

Genuine Progress for the Wellington Region?

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Abstract

There is widespread and long-running discontent with the Gross Domestic Product (GDP) as a measure of progress for society. A number of alternative measures have been proposed, including the Genuine Progress Index (GPI). A GPI has been developed by local government in the Wellington region (New Zealand) to facilitate a rethinking of conventional notions of 'progress'. The Wellington Region GPI (WRGPI) is modelled upon the *Nova Scotia* GPI, a pluralistic index consisting of environmental, social, economic and cultural indicators with mainly monetary values, but based on physical and social variables. This paper provides an overview of the governance and institutional arrangements and attitudinal context within which the WRGPI fits. A synergistic link was found between the *Nova Scotia* GPI framework and the framework provided by the Local Government Act 'community outcomes' process. Despite this synergy, and the commitment to the GPI on the part of local authorities, a number of challenges are evident. These include the poor integration of the existing community outcomes into institutional decision-making, a fragile institutional commitment to the economic valuation procedure of the GPI and a need to revitalise public engagement. It is recommended that deliberative techniques that facilitate institutional and social learning around the WRGPI are implemented. These are necessary to build the value case and a constituency for the WRGPI across the local authorities and community, thereby increasing the likelihood that conventional notions of 'progress' will be replaced with more holistic ones. While this case study provides insights into the challenge of integrating a GPI into local governance, it is still too early to judge whether the initiative will emerge as a viable alternative to the GDP for the Wellington region.

Key words: Genuine Progress Index/Indicator, sustainable development, growth, community outcomes, public participation, social learning

Introduction

There is widespread and long-running discontent with the Gross Domestic Product (GDP) as a measure of progress for society (Cobb et al. 1995; Hodge, 1997; Anielski, 2001; Bagstad & Shammin, 2008; Clarke & Lawn, 2008a, Stiglitz *et al.* 2009). The singular focus on the GDP has paralleled the strong emphasis on the development of economic capital and wealth, often at the expense of social, environmental and cultural capital and wellbeing (Talberth et al. 2007, Jackson, 2009). There is an increasing interest in the development of more holistic national accounting tools, such as the Genuine Progress Indicator (GPI) and the Index of Sustainable Economic Welfare (ISEW), to challenge the uncritical use of the GDP and to provide a more accurate picture of environmental, social, cultural and economic wellbeing (Ness et al. 2007; Gasparatos et al. 2008; Clarke & Lawn, 2008b). These tools are important to the push for 'sustainable development' across the world and also as a means to address the systemic causes of the gathering climate crisis (Richardson et al, 2009; Hamilton, 2009). As these alternative indicators trickle into use, it is important that a critical view is maintained, especially if the GPI is to become a widely used tool that challenges the primacy of the GDP.

The New Zealand context

Interest in alternative measures of progress has also grown in New Zealand in the last decade. At the national level, Statistics NZ (2008) has developed a Framework for Measuring Sustainable Development (FMSD). The first report on the framework was released in July 2009 and measures sustainable development by evaluating stocks, flows, levels and structural criteria across financial and produced capital, natural capital, human capital and social capital¹. The report has been distributed widely amongst government departments and received significant media coverage. In this way the FMSD has been relatively effective in informing decision-makers, but at this early stage it is not a driver of policy-making. At the non-governmental level, the New Zealand Centre for Ecological Economics (NZCEE) is shortly to release the first iteration of a national level GPI for NZ. Unlike the FMSD, the New Zealand GPI contains a bottom-line aggregate indicator designed to directly challenge the primacy of the GDP.

¹ Statistics NZ provide the following definitions (2008:12): *Capital stocks refer to the measurable quantity of a resource that is both accessible and available for use at a particular moment in time. Flow indicators measure the activities (flows) that cause changes in stocks (additions or reductions) from one period to the next. Level indicators provide a starting point or benchmark to assess the extent to which human needs are met. Structural criteria are economic, environmental, and social efficiency.*

Alongside national-level developments, there is growing interest at the regional level in more holistic measures of progress. In part, this reflects the recent refocusing of local government in New Zealand, through the Local Government Act 2002 (LGA), on improving sustainability through devolved community engagement (Reid, 2003; Thomas & Memon, 2005). In practical terms, this means that local government is tasked with (Local Futures, 2006):

- Strengthening local democracy through an increased focus on public participation
- Providing for the social, economic, environmental and cultural wellbeing of the community, and
- Strategic, long-term and outcome-focused decision-making.

Local government is thus empowered to take a “governance for sustainable development” approach to its activities. This governance framework, and the flexibility with which local government can implement it, provides impetus for adopting more holistic measures of progress, such as the GPI. This paper looks specifically at the development of a GPI for the Wellington region.

The Wellington Context

In 2007, Greater Wellington Regional Council in conjunction with the region’s territorial authorities announced that it would develop a GPI. This was part of a joint strategy – the Wellington Regional Strategy (WRS) – that focused on growing the region’s economy and the promotion of good urban form. This GPI and the recently developed Auckland region GPI join just a handful of other such initiatives around the world. As such, an overview of how the Wellington GPI has been developed and implemented is of considerable interest.

While considerable effort has focused on the methodology for developing GPI accounts, Astleithner *et al.* (2004:23) point out that: “designing and devising SISs [Sustainability Indicator Sets], in itself, changes little. It is a question of how SISs are integrated into the processes of urban governance”. The question that Astleithner *et al.* outline is challenging to address, not least because it does not sit comfortably within one field of research. The challenge is a broad one, as Colman highlights (2004:18):

We feel confident that, at the community level, the GPI can assist communities in mobilising behind a common vision, learning about themselves, improving their

wellbeing, planning a better future for their children, and measuring their progress towards that goal.

In providing an overview and recommendations for the Wellington Region GPI (WRGPI), this study has taken an interdisciplinary approach by integrating a number of relevant disciplinary domains, including *sustainable development, political theory, public policy, public participation* and *social learning*. The following research aim was identified:

Explore and make recommendations for how the WRGPI fits into local governance arrangements and how the public are involved in the development and use of the WRGPI.

Methodology

This research is based upon an interpretive paradigm that crosses between “a wide-range of interconnected interpretive practices” (Denzin & Lincoln, 2003:5). The research is pragmatically orientated in that it aims to contribute to the effective application of the WRGPI. Van Kerkhoff & Lebel (2006) have critiqued the two conventional views of links between knowledge and action – *trickle down* and *transfer and translate* – for inadequately engaging in sustainable development because they place the researcher as independent of the users of the research. They provide an alternative view, in which the role of the researcher is to engage with the research users. This is reflected in this study’s research design: time was spent with the commissioning organisation, GW, to develop and refine the research aims, objectives and outcomes. This process was seen as important to ensure that the research was well fitted to the context and to condition the organisational environment, as much as practicable, to be more receptive to the research.

Literature reviews and an in-depth case study analysis were applied to address the research aim. The literature reviews focused on the Genuine Progress Index, the Local Government Act 2002 and on public participation. The case study has been developed as an “intrinsic case study” (Creswell, 2007:74), which is an in-depth exploration on the basis that “the case itself is of interest” (Stake, 2003:136). The intrinsic case study of the WRGPI has involved collecting data from multiple sources, including:

1. Observational study of the development of the WRGPI, based upon regular meetings with council officers and participation in events related to the development of the WRGPI
2. Analysis of council policy papers and publications to develop an overview of public participation, the community outcomes (COs) process and the development of the WRGPI
3. A Treaty of Waitangi analysis based upon the WRGPI context
4. Semi-structured, key-informant interviews with four council officers and two regional councilors to explore the WRGPI context and to outline important considerations for public participation in the WRGPI. The interviews were analysed using thematic analysis (after Braun & Clark, 2006).

The Genuine Progress Indicator and Index

The Genuine Progress Indicator was initially developed by the North American NGO *Redefining Progress* in 1995. The GPI aims to provide a better approximation of a population's welfare than the GDP (Gasparatos, 2008). Unlike the GDP, it is cost and benefit discerning. What is widely accepted to be a cost to society - such as crime, pollution, or emergency expenditure - is subtracted as a cost, rather than being added as a benefit as the GDP does. Over the last decade, GPI development has undergone rapid transformation so that the technical methodology is greatly improved. However, there remain considerable technical challenges that are the topic of hot debate throughout the literature (Clarke & Lawn, 2008a, 2008b; Gasparatos *et al.*, 2008; Lawn, 2005; Ness *et al.*, 2007; Neumayer, 2000; Parris & Kates, 2003).

Although the bulk of the literature remains focused on the *Redefining Progress* approach, an alternative form of the GPI has been developed - the *Nova Scotia* approach - by Dr Ron Colman and his colleagues at GPI Atlantic, Canada (2004). Colman provides a rationale for the divergence from the *Redefining Progress* approach (2004:11):

Parallel to our wish to use the GPI name, we had concerns. We did not want to replicate some of the methodological problems in the original GPI, and planned to

measure some things very differently. We also did not intend to strive for a single bottom line, and therefore felt that the singular designation “indicator” did not accurately express our intention, approach or potential final product. We felt that an “index” was a more appropriate designation for a collection of many indicators.

The Wellington Region GPI is based upon the Nova Scotia methodology, yet there is scant description of this divergence in methodology. This is in large part because GPI Atlantic has been operationally focused and has had few resources to put into analytical development of the *Nova Scotia* approach (Colman, 2004).

The two approaches can be compared as follows – see also Table 1 (Anielski, 2001; Boven *et al.*, 2006; Breuer, 2008; Colman, 2004; Lawn, 2005):

1. The *Redefining Progress* approach only uses indicators that can have a monetary value assigned to them across environmental, social, cultural and economic areas. It seeks to challenge the GDP, partly by aggregating all indicators to one headline indicator that is compared to GDP. The calculation of the *Redefining Progress* GPI starts with private consumption expenditure, to which other transactions are either added or subtracted (depending on whether they are considered a cost or benefit) and systems that defy market valuation undergo adjustments before being included. In this context, the GPI stands for Genuine Progress Indicator.
2. The *Nova Scotia* approach uses the full-cost accounting² procedure, which does not depend on consumption expenditure to be calculated. Full-cost accounting integrates estimates of the true costs or benefits of natural resources (amongst other non-market variables) with the GDP. This reflects a shift away from the weak sustainability approach to a strong sustainability approach.³ In other words, it attempts a shift from a predominantly ‘reductionist’ paradigm towards a ‘systems thinking’ paradigm that focuses on wholeness and interconnectedness of the system. *The Nova Scotia* approach avoids aggregating and seeks instead to provide indicators that integrate (where possible) across environmental, social, cultural and

² Full-cost accounting is an accounting procedure that considers the costs and advantages of an item beyond that of a conventional economic cost-benefit analysis by incorporating environmental, social, economic and cultural non-market variables.

³ Stiglitz *et al* (2009) provide a useful discussion of these concepts.

economic areas⁴. Due to this level of depth within each indicator, indicators are usually reported independently and as they are developed. In this context, GPI stands, counter-intuitively, for Genuine Progress Index.

Table 1: Comparative analysis of the Redefining Progress and Nova Scotia approaches

	<i>Redefining Progress</i>	<i>Nova Scotia</i>
Methodology	Personal consumption expenditure adjusted for environmental, social, cultural and economic costs and benefits	Takes physical measures and applies economic valuations where possible (full-cost accounting). Engages with the community.
Uses economic value and physical measures?	Focus on economic measures	Both
Relationship to GDP	Directly challenges the GDP	Provides a more holistic alternative framework, which includes the GDP
Aggregation to a single indicator?	Yes – the ‘GPI’	No
Top-down or bottom-up?	Top-down	Ability to be bottom-up or top-down
Paradigm	Tends toward reductionism, monistic	Tends toward systems thinking, pluralistic
Reporting	As a time series comparison with GDP, and spider diagram	As single accounts and spider-diagram
Meaning of ‘GPI’	Genuine progress indicator	Genuine progress index (collection of indicators)

Source: Own analysis, drawing on Colman (2004).

The most important consistency between the approaches is an emphasis on economic valuation, seen as necessary to challenge conventional economic systems (Colman, 2004:53):

In the view of both Redefining Progress and GPI Atlantic, only such economic valuation could challenge and take issue with existing core accounting mechanisms and create an essential dialogue with the world of conventional economics.

⁴ A good example of an integrative indicator is ‘commuter transport by mode’ because it provides insight into the social (who is using different modes of transport), economic (who can afford different modes of transport) and environmental (is the choice of dominant transport modes impacting on environmental quality?) aspects of an issue.

Economic valuation is the key methodological characteristic that differentiates both forms of the GPI from other indicator sets, such as those already developed in New Zealand (for example the Quality of Life indicators, and the Social Report). The *Nova Scotia* GPI approach of using both monetary values and physical values (to underpin monetary values) is consistent with the recent recommendations provided by the *Report by the Commission on the Measurement of Economic Performance and Social Progress* (Stiglitz et al. 2009), which suggests that putting an economic value on the environment should be undertaken where possible, but in many cases it is better to leave values as physical indicators.

Using the GPI at the local government level

There is growing interest in the regional/local development of GPIs on the part of local governments around the world (Bagstad & Ceroni, 2008; Clarke & Lawn, 2008b). Colman (2004) notes that the Nova Scotia GPI has percolated into and directly impacted on public policy at the provincial and regional level. It has also increased public consciousness, which has led to increased pressure and participation from the public.

Downscaling the GPI from the national to the sub-national level offers several challenges, including data quality and availability, interpretation of certain aspects and the appropriate use of results (*ibid*). These challenges for regional/local use of the GPI ultimately come down to the context, which is strongly defined by institutional arrangements and political contexts (Aistleithner, 2004).

Public participation and social learning

Both the Local Government Act (LGA) and the Nova Scotia GPI have a strong focus on the role of public participation. The focus on public participation stems from the recognition that the complex and “wicked” nature of environmental and social problems requires more holistic or pluralistic approaches (rather than what have tended to be somewhat monistic or reductionist approaches) to governance and policy-making (Norton, 2007). Therefore, working within a pluralistic or more holistic framework, such as the LGA, poses the challenge of engaging the ‘plurality of legitimate perspectives’ (Funtowicz & Ravetz, 1993). Effective responses must negotiate a complicated web of politics, evidence and power relationships (Juntti *et al.*, 2009).

The philosophy and practice of deliberative democracy has emerged in the last 30 years as a response to the need to negotiate such complex relationships and contexts. Dryzek & List (2003:1) note that “deliberation involves discussion in which individuals are amenable to scrutinizing and changing their preferences in the light of persuasion (but not manipulation, deception or coercion) from other participants.” When the public is effectively engaged, there is a range of benefits that can emerge, including (Bell & Morse, 2008; Involve, 2005; Lukensmeyer & Torres, 2006; Macnaghten & Jacobs, 1997; van Kerkhoff & Lebel, 2006; Vatn, 2005; Webler *et al.*, 2001):

- An enhanced understanding of the problem, issue or system
- Enhanced support and legitimacy of governance
- Increased social cohesion, trust and justice
- More effective services and policy
- The shared management of responsibility for actions, and
- Social learning and capacity building.

However, public participation can be associated with a number of risks and costs, including (Abelson *et al.* 2003; Barnes *et al.* 2004):

- The increased amount of time required to set up and get used to deliberation
- The need for an appropriate facilitator who has a well-developed understanding of the deliberative process
- The increased cost of running the process due to the longer time and facilitation requirements
- The challenge and possible implications of addressing established distributions of power and interests.

In the context of sustainable development, deliberation is especially important for the social learning that it makes possible. Holden points out that (2008:2):

We have remarkably few analytical tools to assess when and how learning is taking place in different contexts...In failing to understand how learning processes function in the public realm, planners and policy makers miss an important means to connect with communities and members of the public to push for desired ends.

Social learning is defined by Keen *et al.* (2005:4) as *the collective action and reflection that occurs among different individuals and groups as they work to improve the management of human and environmental interrelations*. They argue that the failure to come to grips with the complexities of 'sustainability' is in large part due to a lack of focus on social learning between local government and the community. Brown *et al.* (2005) provide an overview that focuses government learning through *reflection, systems orientation, integration, negotiation and participation* (as outlined in more detail in Figure 1). Such a framework can be a powerful tool for reshaping entrenched institutional attitudes and for promoting innovation.

Figure 1: Social learning strands of a government-initiated environmental management system

Government Learning	
Reflection:	Respecting intuition and professional knowledge, revealing community and organisational values and objectives
Systems Orientation:	Understanding interactions between community and government over time and space
Integration:	Valuing different types of knowledge (individual, local, expert, organisational and holistic), using iterative knowledge management systems
Negotiation:	Exchanging ideas and facilitating learning across scales and interests
Participation:	Developing rules of engagement to encourage mutual obligations and shared objectives

Source: Brown *et al.* 2005:254

The Wellington Region Genuine Progress Index case study: results

The Wellington Regional Strategy (WRS), is a vivid example of where the GPI is part of a specific context that is shaped greatly by the regional (and national) institutional and political arrangements. The WRS is a joint venture between the territorial and regional councils, which establishes the GPI as a means to measure progress on the strategy. The final pages of the WRS outline how progress will be measured and introduce the GPI concept at a very basic level. The establishment of the GPI sits somewhat awkwardly within a document which, although it is called a 'sustainable regional growth strategy', is very focused on economic growth. The three primary focus areas of the WRS are:

1. Leadership and partnerships
2. Growing the region's economy, especially its exports
3. Good regional form/design.

During the course of the research (July 2008 – August 2009), a GPI framework was developed by the WRS team and its constituent indicators identified. As well as the guidelines provided by the WRS, the WRGPI has been designed to fit within (but not be limited by) the Local Government Act 2002, and specifically the Community Outcomes (COs) process. The *Nova Scotia* GPI framework described by Colman is broadly congruent with the purpose of the Local Government Act, 2002 (Section 2):

- a) To enable democratic local decision-making and action by, and on behalf of, communities; and
- b) To promote the social, economic, environmental, and cultural wellbeing of communities, in the present and for the future.

The LGA enacts this purpose primarily through the COs process and the Long Term Council Community Plans (LTCCPs). The COs process was developed as a tool for long-term planning that addresses social, environmental, economic and cultural wellbeing for current and future generations (Local Futures, 2006). Local authorities are provided with general empowerment to develop the COs process and, at a broader level, to achieve the purposes of the Act. The local authority must work in a participatory way with local communities and relevant organisations at least once every six years to identify COs.

Local Government New Zealand (2003:31) provides a useful overview of the significance of the COs for the community:

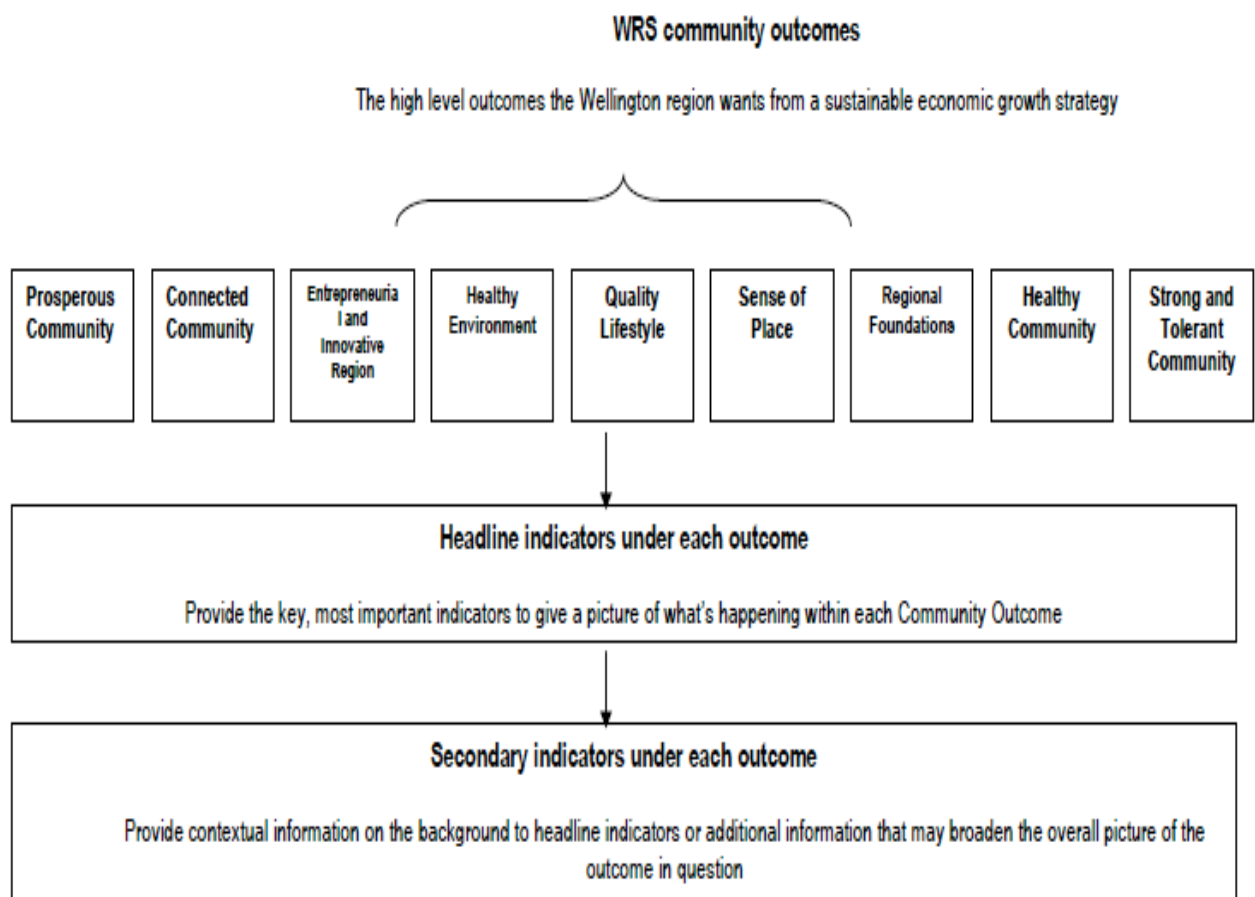
The outcomes are the community's judgment of what it needs to promote its wellbeing. Outcomes therefore belong to the community – not the local authority. The local authority does not have to adopt the outcomes in the sense that it would adopt any other plan or policy, and may not even agree with the outcomes.

This community ethos is strongly matched with the *Nova Scotia* GPI, which aims to *assist communities in mobilising behind a common vision, learning about themselves, improving their wellbeing, planning a better future for their children, and measuring their progress towards that goal* (Colman, 2004:18).

However, the community ethos has in practice been challenging for local authorities to enact as for many it has been new territory. This is especially so given that in practice local government has limited control over the outcomes and its primary role is as a facilitator.

The WRGPI has adopted the nine COs for the Wellington region as the headings for the GPI (Figure 2) show, instead of the conventional environment, society, culture and economy headings. For each of the nine COs there are both headline indicators (a total of 62) and secondary indicators (a total of 40).

Figure 2: WRS Monitoring Conceptual Framework



Source: Greater Wellington, 2009b

Public participation in the development of the WRGPI

Public participation in the WRGPI was one of the core issues that this study investigated. An officer from the WRS team summed up the approach to public participation in the development of the WRGPI (from interview):

Our approach has been top-down. The regional community were consulted on the overall strategy throughout its development. In developing the GPI, it would have been nice to engage with the community from the start, but the WRS regional projects are principally related to collaboration across councils rather than direct consultation with the community.

This statement is reflective of the awareness within the council that it is performing poorly in involving the public, and this was a common theme during the interviews. Both of the regional councillors interviewed felt that GW could do a much better job of public participation than it currently does.

Councillor Peter Glensor expressed a concern that the council was 'over-consulting':

...having conversations in our community is a practice that we need to encourage. The contradictory bit of it is that I'm of the strong view that we are consulting people to death and we've got to stop it...we've got to gear our public participation to the appropriate people at the appropriate time and size the public participation programmes to the size of the issue.

The deficiency of public participation in the WRGPI development process is mirrored by the discontent with the application of GW's COs process (see Box 1). This was evident not only from critiques provided by outsiders, but is evident in council documents and was brought up by all the interviewees.

Attitudes to the WRGPI

The Wellington local government interviewees were asked to comment on what they saw as the merits of the GPI. Five of the interviewees were supportive of the development of the WRGPI, while one of the policy officers was uncertain and admitted some significant reservations about it. They raised the following merits of the WRGPI:

- It will encourage collaboration across agencies and mitigate the silo mentality
- It represents more holistic thinking (than just the GDP)

Box 1. Critical perspectives on GW's COs process

There is a widespread belief within the regional authority and council that the region's COs are too broad to be meaningful. All the councillors and council officers from GW critiqued (unprompted) the COs for being too broad to be useful. Two of the interviewees said that they really were just about being 'healthy, wealthy and wise'. The COs process is approached as another statutory requirement – rather than as a strategic community planning exercise, as intended by the Act. This was observed by a range of sources, including the proposed 2009-2019 LTCCP (GW, 2009a:17), which quite clearly states that “the outcomes, in their current form, do not help Greater Wellington in setting priorities.”

The LGA requires regional and territorial authorities to develop COs. It is up to the authorities how the territorial COs relate to the regional COs. In GW's case, they chose to make the regional COs a conglomeration of the territorial COs.

One of the GW council officers reflected on the matter of integration as well as the ineffectiveness of the COs:

I'm in two minds about this. I first of all thought that we should have one set for the entire region. But after mulling it over...I think that there is merit in having territorial focused COs...there is definite duplication of time and money spent on developing community outcomes and indicators, and to be perfectly honest, the COs don't guide our work at the everyday level and the only time we refer to them is when we do our LTCCP⁵. This is mainly because the COs are too high level and because we have to do the work programmes and functions under statutory requirements.

- It can replace current performance indicators
- It can effectively communicate important information to the public
- It can be used as a tool for education
- It will be useful in the policy cycle
- It's new and exciting.

The interviewees also raised the following concerns:

⁵ Long term council community plan

- That it is resource intensive and doubles-up on work
- That it is beyond the call of duty of the council – the GPI measures things which are not the function of the regional council
- That time will be wasted measuring things at the cost of taking action on things
- The success of the GPI depends on the content of the indicators
- That the GPI will be implemented at the cost of economic development.

Should the full-cost accounting procedure be undertaken?

Most of the interviewees admitted that they did not know enough about full-cost accounting to make an adequate judgement. The primary concern, which all of the interviewees reflected, was the cost and resource intensiveness of the procedure. Some felt that they were unsure of the gain from it. As shown in Box 2, three of the interviewees were supportive of full-cost accounting, if resources were streamlined and pooled within the region to develop it.

Box 2: Councillor and council officer reactions to the challenge of full-cost accounting

“I mean I sort of understand the theory behind it but it does feel to me like it is a huge amount of work and I’m not sure how much the gain will be.”

“I don’t really agree with it, although I’m no expert in it. I could see that there could be cases in which it would be useful but it is so resource intensive that I think the council’s money is better spent elsewhere.”

“I think it’s interesting – I don’t know enough about it.”

“I can see the value of it for sure and I think it’s not until we get our first report together that we can convince our decision-makers about the use of full-cost accounting. It does cost a lot though. If everyone was aligned it might make sense to do full-cost accounting.”

“I see that it is probably a huge exercise. I think that it would be one of the first things to do because at the moment there is a total misunderstanding, there are very few people that actually understand where the benefits are of x versus y.”

“I think we need to better understand the total value of it. We need to see what we are going to get out of it before leaping in head and shoulders.”

As part of this research, the issue of full-cost accounting was discussed with WRS staff, who reflected that GW was likely to only have the resources to do full-cost accounting for one indicator per year.

Treaty of Waitangi Analysis

Article Two of the Treaty of Waitangi (1840), gives Māori the right to “te tino rangatiratanga o o ratou wenua o ratou kainga me o ratou taonga katoa”, which can be translated as *self-determination over land, homes and all possessions therein*.

Therefore, local government has a special responsibility to involve local Māori (*tangata whenua*) in decision-making (as recognised in the LGA). GW liaises with representatives from the Wellington region’s iwi (tribes) through the iwi advisory group, *Ara Tahi*.

The initial WRS project proposal outlined the way in which *Ara Tahi* would be engaged (Greater Wellington, 2004), and the most recent report outlines how the views of *tangata whenua* were incorporated into the selection of indicators (Greater Wellington, 2009b:10-11):

Māori-specific measures have been developed in liaison with Greater Wellington’s iwi advisory group Ara Tahi. Where the data is available, these indicators have been selected as part of the monitoring framework.

GW has also been in contact with an academic group from Te Wānanga o Raukawa who have been researching a tikanga Māori based GPI. When Canadian GPI expert and pioneer of the full-cost accounting approach Dr Ron Colman was hired (in both 2006 & 2008) to provide advice to Greater Wellington, he also worked with the group from Te Wānanga o Raukawa. The GPI forms an important aspect of the courses taught at Te Wānanga o Raukawa.

Discussion with the local iwi representative highlighted the fact that there is an intuitive link between tikanga Māori and the normative framework that underpins the *Nova Scotia* GPI. This has been further reflected in the adopting of a national-level GPI goal as a policy initiative of the Maori Party (Sharples, 2008).

Further research is being jointly developed between Te Wānanga o Raukawa and the NZ Centre for Ecological Economics to develop variables specific to Maori. These measures could also potentially be integrated into the WRGPI. While this analysis suggests that the perspectives of Māori have been adequately engaged with, further analysis is required to assess the adequacy of this engagement as the WRGPI is released and reported.

Discussion

Analysis of the LGA and the *Nova Scotia* GPI suggest there is a strong case for linking the two frameworks. This is particularly evident in the close affinity between the community philosophies of the two. In the WRGPI context, the link between the *Nova Scotia* GPI and the LGA has been exhibited by the use of the COs to guide the selection of the WRGPI indicators. However, this link has not yet stimulated action toward the COs because council work programmes have yet to be shaped by the findings of the WRGPI. There are two important aspects of the WRGPI that need improving on if it is to accord with the broader *Nova Scotia* GPI philosophy⁶.

The community philosophy

Even though the community was consulted in the development of the regional COs, this fell short of genuine participation because there was a minimal transfer of power or ownership between the local authority and the community (Innes & Booher, 2003). Furthermore, the GPI was not the subject of any part of the original COs consultation for the region. A range of key stakeholders has been involved in the development of the WRGPI, but they represent a somewhat limited component of the Wellington region community. As a result, community participation and ownership of the WRGPI is, so far, minimal and not reflective of the *Nova Scotia* GPI community philosophy. In short, a substantive reconsideration of how the community is engaged in the COs would strengthen the WRGPI. A more comprehensive and inclusive process for the COs process need not be significantly more resource intensive.

Economic valuation of non-market variables

It was evident during the interviews with staff and councillors in the Wellington region that there was some resistance to and lack of understanding about the full-cost accounting procedure. This concern was primarily due to the resource intensiveness of the full-cost accounting procedure, and to a lesser degree, a concern that the GPI should not replace the GDP accounts. These concerns are not unexpected, as they are reflective of the wider political and economic climate that is seeing a 'cutting back of the frills' across local and central government.

⁶ This research has only focused on how the WRGPI is developed and applied; there are further issues that are not covered here, such as the appropriateness and technical features of the constituent indicators.

However, for the WRGPI to reflect either the philosophy of the *Nova Scotia* GPI or the *Redefining Progress* GPI, considerable economic valuation of non-market goods preferably by full-cost accounting is required (Colman, 2004; Talberth *et al.* 2007). Without progress in this direction, the WRGPI is unlikely to adequately challenge conventional economic directions or significantly reshape progress in the Wellington region. For these reasons, the argument could be made that if adequate steps in the full-cost accounting procedure are not taken, the WRGPI should no longer be called a GPI.

Can the challenges in the WRGPI context be resolved?

To address the first challenge, to greatly improve community participation and ownership of the WRGPI, institutional attitudes toward the COs process and its role as a strategic decision-making and planning tool need to be addressed. We argue that only with institutional learning about the role of the COs can the process become more meaningful for GW and the community. There is considerable frustration with the public participation processes with which GW currently engages the community, both from within the council and from the wider public (for a public critique, see Duston, 2009). The challenge therefore is to carefully tailor public participation initiatives so that they are fun, empowering and produce useful outcomes.

A case study that can help to inform the design process is the “Dialogue with the City” initiative in Perth, Australia, that saw 1100 participants actively engaged in deliberations over the future of their city (Carson & Hartz-Karp, 2005; Carson & Hart, 2005; Hartz-Karp, 2005a, 2005b). Participants from the event left very satisfied overall, with 99.5% of them reporting that the deliberations went ‘okay’ or ‘great’. Ninety-seven percent of participants said that they would be prepared to participate in a similar event again. The design of the initiative was based upon three principles; that effective public participation needs to be inclusive, influential and deliberative. If these three principles are coupled with institutional learning, they could potentially reshape attitudes to and outcomes from public participation.

Undoubtedly there remain tricky issues that need to be negotiated. Perhaps the most obvious is the need for coordination of public participation initiatives both within GW and with the territorial authorities. This could help to prevent

'participation burnout' and at the same time provide a more efficient use of local authority resources. Furthermore, greater linkages to the territorial authority efforts to develop COs could then provide more detailed and useful regional COs than the current ones.

To confront the second challenge, of ensuring that economic valuation of non-market variables is undertaken, two steps are recommended from this research:

1. The political and economic status quo needs to be addressed and, where necessary, challenged through a deliberative process of social learning, and
2. There needs to be greater pooling of monitoring data and resources between the territorial and regional authority.

The first step is particularly challenging, given that the WRGPI was tacked onto a strategy dominated by a strong economic growth framework. This is ironic considering that the point of the GPI is to challenge such frameworks. This institutional tension can be seen as pointing to a possible transition between two ultimately conflicting paradigms. The conventional economic paradigm is based upon neoliberal ideals of a high growth economy operating in a world with few ecological limits. The GPI, on the other hand, is based upon the principles of ecological economics and green accounting, which attempts to provide a more holistic national (or sub-national) accounting framework than conventional national accounts focused on GDP. It can potentially facilitate, through social learning, a transition away from a growth-based view of well-being.

The conventional economic analysis is particularly evident in the core objectives of the WRS, such as 'double the region's exporting share of GDP by 2026'. This objective is based upon business-as-usual forecasting, remarkably unperturbed by a sense that the economy and society is likely to go through major and almost certainly disruptive adjustment over this period. Yet future global economic, social and environmental dislocation due to peak oil (Heinberg, 2007; Kerschner & Hubacek, 2009) and particularly the need to mitigate future climate change (Beddoe *et al.* 2009; Richardson *et al.* 2009) is now widely expected. Knowledge of such risks has, however, rarely led to convincing or proactive responses from policy-makers,

except where policy-makers are able to build a broad-based constituency for adjustment.

Without an improved understanding of these risks, the merits of a reappraisal of social and economic progress, and the value of the full-cost accounting procedure in progressing toward desired community outcomes, decision-makers are unlikely to support the scale of resourcing required for adequate GPI development. For this reason, it is recommended that there be a focus on social learning and deliberative democracy to ensure that the connections are made between goals, the GPI, and the procedures to support the GPI, especially the full-cost accounting procedure.

The second step, greater pooling of reporting resources between the local authorities, could be relatively easily achieved. The WRS itself is a good example of how the local authorities in the Wellington region are sharing resources and working together to address economic issues. The council officer from Kapiti Coast District Council highlighted in her interview that particularly for the smaller councils, regional collaboration could greatly increase the efficiency of meeting the monitoring and reporting requirements of the LGA. This would require the WRGPI to be able to be disaggregated from the regional to the territorial level (as some of it currently can be), and would also depend on how well the regional COs match the various territorial indicators.

In summary, the WRS is a mixed blessing. On the one hand the context that the WRS has created has limited the extent to which the WRGPI reflects the *Nova Scotia* GPI philosophy. On the other hand, the strategy has enhanced the integration and cohesion between the territorial authorities and the regional authority and therefore increased the resourcing opportunities for it. Such a mixed context is likely, at present, to face pioneering efforts to develop a GPI at the local government level.

Global and national risks facing the WRGPI

Coupled with these two challenges there are two further scales of external risk facing the effective implementation of the WRGPI: global and national risks.

Global level risks

The global level is characterised by increasing globalisation and interconnectedness, to which the Wellington region is no exception. The WRS in fact is explicit about its aim of increasing the Wellington region's global connectivity⁷. While increased globalisation can bring a range of benefits, it also increases the susceptibility of the Wellington region to global events and risks (Murray, 2006). At the time of writing, the most obvious global risk is the global financial recession, which has reduced the willingness and ability to invest in public-sector infrastructure and policy. Given the costs associated with the WRGPI 'good practice' approach, this poses a threat, which is also compounded by the national-level risks.

Climate change and peak oil are further global level challenges that will directly affect the Wellington region. In these contexts, the WRGPI can play a significant role in directing decision-making down a path that is focused on renewable energy sources and sustainable transport options, with a shift away from carbon-intensive modes of activity and oil-dependency. If the WRGPI is carefully implemented, it could provide an important framework for monitoring and helping to improve the resilience of the Wellington region to global risks, and could facilitate new ways of conceptualising 'progress' that are more robust in the face of global shocks.

National level risks

At the national level, the risks are particularly pertinent. Coupled with the government spending cutbacks in response to the global economic recession, a political shift to a narrow vision of local government is a considerable risk. Local government minister Rodney Hide has been working hard to make his desire to reduce the scope of local government (and particularly regional councils) known. He has suggested doing away with the environmental, social and cultural mandates of local government with the primary focus shifting to economic growth (Hide, 2009). This reflects a fundamental challenge to the WRGPI framework, which certainly does not fit within the Minister's definition of 'core business'.

How these risks play out depends in large part on the response and forward planning proffered by the people of the Wellington region. Ensuring that the

⁷ Through such initiatives as providing a direct air link to South-East Asia, and doubling Wellington's share of exports by 2026 (WRS, 2007).

ownership of the WRGPI is diverse and spread across the region would be an important step to developing resilience to these risks. This once again reinforces our central argument; that the role of public participation in the WRGPI needs to be strengthened through deliberation and social learning and, in turn, that such engagement may increase adaptive capacity and resilience.,

What does this case study tell us about applying a GPI at the local government level?

In a global context in which the development of a GPI by any form of government is uncommon, it can be expected that pioneering initiatives, such as the WRGPI, will be developed in difficult political and institutional contexts. Therefore, the imperfect application of the GPI philosophy, as exhibited by the WRGPI, is to be expected. While the process of developing the WRGPI has been brought about by a specific and significant strategy, its development will also be coupled with longer-term incremental changes that will improve or reduce its effectiveness (Geczi, 2007; Lindblom, 1979). Thus the social learning frameworks recommended by this study will be critical to ensuring that these incremental changes enhance, rather than reduce, the effectiveness of the WRGPI.

Conclusion

This study has found that the success of the wider transition from narrower, conventional economic analysis to more holistic and meaningful accounting frameworks requires:

1. Pioneering case studies such as the WRGPI that can provide evidence that the GPI is a useful and effective tool, and can positively reinforce COs development⁸
2. Social learning frameworks that accompany the development and subsequent incremental application of a GPI
3. Integration where possible between institutions to ensure that a GPI is adequately resourced and maintains relevance to the region
4. One-off policy interventions (such as the introduction of the GPI), coupled with incremental adjustments.

⁸ These conclusions about the utility of the WRGPI are limited by the fact that it remains to be fully developed and put into practice.

The *Nova Scotia* GPI is a powerful tool, with significant potential for shifting thinking around 'progress'. However, this study has shown that such a tool alone is not enough; a GPI needs to be coupled with supportive institutional and political conditions and social learning frameworks that align with its development. This study has contributed to the evaluation of a new framework for assessing social progress that challenges the juggernaut of conventionally measured economic 'progress', i.e. growth. Effectively enacting any such proposed framework will require dedication, imagination and persuasiveness on the part of local government practitioners, and all the support that stakeholders, who can see its importance, can muster.

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