

MAKING IT REAL: MEASURES OF CULTURE IN LOCAL SUSTAINABILITY PLANNING AND IMPLEMENTATION

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On 15 May 2014, the International Organization for Standardization (ISO) and the Global City Indicators Facility (GCIF) launched the first official international standards on city metrics – *ISO 37120 Sustainable Development of Communities: Indicators for City Services and Quality of Life*. Cited as ‘an international standard for cities created by cities’ (Ng 2014, 2), ISO 37120 is a series of standard indicators for ‘a holistic approach to sustainable development in cities and communities’ (GCIF 2014, 18). It includes 100 indicators, of which 46 are compulsory core indicators and 54 are supporting indicators. They are structured around 20 themes, organised by City Services and Quality of Life. ‘Culture’ is one of seven themes within the latter category. However, no core cultural indicator is identified and only one supporting cultural indicator is listed: the percentage of jobs in the cultural sector (GCIF 2011).

This example is one of the latest efforts to develop cultural indicators to use in local planning and benchmarking processes, a journey that has been peppered with initiatives internationally for more than a decade. While culture is gradually becoming recognised as an element within integrated sustainable development planning frameworks (see Duxbury 2014) and ‘community wellbeing’ indicator projects (see Warner and Kern 2013), the challenge to ‘capture’ *culture* in a meaningful way remains. Many attempts to include culture in community quality of life or wellbeing indicator projects have highlighted the difficulties of developing appropriate measures for culture at a local level (see University of Oxford and the Open University, 2014; Hemphill et al. 2004; Boston Foundation 2012). These concerns have also been expressed with regard to both national and international initiatives (see Madden 2005; Smale et al. 2010; Blomkamp 2013; Grincheva 2014).

A key driver of local cultural indicator development has been the integration of (or desire to integrate) culture within broader planning and development processes and city-wide initiatives (Duxbury 2005). In these initiatives, efforts to *quantify* are closely related to needs to *qualify* the inclusion of culture in these broader frameworks and processes. The widespread, cross-sectoral pressure for indicators often comes with an underlying implication that culture cannot be included (and valued) in these processes if it cannot be quantified and counted, putting a spotlight on the perennial debates about the non-qualitative values of culture.

The development of urban sustainability indicators is not simply a matter of data and methodology, although research into indicator development is largely advanced from this

perspective (e.g., Hemphill et al. 2004; Shen et al. 2011). Indicators must also be linked to the *value* that culture brings to a community and to the way that it fits within the community's vision of its overall, holistic sustainability, citizens' values, and the socio-political context. This view of sustainability is intrinsically multifaceted and encompasses the goals or endpoints of development as well as the iterative processes, discussions, and collective decisions necessary to reach this more 'balanced' state. In our research, we recognise that local sustainability is a contested and pluralistic concept centred on socio-cultural processes of negotiation and dialogue. Citizens engage in such dialogue to imagine and reach collective decisions on future paths and objectives, and to catalyse actions, circumscribed by environmental limits and social dynamics.

It is with these issues in mind that this chapter critically examines attempts to develop indicators for culture within a context of local sustainability in a cross-section of communities across Canada. We investigate the quality of local sustainability indicator efforts, the extent to which cultural indicators are included, and the approaches and pathways that are being forged to do so.

FRAMEWORKS FOR SUSTAINABILITY AND CULTURAL INDICATORS

Efforts to develop an integrative indicator framework to measure progress toward sustainability have been ongoing for at least three decades, but until recently most of these initiatives have been based on what is known as 'the triple bottom line' – environmental, economic, and social sustainability (Khan 1995). Only within the last decade has the fourth pillar of sustainability – culture – entered more widely into the literature and practice surrounding indicators (e.g., Statistics New Zealand 2008; UNESCO 2014a, 2014b; Rantala et al. 2012; Axelsson et al. 2013).

At the local level, the rise of a sustainability paradigm has altered the context of efforts to measure cultural change, issues, and 'progress' in communities (Duxbury and Jeannotte 2010). While culture has gradually become the 'fourth pillar' of sustainability (Hawkes 2001), taking a place (if not always an equal one) in discussions about sustainability at the local level, there continues to be a significant gap between discourse and implementation that is most apparent in the development of indicators to track change and 'progress'.

The question of what *value* culture brings to sustainability continues to be a central ambiguity in the conceptual development of frameworks for indicators. While culture's contribution to economic and social development has been examined from a number of perspectives (e.g., Cwi 1980; Ready and Navrud 2002; Florida 2002; Throsby 2003; Evans 2005; Jeannotte 2008; Ost 2012), culture's contribution to sustainability remains under-researched and underdeveloped. As Katrina Soini and Inger Birkeland (2014, 215, 221) note, scientific discourse on cultural sustainability is fractured and while it can be organized into storylines – which they characterize as devices that 'structure and re-order meanings of discourse' and as mechanisms for 'creating and maintaining meaning' – there is a continued need for 'more transdisciplinary and broader understandings of culture in sustainable development discourse'.

There are growing calls to consider cultural value in a broader way. As Eleonora Belfiore (2012, 16) notes,

the nature and definition of the arts and culture, the values that underlie them, their public perception, their perceived role and value in society, and the rationales for their support are contentious and open to contestation to an extent that does not find a parallel in any other field of policy.

Furthermore, as Catalina Turcu (2013, 698) observes,

Measuring sustainability is not only an objective issue but, unavoidably, a political and social one which points to the difficulty of comprehending the 'social construction' of sustainability – this is unlikely to be 'objective'; likely to serve a certain scope (such as the assessment of policy processes...); and is conflictual and manipulated (by the various expert and citizen groups involved).

In the planning sphere, these debates take place in public forums involving a broad spectrum of residents. This is particularly the case in the realm of community sustainability planning, which is increasingly based on extensive community input into the visioning, planning, and decision-making processes (Ling et al. 2009). Public participation is also a key element in constructing cultural and other sustainability indicators if they are to measure what is truly valued (Turcu 2013).

In this context, in the late 1990s many OECD countries began to adopt the Bellagio Principles as guidelines for the design of sustainability indicator systems and the choice of sustainability indicators (Hass, Brunvoll and Hoie 2002). Ten principles provide a framework describing the characteristics of an ideal sustainability indicator system, albeit one that at the time was focused only on 'the triple bottom line'. Figure 1 below presents the principles rearranged into three groups – what should be included, how the indicators process should be managed, and how sustainability should be assessed. In this study, the Bellagio Principles were used as a broad guide to assess the quality and coherence of the sustainability indicator initiatives.

Figure 1: The Bellagio Principles

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ICSP PLANNING: A NATIONAL EXPERIMENT

In 2006, the Canadian government's External Advisory Committee on Cities and Communities (EACCC) put forward a vision and approach to sustainable development for cities and communities based on a four-pillar model of sustainability, which addressed environmental responsibility, social equity, economic health, and cultural vitality (EACCC 2006). Infrastructure Canada (responsible for cities and communities at the time) introduced a policy requiring municipalities to develop long-term Integrated Community Sustainability Plans (ICSPs) reflecting this model. The ICSPs were tied to Gas Tax Fund (GTF) Agreements signed in 2005-06 with each province and territory, and municipalities used a

portion of the GTF funds to undertake these community-based sustainability planning processes. Public participation in the development of an ICSP or similar sustainability plan was a central requirement for communities wishing to access gas tax money (EACCC 2006).

Since 2006, communities across Canada have developed ICSPs or an acceptable equivalent (in some provinces, this was a Municipal Sustainability Plan or the inclusion of an ICSP within an Official Community Plan). In the Province of Quebec, a somewhat different approach was taken, and many communities developed sustainability plans based on Local Agenda 21 principles, adopted by 192 nations at the Rio de Janeiro Earth Summit in 1992, which are widely used by municipalities internationally to guide the implementation of local sustainability programmes.¹ Since 2009, we have compiled a database of 650 such plans from federal, provincial, local government, non-governmental organisations, and consultants' websites and personal contacts, which provides a rich source of information on how communities see culture contributing to their overall sustainability.

We have found, however, that in many of these plans, 'concrete actions seem disconnected from holistic definitions of sustainability or cultural sustainability' and 'the culture-related visions and plans resulting from the ICSP process often seem "moderated" by limited municipal resources and action commitments' (Duxbury and Jeannotte 2012, 14). We have also observed that the systemic implementation of culture as a component of sustainability tends to be linked to the development of indicators or checklists integrated within municipal planning and development processes (Duxbury and Jeannotte 2011). In other words, to tell a 'real' story about culture's role in local sustainability and to integrate it within broader planning systems, cultural indicators seem to play a central role. To better understand these approaches, we examined the cultural indicators developed within local sustainability plan initiatives.

ANALYSIS OF SUSTAINABILITY-RELATED CULTURAL INDICATOR DEVELOPMENT IN CANADA

Over the last decade, indicators have become central to public administration at the local level in Canada. With regard to community sustainability plans, local authorities were encouraged to develop indicators to track their progress toward sustainability. However, of the 650 sustainability plans in our database, we found that only 102 communities or about 15 per cent explicitly attempted to include indicators.

Our analysis of these local sustainability indicator initiatives consisted of four parts. First, we assessed the 102 community sustainability plans that contained indicators. In keeping with the Bellagio Principles, we examined whether culture was included in their guiding vision of sustainability (which served as a proxy for the degree to which it was valued), whether there was broad participation in the indicator development process, and whether a clearly assigned responsibility for data collection, maintenance, and communication was established. Second, we were interested in the indicators themselves: were the culture-related indicators simple, valid, available in a time-series, of good quality, affordable, and reliable? Third, we went to the communities' official websites (or, in a few cases, affiliated sustainability websites) to determine if indicators had been monitored and updated since the plan's completion. Fourth, taking into account all the indicator success factors – presence of a vision including culture,

public participation, adequacy of cultural indicators, monitoring, communication, and implementation – we assigned a score of *high*, *medium*, or *low* to each community.

Part 1: General assessment of the indicator initiatives

To frame the analysis, we grouped the 102 communities-with-sustainability-indicators by population size: 11 large (population of 100,000 or more), 17 medium-sized (population of 20,000 to 100,000), 41 small (population of 2,000 to 20,000), and 33 very small (population under 2,000). Table 1 below provides an overview of the sustainability plans examined, showing whether culture is included in the vision statement for local sustainability and the degree of community participation in the development of the plan.

Table 1: Communities with culture in plan vision statement and level of participation in plan development.
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Vision and expression of cultural value

Within the set of 102 communities examined, we reviewed the sustainability plan's vision statement to assess whether culture, the arts, heritage, or cultural diversity was included. In a few instances, we also coded a community 'yes' if culture figured prominently in a statement of principles or values, although not mentioned in the vision statement. Overall, 69 of the 102 communities with sustainability indicator initiatives included culture in their vision for sustainability. Large communities were the least likely to include culture in their vision for sustainability. Less than half (45 per cent) did so, compared to 59 per cent of medium-sized communities, 76 per cent of small communities, and 70 per cent of very small communities. This finding suggests that local culture is perceived to play a more central role in the sustainability of smaller communities than in larger ones and that this value is worth expressing in a visionary way.

Typically, larger communities, if they include culture in the vision, state it in a *subordinate phrase* – for example Metro Vancouver, British Columbia (population 2,135,201) 'seeks to achieve what humanity aspires to on a global basis – the highest quality of life embracing cultural vitality, economic prosperity, social justice and compassion, all nurtured in and by a beautiful and healthy natural environment' (Metro Vancouver 2009, 2). In contrast, many smaller communities tend to see culture as more central to their vision of local sustainability. For example, Bonavista, Newfoundland and Labrador (population 3,589) asserts that it is:

a community that is immersed in heritage, originating from its people's reliance on the sea. This heritage, steeped in culture that has been nurtured by both people and place and creating a sense of belonging has defined the history of the Town of Bonavista, and will continue to be a driving force in defining the future of this vibrant community (Whey Consulting 2010, 9).

A few larger communities mention the role that *cultural diversity* plays in their vision of sustainability. For example, Saskatoon, Saskatchewan (population 222,189) states: 'In 2030, Saskatoon is a world class city with a proud history of self-reliance, innovation, stewardship

and cultural diversity' (City of Saskatoon 2012, 12). In general, it appears more common for the idea of culture as tradition and heritage to be featured in the sustainability vision than the ideas of change and diversity, although some, like Saskatoon, try to meld these notions.

Public participation

Participation was assessed from a dual perspective: whether the broader public *and* cultural stakeholders were involved in the indicator development process. To assess the extent of public participation in the communities in our sample, we looked at the number of participants responding to surveys and attending public events, and the quality of participation: whether cultural stakeholders were engaged in the discussions and whether residents were given the opportunity to provide input and not just react to draft documents. Intensity of participation was assessed partially on the number of occasions that stakeholders and the general public were given opportunities to provide input to the plan and partially on the raw numbers of participants (if this information was available). *High* public engagement included cultural stakeholders in at least one of the planning sessions, consultations, or draft review sessions, and engaged a significant proportion of the population. If cultural stakeholders were only engaged at the plan implementation stage, and only a moderate proportion of the population was consulted, the community was given a *medium* score. Alternatively, if cultural stakeholders had minimal involvement but the general public was highly engaged (or vice versa), the community was also given a *medium* score. If cultural stakeholders did not appear to be engaged and/or only a very small proportion of the population was consulted, the community was given a *low* score.

Using this metric, the overall level of public participation among all indicator communities was split quite evenly between *high*, *medium*, and *low* levels of participation, with participation by cultural stakeholders in about 84 per cent of the communities. Reviewing communities by size, an overwhelming majority of large communities in the sample (about 82 per cent) were judged to have *high* participation rates, compared to 29 per cent of medium-sized communities, 37 per cent of small communities, and 12 per cent of very small communities (see Table 1). On the other hand, about one-quarter of both medium-sized and smaller communities and over half of very small communities had *low* levels of public participation in the development of their sustainability plans, while about 18 per cent of large communities also failed to engage their residents to any great degree. About half of medium-sized communities and over one-third of smaller communities fell somewhere in between, obtaining *medium* levels of public engagement.

In ICSP development processes (particularly in discussions of culture's role in sustainability), municipal planners have worked hard to gain the perspective of ordinary citizens, as well as experts, with varying degrees of success (Jeannotte and Duxbury 2012). This process can be difficult, even if the community is able and willing to devote the necessary resources to such consultations. In the case of communities that included indicators in their sustainability plans, larger communities seemed better able to make that commitment.

Part 2: Adequacy of the cultural indicators

We examined the proposed indicators from a dual perspective: their *quality* and *breadth of coverage* and their *practicality* or *realism*. Indicators were judged to be *good* if they were comprehensive, related to the proposed cultural actions in the plan, and if the data needed to

create the indicators were likely to be available. They were judged to be *adequate*, even if they were minimal, as long as they were related to at least some of the cultural actions in the plan and were likely to be measurable. They were judged to be *weak* if they were vague, likely immeasurable, and probably beyond the capacity of the community to monitor. Table 2 below provides a summary of cultural indicator adequacy by community size as derived from their sustainability plans.

Interestingly, the presence or absence of culture in a community's vision of sustainability did not fully correspond to the presence, absence, or quality of cultural indicators in the plan. Among the 69 communities with culture mentioned in the vision statement, 23 (33 per cent) developed cultural indicators assessed as *good*, 29 (42 per cent) as *adequate*, and 17 (25 per cent) *weak*. Among the 33 communities with culture *not* mentioned in the vision statement, 13 (39 per cent) developed cultural indicators assessed as *good*, 14 (42 per cent) as *adequate*, and 6 (18 per cent) as *weak*. Thus, among the communities that did not include culture as part of their vision of sustainability, most (81 per cent) developed cultural indicators assessed as *good* or *adequate*, with the 13 *good* cases representing over one-third of all communities with a *good* ranking.

Table 2: Overview of cultural indicator and monitoring adequacy
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Larger communities tended to produce better sets of cultural indicators, both in relation to the plan and the availability of data to create them. Among communities with a *good* set of cultural indicators, the most common topics were related to attendance or participation, physical heritage, the number of events or festivals held annually, and the number of cultural facilities or level of services offered (see Figure 2). The communities producing *weak* indicators often conflated the accomplishment of actions with indicators – for example, 'more cultural events' – or made vague statements such as 'aesthetic enhancements are pursued'. Many medium-sized and smaller communities produced long lists of cultural sustainability indicators. However, resources were seldom designated to collect such information.

Figure 2: Topic areas of cultural indicators among communities with good indicator sets (n=36)
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Part 3: Monitoring, communication, and implementation

Many communities, both larger and smaller, outlined fairly detailed plans for annual and, in some cases, even quarterly or semi-annual reviews of indicators to assess progress on the sustainability plan. Responsibility for indicator development and maintenance was usually assigned in the section on 'plan implementation', but was often stated in vague terms (for example, as 'town officials') and resource levels required were not usually specified. Consequently, as is evident from Table 2, good intentions were not always fulfilled.

If a community issued even one update on the cultural indicators in the sustainability report, we gave it a positive score, even if it reported on indicators that were not in the original

ICSP. In cases where sustainability reports were only recently completed and it was too early for an update, we scored the intention to monitor and produce updates positively.

Among the 102 communities, only about one quarter monitored cultural indicators since the plan's completion. While about 64 per cent of large communities issued some type of progress report on cultural indicators of sustainability, only about 35 per cent of medium-sized communities, 24 per cent of smaller communities, and 3 per cent of very small communities did so. In general, this did not stem from lack of commitment to the ideas expressed in the plans. Many communities produced detailed and visionary plans based on fairly wide consultations with residents, but ambitious intentions to monitor and report on progress often seemed to overwhelm the capacity of local officials, especially those in smaller communities. In a number of cases, report cards of indicators were issued only once. In a few cases, organisations established to benchmark progress closed their doors (see, e.g., Bluewater Sustainability Initiative 2014).

Part 4: Overall assessments

Taking into account all the indicator success factors – a vision including culture, public participation, adequacy of cultural indicators, and monitoring, communication, and implementation – we assigned a score of *high*, *medium*, and *low* to each community.

Communities scoring positively or highly in all four categories were assessed as *high*. Those scoring positively on at least two categories were given a *medium* score, and those with low scores in three of the four categories were assessed as *poor*. Summarised results are presented in the final set of columns in Table 2. Among all the communities that developed indicators, only 19 (19 per cent) were assessed as having done a good job in developing and reporting on cultural indicators of sustainability. Examining the communities by population size, just under one-half (45 per cent) of large communities could be considered to have done a good job in developing and reporting on cultural indicators of sustainability, but only 35 per cent of medium-sized communities and 17 per cent of small communities achieved this level of success. Among very small communities, only one received an overall score of *high*. In the final section of this chapter, we assess what lessons can be learned about the measurement of culture within the framework of local sustainability plans.

INTERPRETATIONS

These efforts can be contextualised and interpreted in the light of previous efforts to integrate culture within community wellbeing and quality-of-life initiatives. Past attempts to include cultural indicators within broader quality-of-life indicator initiatives often left the 'culture' section relatively empty, serving as a placeholder until the most appropriate indicators were decided, or developed a shopping list of possible indicators that were not linked to particular situations. While flagging intent, these efforts did not significantly advance the integration of culture into broader systems. The initiatives studied here, while not perfect, are a significant step forward in placing culture within local sustainability frameworks and articulating ideas for cultural indicators.

In the ICSP development processes, local governments needed to take into account what residents were telling them about the most important cultural features of their community, but translating this into a vision, action plan, and indicators was clearly a challenge. The Bellagio

Principles emphasise the importance of the guiding vision, but the disparity between the lack of culture in vision statements and the inclusion of cultural indicators, particularly in larger centres, indicates that something more complex was occurring and hints at the contested nature of values in those communities and the continued struggle to include culture in the dominant 'three-pillar' sustainability paradigm (Duxbury, Cullen and Pascual 2012). The fact that smaller communities were more likely to make an explicit statement about the value of culture in their visions of local sustainability speaks to the centrality of culture as local ways of life, providing a shared sense of existence, and thus integral to 'grassroots' envisioning of community futures. It may also mean that decision-makers in smaller communities are more in tune with their citizens, or perhaps that the voices of countervailing stakeholders are less dominant in such places.

With regard to the choice of indicators, we found a wider range of ideas than typically found in cultural indicator sets. There appears to be a close link between the types of indicators selected and the primary concerns of the individual communities, with some, for example, focused on visitors, others focused on resident participation and volunteerism, and others concerned with knowledge and language transmission between generations. In keeping with some of the international indicator sets now under development, the most common types of proposed indicators focused on the built environment, employment and other economic impacts, and size of the cultural sector. However, as presented in Figure 2, a sizable number of indicators also related to participation and volunteerism, sense of place and belonging, and social dimensions such as cultural diversity.

The most significant issues evident in our study is the gap between ideas and implementation. Only 64 per cent of large communities issued some type of progress report on cultural indicators of sustainability, and this proportion fell as the size of the community diminished, sinking to 35 per cent in medium-sized, 24 per cent in smaller, and 3 per cent in very small communities. The Bellagio Principles emphasise that indicators should have a practical focus and that attention should be paid to the institutional capacity to collect and maintain data for the indicator sets. Unfortunately, not all of the indicators suggested in ICSPs were practical or measurable, and it was evident that larger communities were much better equipped than smaller ones to deliver cultural sustainability progress reports.

CONCLUSIONS

This chapter reviewed 102 local sustainability indicator initiatives across Canada. We assessed them on the presence of a vision including culture, public participation, adequacy of cultural indicators, and monitoring, communication, and implementation. Of the 102 communities, 69 included culture prominently in their vision for sustainability, with smaller communities more likely to do so than larger communities. However, the presence or absence of culture in a community's vision of sustainability did not fully correspond to the presence, absence, or quality of cultural indicators in the indicator initiatives. Except in very small communities, high and medium levels of participation in the plan development process seemed to be as important as the official vision in the indicator development and implementation process. The bottom-up development of cultural indicators privileged local resonance and community planning goals over macro-level frameworks. In general, the level

of intercommunity comparability among the culture indicators appears to be low, mainly because the story being told is so rooted in place.

We assessed whether the culture-related indicators were simple, valid, available in a time-series, of good quality, affordable, and reliable. Among the 69 communities with culture mentioned in the vision statement, 23 (33 per cent) developed cultural indicators assessed as *good*, and among the 33 communities with culture *not* mentioned in the vision statement, 13 (39 per cent) developed cultural indicators assessed as *good*. Data sources for the suggested indicators range from information created as part of municipal operations (for example, public library usage, museum visits, use of cultural centre), to data created through regular surveys of local residents, to data extracted from outside statistical agencies. Operations-related data are the easiest to include if collected and monitored systematically. Data on resident perceptions are dependent upon municipalities investing in information and opinion-gathering surveys. 'Outside' data are methodologically valid and consistent but are subject to the least local control. The value of culture in community sustainability and resilience goes far beyond economic indicators (for example, employment and GDP contributions) – the current focus of national culture statistics (McCaughey, Duxbury and Meisner 2014) – and the official statistical agency may not gather the data needed to create indicators on other aspects of culture in these communities.

Issues of value and measurability seem only marginally related in many municipalities, suggesting a disjuncture between what is *desired* and what is *quantifiable*. The pressure to find quantitative indicators appears to have been counterbalanced by aspirations to include more qualitative factors, such as satisfaction levels. One of our tentative conclusions is that culture is perceived and treated as a collective value and goal, particularly in the smallest communities, but is often separated from policy or planning 'actions'. This conclusion is reinforced by the finding that the biggest ICSP challenge is follow-up and use of the suggested indicators to guide and monitor community sustainability. Only about one quarter of communities actually monitored and updated their suggested indicators after the plan's completion. Political factors such as power imbalances, resource constraints, and the very real difficulties of understanding what should and can be measured certainly played a role in some communities, particularly in the smaller ones.

As mentioned at the beginning of this chapter, cultural indicators seem to play a central role in telling a 'real' story about culture's role in local sustainability and in integrating and activating it within broader planning systems. But the story may be one based partially upon non-use values, which are not directly measurable in economic or bureaucratic terms (Ost 2012). Residents may view culture as having an *intangible* value that is only partially captured by attendance at cultural events or visits to historic sites. These are proxies for making the intangible tangible, but just as assigning a monetary value to a forest does not mean that this amount would compensate for its destruction, measuring culture's role in sustainability by its contribution to the local economy does not capture its full value. Cultural indicators may never succeed in telling the full story of a community's cultural life, but they are nevertheless important elements in the ongoing campaign to provide 'voice' to a community's residents within the walls of city hall. Those communities in our sample that included this voice, not only as part of the planning process but subsequently in the plan's

progress reports, can be counted as successes in the emerging effort to articulate what constitutes a culturally sustainable community.

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ENDNOTES

¹ None of the local Agenda 21 plans reviewed included indicators.

Table 1. Communities with culture in plan vision statement and level of participation in plan development

<i>Community size</i>	<i>N</i>	<i>Culture included in vision statement</i>	<i>Cultural sector participation in plan development</i>		<i>Public participation level in plan development</i>		
			<i>Yes</i>	<i>Uncertain^a</i>	<i>High</i>	<i>Medium</i>	<i>Low</i>
Large (100,000+)	11	5	9	2	9	0	2
Medium (20,000-100,000)	17	10	11	6	5	8 ^b	4
Small (2,000-20,000)	41	31	37	4	15	16 ^c	10
Very small (< 2,000)	33	23	29	4	4	12 ^d	17 ^e
Totals	102	69	86	16	33	36	33

Notes:

^a Uncertain involvement in plan development, although often explicit involvement in implementation.

^b Includes one assessed as 'uncertain but likely medium'.

^c Includes five assessed as 'uncertain but likely medium'.

^d Includes two assessed as 'uncertain but likely medium'.

^e Includes nine assessed as 'uncertain but likely low'.

Population figures: Statistics Canada 2011 Census

Table 2. Overview of cultural indicator and monitoring adequacy

<i>Community size</i>	<i>N</i>	<i>Adequacy of cultural indicators</i>			<i>Indicator reports</i>		<i>Overall assessment score</i>		
		<i>Good</i>	<i>Adequate</i>	<i>Weak</i>	<i>Yes</i>	<i>No</i>	<i>High</i>	<i>Medium</i>	<i>Low</i>
Large (100,000+)	11	5	6	0	7	4	5	5	1
Medium (20,000-100,000)	17	9	5	3	6	11	6	5	6
Small (2,000-20,000)	41	14	15	12	10	31	7	14	20
Very small (<2,000)	33	8	17	8	1	32	1	23	9
Totals	102	36	43	23	24	78	19	47	36

Figure 1. The Bellagio Principles

What should be included in a sustainability indicators system:

- Principle 1 – A clear vision of sustainable development and goals that define that vision should guide assessment of progress toward sustainable development.
- Principle 3 – Indicators should include the essential elements of equity, ecological conditions, and economic development (*to which we add 'cultural vitality'*).
- Principle 4 – The indicator set should have a time horizon long enough to capture both human and ecosystem time scales, and should apply to a defined space of study.
- Principle 5 – Indicators should have a practical focus and an explicit set of categories or organizing framework that links vision and goals to indicators and assessment criteria. There should be a limited number of key issues and indicators, standardized measurement, and comparison of indicator values to targets.

How the indicators process should be managed:

- Principle 10 – Attention should be paid to institutional capacity – clearly assigned responsibility for data collection, maintenance, and documentation.
- Principle 8 – Broad participation – key grassroots, professional, technical, and social groups, as well as decision-makers should be involved.
- Principle 6 – Openness – methods and data should be accessible to all.
- Principle 7 – Effective communication should address the needs of audience, users, decision-makers and use simple structure and language.

Mechanics of analysis / How sustainability should be assessed:

- Principle 2 – Holistic perspective – Indicators should consider the wellbeing of social, ecological, and economic sub-systems, their state, and the direction and rate of change of that state, of their component parts, and the interaction between parts.
- Principle 9 – There should be ongoing assessment – repeated measurement, adaptive and responsive to change, and development of collective learning and feedback.

Source: Adapted from Hass et al. (2002)

Figure 2. Topic areas of cultural indicators among communities with *good* indicator sets (n=36)

Note: The figure indicates the number of communities mentioning indicators related to this general topic. If a community mentioned more than one indicator in a category, the topic was registered as *yes* (i.e., 1, not multiple scores).

Relate to participation:

- Attendance at cultural events, other participation, household expenditures (25)
- Civic participation (e.g., volunteering, organization membership, strong sense of belonging to the community, community pride) (10)
- Visitor participation, satisfaction (10)

Relate to built environment or cultural infrastructure:

- Heritage / history (22)
- Cultural facilities/services (including library services/programs) (19)
- Public art / commemorative naming / storyboards/interpretations (8)
- Unique neighbourhoods / good 'sense of place', cultural sites in land use plan (6)

Relate to size of culture sector / economic features:

- Number of events (20)
- Number of cultural groups / size of cultural sector/industry, collaborations/partnerships within the sector (9)
- Cultural employment (7)
- Sales/revenues (4)

Relate to social qualities/dimensions:

- Ethnic diversity, First Nations cultural aspects, tolerance, harmony (6)
- Elders and/or youth involvement (3)

Other:

- Municipal (and other) investments (11)
- Communications/knowledge: Development of knowledge base (inventories), Language-related, Public/intergovernmental communications, Media attention (8)