rate, dropout rates, teen pregnancy rates, smoking and things like that.”

Dr. Barbara Markiewicz, the consultant who led the Whole Child Leon Healthy Infant Partnership provided another example of changes resulting from integration efforts. This two-year effort was created by the Healthcare Advisory Board appointed by the county commissioners at the urging of a physician. The physician was interested in a comprehensive child health plan that would eliminate racial disparities and improve child health outcomes. Although the initiative is no longer active, Dr. Markiewicz said that the county now has quarterly free screening for younger children and some healthcare providers who had not talked to each other in the past are doing so now.

We also found some documented evidence of community-level outcomes. Washoe County integrated TMT’s *literate community* indicator in the community’s library system

(Marsh, 2012). Accomplishments from the library's program efforts include helping more than 1500 individuals meet literacy, educational and employment needs.

Challenges and Sustainability of Integration Efforts

During the interviews we learned of significant challenges to sustaining integration efforts and that some of our participants felt full integration remains elusive, in spite of significant progress (e.g., Albuquerque, King County, and TMT). In one instance the effort could not be sustained (The Whole Child Leon) and in another it was recently reenergized (TMT). The questions generated a total of 68 comments.

As before, political leadership (22 or 32 per cent) and collaboration with citizens and other stakeholders (21 or 31 per cent) were the most salient factors. The process of integration itself including the lack of understanding of what drives outcomes generated 15 comments (22 per cent). Resources to support the efforts generated only 10 comments (15 per cent). Below we discuss the top three factors. In our estimation resources, which include having adequate financial means, staff to implement the system, and the appropriate expertise, are directly or indirectly related to the other factors.

Political Leadership. Key components are lack of buy-in from officials and agencies and term limits of elected officials. For example, in Calgary it took time to secure approval for the plan when a new mayor took office. Part of the problem with new administrations is their lack of familiarity with these efforts. Thus, they tend to ignore them, or in worst case scenario, oppose them. As stated by Chris Payton from Albuquerque, oftentimes new public officials and their staff "are less able to understand the goals, processes and the linking of performance information and performance data to budgets." This is not an uncommon perception, said Jay Fountain,

former assistant director of research for the Government Accounting Standards Board (CIC, 2012). He stated that in general elected officials are not very cognizant “about CIs or PMs, much less the value of their integration. Or, if they do know about them, they are often hard-pressed to know how best to put them in context and make them truly useful” (CIC, 2012, p. 2).

The sentiment expressed above was echoed by Mr. Werner who said that implementation and sustainability of integration efforts are also vulnerable in cities where there isn’t a strong city manager form of government as is the case in Jacksonville. Newly elected mayors are not likely “to know the importance of integration and typically are not knowledgeable of it” so they may not be interested in using the system. Werner said that JCCI will always “work with mayors to help them understand the importance of performance measures and integrating them with community indicators processes.” Nevertheless, he added that the situation remains challenging because elected officials are often facing competing demands in terms of “how to use limited money for services they prefer.” Thus, these preferences may take precedence over the information CI-PM systems may suggest.

Collaboration with citizens and other stakeholders. Participants realized that successfully integrating CI and PM and sustaining the effort required ongoing and meaningful participation from diverse groups. Without a good ongoing communication system to receive information and to give feedback to the public, the likelihood of building commitment to the effort and accountability to the public is very low. Also, indicators, reasoned a participant, will have limited value unless they reflect needs and opinions of many community residents.

The Whole Child Leon Healthy Infant Partnership confronted many challenges related to collaborative arrangements in an environment of competing demands and values. The Healthcare Advisory Group members barely had time to come to the quarterly meetings, “no less complete

an assignment or attend other meetings outside of official quarterly meetings,” said Dr. Markiewics. She also said that these providers were underfunded and overworked, but, at the same time, “still wanting to see as many clients as they could.” Thus, while they were committed to providing the service, their lack of resources kept them from collaborating and having a greater impact through the partnership.

The literature emphasizes the need for community efforts to involve diverse groups (Mathie and Greene, 1997), but as suggested earlier managing these groups can be challenging because of individual objectives and biases that may not align with those that would be of benefit to the entire community. This was the case for the Leon County partnership. The numerous service providers that were part of the partnership were themselves competitors for funding. Thus, they were somewhat resistant to collaboration. Dr. Barbara Markiewicz said that “There was resistance to measuring success. There was resistance on the part of communities to measure outcomes as communities prefer measuring the process.” These competing interests along with a lack of partnership leadership contributed to the eventual discontinuation of the effort.

For other participants in this study, citizen engagement was critical to the sustainability of the integration effort. For example, citizens such as young professionals and new entrepreneurs were viewed by TMT as important actors who could “exert influence through pressure on local government to pay attention to community issues.” For Calgary, successful integration requires a “system approach” where citizens are meaningfully engaged in a process that involves them as well as other groups. Indeed, the Office of Sustainability of the City of Calgary has a “mandate to embed sustainability within the corporation and accelerate community engagement around sustainability through the imagineCALGARY Partnership and other networks” (City of Calgary, 2014). To that end their integration effort for sustainability involves a number of departments

working on issues from transportation, to environment and smart growth. Their strategy to achieve integration is to link the measures (community indicators) derived from citizen input to the measures that departments are already using, and educating people about the importance of having sustainable communities.

Process. The process of integrating CI-PM faces technical and methodological challenges because of legacy systems, lack of agreement, and conflicting expectations. To illustrate, Chantal Stevens, from the King County Auditor's office, referenced three indicator and measurement endeavors that involved King County: Communities Count, The Benchmark Program and the County's Strategic Plan and Performance Measurement System. She said that although community indicators were created collaboratively with stakeholders including government, some of the indicators developed were meant to support several activities outside of county government. So, "the challenge is to bring it all together into an integrated approach."

Additionally, putting a new integrated system of CI-PM into an existing, established, and successful process can be daunting. In particular, participants talked about the difficulties in maintaining linkages between CI-PM and budgets. One participant from Calgary stated that "It's not, in many cases, so clear cut and dry. It is just not that easy to go from our communication to the actual process of how you align our work to our community indicators and our sustainability plan."

Having different unit of analysis also made linking services and programs' performance to desired community outcomes also challenging. The CEO of CSC found it difficult to make the "credible link between the performance measures down at the program level up to the community indicators." Participants from Jacksonville and Calgary also noted that this problem

is compounded by the perennial difficulty of tracking outputs and impacts, and obtaining reliable and credible data.

Chris Payton, from the City of Albuquerque, said that not holding agencies accountable for results makes it difficult to link the adopted goals of the Indicators Progress Commission (IPC) to the budget process. Also, without the accountability piece there is no incentive to collect, use, and report achievement data in an integrated way. Even though IPC was created by resolution, it doesn't have the power to require agencies to integrate their program's performance measures and the community desires as expressed by the IPC's goals.

JCCI faced similar challenges. Although it has a fairly mature indicator tracking system and can relate indicators to performance measures, it remains difficult to keep the PM systems managed by other entities consistently tracking and reporting data that links to the CIs.

Conclusions and Recommendations

Similar to findings on performance measurement studies (e.g., de Lancer Julnes, 2009; Carlucci et al., 2015), our analysis of interviews with knowledgeable participants of CI-PM integration efforts suggests that moving from two separate systems of CIs and PMs to an integrated system (Stage I to Stage IV in the CIC's ideal model) is possible but may face significant challenges. For example, political leadership was referenced the most as the impetus for integration, but also received the highest percentage of comments related to sustainability challenges. Lessons learned from CIC's Real Stories reinforce the importance of political leadership to sustain the effort over time.

Collaboration scored second in the drivers and challenges categories. In successful efforts government and community organizations partner in establishing CI-PM systems. They engage the community in determining the priorities and employ collaborative mechanisms to ensure

those priorities are met (Ho, 2007). However, maintaining collaboration over time among many groups—often with competing interests-- is a significant challenge, as evidenced by TMT and Leon County. Communities, such as Broward and Jacksonville, have established and maintained infrastructures with broad-based partnerships.

The third most frequently referenced challenge to sustainability of CI-PM efforts relates to process, which covers many factors. Primary among them is the actual linkage of community priorities and desires to performance measures and goals and linking both to budget allocations, which is critical to successful integration. Even those entities that appear to be the most successful at integrating CIs and PMs struggled to achieve this level of integration. In our view this illustrates that CI-PM is doable and has value, but ensuring its sustainability and use remains at a crossroads. In particular, our interview data seem to indicate that the political environment in which these efforts operate will dictate the extent to which connecting actions to budget allocations and informing decisions based on CI-PM systems will be able to occur and whether these efforts will be allowed to take hold.

In spite of the challenges, our findings indicate that in most instances integration efforts continue as does interest in improving the performance of public services and opportunities for public engagement. JCCI and CSC's have well established CI-PM programs they are tweaking. Calgary and King County are endeavoring to improve linkages of government strategic plans and performance measures to community indicators. Albuquerque and Virginia have mandated systems and continue to strengthen the relationship of their public councils to their government's budget and program plans. With the economy improving and renewed interest in linking community priorities to public services, TMT is getting underway again. The only CI-PM program not moving forward is Leon's health partnership.

Further study is needed to address issues identified here and by CIC. We offer the following for further exploration: 1) If a community is interested in pursuing CI-PM integration, what factors should be taken into consideration? Our study shows that context matters; 2) How can we achieve common purposes through integration of CI-PM? As shown here, competing values remains a challenge; 3) What data are available or can be generated to demonstrate the impacts of CI-PM? Most of our current knowledge comes from anecdotal accounts; 4) What kinds of models of engagement should CI-PM integration efforts adapt to ensure success? And 5) How can we build upon CIC's maturity model to better understand the meaning of integration? The notion of "integration" and the integration framework need further refinement.

References

- Baxter, P., & Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. *The Qualitative Report*, 13(4), 544-559.
- Besleme, K., Maser, E., & Silverstein, J. (1999) *A Community Indicators Case Study: Addressing the Quality of Life in Two Communities*.
http://rprogress.org/publications/1999/CI_CaseStudy1.pdf
- Broom, C., & Lomax, A. (2012). *Challenges and opportunities of community indicators—Performance measures integration*. Annual conference of the American Society for Public Administration, Las Vegas, NV.
- Bryson, J. (2011). *Strategic Planning for Public and Nonprofit Organizations: A Guide to Strengthening and Sustaining Organizational Achievement*, 4th Edition. Wiley.
- Carlucci, D., Schiuma, G., & Sole, F. (2015). The adoption and implementation of performance measurement process in Italian public organisations: the influence of political, cultural and rational factors. *Production Planning & Control*, 26(5), 363-376.
- City of Calgary. (2014). Retrieved from <http://www.calgary.ca/CA/cmo/Pages/TripleBottomLine.aspx>
- Charbonneau, É. & Bellavance, F. (2015), Performance management in a benchmarking regime: Quebec's municipal management indicators. *Can Public Admin*, 58: 110–137.

Community Indicators Consortium. (2007). *Creating stronger linkages between community indicator projects and government performance measurement efforts*.
http://www.communityindicators.net/system/medias/49/original/CIC_2007_Linkages_Final_Report.pdf?1273695674

Community Indicators Consortium. (2010). *Community Indicators-Performance Measures (CI-PM) Integration Descriptive (Maturity)Model*.
http://www.communityindicators.net/system/medias/64/original/CI-PM_Descriptive_Maturity_Model-draftv4.pdf?1275505793

Community Indicators Consortium. (2012). *Community indicators and performance measures integration — A need or a luxury*.
<http://www.communityindicators.net/system/medias/326/original/BriefingsNo1-final.pdf?1341586764>

Council on Virginia Future. (2014). Retrieved from <http://future.virginia.gov/aboutUs/council/>

de Lancer Julnes, P. (2009). *Performance-based management systems. Effective implementation and maintenance*. Boca Raton, FL: CRC Press.

Ditillo, A., Liguori, M., Sicilia, M., & Steccolini, I., (2015), "Control patterns in contracting-out relationships: it matters what you do, not who you are." *Public Administration*, 93(1), pp. 212–229.

Dulhy, M. & Swartz, N. (2006). Connecting knowledge and policy: The promise of community indicators in the United States. *Social Indicators Research*, 79, 1–23.

Greenwood, T. (2008). Bridging the divide between community indicators and government performance measurement. *National Civic Review*, 97(1), 55–59.

Ho, A. (2007). *Engaging Citizens in Reporting Policy Results and Community Conditions: A Manager's Guide*. Washington, D.C.: the IBM Center for the Business of Government.

Innes, J. and Booher, D. E. (1999). Indicators for sustainable communities: A strategy building on complexity theory and distributed intelligence. *Planning Theory and Practice*, 1(2), 173–186.

Martin, L. & Kettner, P. (2010), *Measuring the Performance of Human Service Programs*. Thousand Oaks, CA: Sage.

Marsh, Z. (2012). Citizen-driven performance: Truckee Meadows Tomorrow and Washoe County, Nevada, Real Stories Series No.1 from Community Indicators Consortium. Retrieved from,

http://www.communityindicators.net/system/medias/90/original/TruckeeMeadowsStory_1_.pdf?1283885397

Mathie, A., & Greene, J. (1997). Stakeholder participation in evaluation: How important is diversity?. *Evaluation and Program Planning*, 20(3), 279–285.

Miller, P., Kurunmaki, L., & O’Leary, T., (2008). Accounting, hybrids and the management of risk. *Accounting, Organizations and Society*, 33 (7–8), 942–67.

Murphy-Greene, C., & Blair, J. (2004). Binational vital signs: A quality of life indicator program for the San Diego–Tijuana metropolitan region. *Review of Policy Research*, 21(5), 681–697.

Perrin, B. (2015). Bringing accountability up to date with the realities of public sector management in the 21st century. *Can Public Admin*, 58, 183–203. doi:10.1111/capa.12107

Phillips, R. (2003). Community indicators. American Planning Association Report Number 517. Accessed online (<http://www.planning.org/pas/reports/subscribers/pdf/PAS517.pdf>)

Schnaible, J., & Shogry, T. (2012). Improving community conditions: a framework linking community indicators, city budgets, government performance measures and performance management in albuquerque, new mexico, Real Stories Series No.3 Retrieved from, <http://www.communityindicators.net/system/medias/91/original/AlbuquerqueRealStory.pdf?1283885433>

Smith, M., Busi, M., Ball, P., & Van der Meer, R. (2008). Factors influencing an organizations’ ability to manage innovation: a structured literature review and conceptual model. *International Journal of Innovation Management*, 12(4), 655–676.

Swain, D. (2001). *Measuring progress: Community indicators and the quality of life*. Retrieved from www.hmecomunications.com/articles/measuringprogress_QOL.pdf

Appendix: Study Participants

Organization	Interviewee	Position	Effort Led/Financed Primarily By	Date of Interview
Auditor's Office, King County, WA	Chantal Stevens	Principal Performance Management Analyst	Government	July 24, 2013
Truckee Meadows Tomorrow Reno, NV	Karen Hruby	Management Firm (and Former Executive Director)	Non-profit	July 30, 2013
Jacksonville Community Council Inc., Jacksonville, FL	Ben Warner	President and CEO	Non-profit	July 30, 2013
Executive Office of Performance Strategy and Budget, King County, WA	Michael Jacobson	Deputy Director for Performance and Strategy	Government	July 31, 2013
City of Albuquerque, NM	Chris Payton	Transit Department Fiscal Manager	Government	August 1, 2013
Council on Virginia's Future, Richmond, VA	Gerald W. Ward	Deputy Director	Government	August 7, 2013
Whole Child Leon Healthy Infant Partnership, Florida	Barbara Markiewics	Retired	Government	August 13, 2013
Children's Services Council of Broward County, Florida	Cindy Arenberg	President and CEO	Government	August 15, 2013
Division of Citywide Planning and Design, City of Calgary, Canada	Denise Carbol	Senior Planner	Government	September 5, 2013
Office of Sustainability, City of Calgary, Canada	Carolyn Bowen	Manager	Government	September 13, 2013