



In Conclusion: Assessing Community Sustainability

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July 2001

The communities we looked at in this series all did something to become more sustainable. We pointed out a few things each small city had done, but do we really know when communities are better off? Do we have systematic knowledge about our communities' well being?

Unfortunately, the answer is no. Traditionally, when people wanted to know whether things had gotten better in their communities, they resorted to numbers that related to economic and social categories and sometimes to the environment. People would ask themselves if employment had gone up, or if crime had dropped, or if the water quality had changed. Many of the numbers that told us whether we were better off or not came from governmental departments that more than likely didn't communicate with each other.

This fragmented approach to our well-being leads to fragmented policies that often create problems for other people in a community. Encouraging new businesses, for example, could lead to traffic congestion or pollution, while preserving pristine environments could suffocate an economy. At the Minnesota Project, we favor the integrated approach encompassed by the term "sustainability" to define and assess progress in communities.

As "sustainability" gains greater recognition in the community development literature, there is an increasing need for quantifiable indicators that measure whether a community is succeeding or failing at sustainable development. Additionally, the development literature specifies that grassroots-based indicators not only meet sustainability's emphasis on fairness and the widest possible participation in governance, but they also tend to have the greatest chance of succeeding.

This concluding section of these case studies series responds to this growing need for bottom-up, sustainability indicators and highlights some sources of good information that communities can access. First, let's back up and revisit the concept of sustainability.

Sustainability

"Sustainability is about how we fit into the natural world."¹ Sustainability is a concept used by many to describe community development that integrates the economy, environment, and society. The term is used to describe development that takes the future into account and gives future generations environmental quality comparable to that enjoyed by the present generation.

Sustainable Communities

Any group of people that share interactions in a particular area can be termed a community and a sustainable community is one that tries to improve and nourish community well being for a very long period of time into the future. This well-being is based on community capital which Maureen Hart labels as "[t]hose things a community has that allow its citizens to live and interact productively, including built, social, and natural capital."²

Built and financial capital constitutes manufactured products, buildings, sewer systems, jobs, banks, or the financial resources of a community. Human and social capital, comprise education, skills, health and their ability to cooperate and work together. Natural capital includes all the services that nature provides us that enhance life, including the beauty of an autumn day. Some of this community capital is quantifiable and much of it is not. This difficulty of quantifiability, however, ought not to deter us since what we measure reflects what we decide is important. however, ought not to deter us since what we measure reflects what we decide is important.

Sustainable Community Indicators

"An indicator is something that points to an issue or condition. Its purpose is to show you how well a system is working."³ Since we value an integrated approach to defining progress and assessing it, we need indicators that reflect the "...interconnections between changes in the economy, the environment, and society" over the long-term. A good sustainable community indicator ought to:⁴

- address the carrying capacity of community capital,
- be relevant to the community,
- understandable to the community,
- usable to the community,
- show the links among the economy, environment, and society,
- focus on the long range view,
- advance local sustainability but not at the expense of others,
- be based on reliable and timely data.

Organizing Indicators

The most commonly used ways to organize sustainability indicators are to a) put them into categories, b) develop a goal-Indicator matrix, and c) construct a "driving force-state-response matrix." These are each described below.

Categories

Indicators can be organized into "mutually exclusive categories" such as issues, themes, or a topic framework. A community could use, for example, the "three-legged stool of sustainability," economy, environment, and society to classify a group of indicators. The advantage of this categories approach is that one can easily see the way the indicators balance and that one category of indicators isn't

¹Hart, Maureen. Guide to Sustainable Community Indicators 2nd Edition. North Andover, MA: Hart

²Environmental Data, 1999. p.13

³Hart, p.15

⁴Hart, p.26

more important than the other. On the negative side, however, not every indicator fits into a category easily. Further, all three categories are presented as distinct while the idea was to offer an integrated approach.

Using topics or issues can help a community address topics that specifically affect them...they don't have to fit into a limited category and can more accurately reflect the thought process of a group of people.

Goal-Indicator Matrix

As the word "matrix" implies, this indicator mechanism "...organizes the community goals and indicators into rows and columns that intersect."⁵ Indicators relate to community goals and one indicator could relate to more than one goal. The principal advantage of the matrix is that it quickly shows "...how one indicator links different parts of a community."⁶ The primary drawback is that as communities try to report goal results, the indicators may be described repeatedly since one indicator may serve several goals.

Driving Force-State-Response

"Driving forces are the underlying or root causes of problems in communities."⁷ They are what a community connects with some state or situation relating to a community's quality of life. The state of air pollution (some level of pollutants measured in parts per million) is connected to some driving force such as the unavailability of mass transit, or "too many people driving too many miles in too many cars." The state then calls for a particular response such as more car-pooling or auto emission standards.

This way of organizing indicators has the advantage of highlighting the links between economic, social, and environmental issues as

well as providing a quick look at the overall balance of the set of indicators. The disadvantage, however, is that the context of some issue needs to be carefully explained since otherwise it might be difficult to decide if an indicator is a driving force, state or a response indicator.

Conventional versus Sustainable Indicators

The main problems associated with traditional indicators is that they mostly focus specifically on some single characteristic or dimension without relating that characteristic to other indicators or to improving human quality of life. Economic progress, for example, comes at the expense of some other variable such as social progress or environmental quality. "What we need is a new way of looking at a community, one that integrates the pieces."⁸

Indicators of a sustainable economy link economic activity to social or environmental concerns of the economy rather than the single-dimensional indicators we deal with to assess how well the economy is doing such as job growth, electricity costs, or median income per capita. We need to have multidimensional indicators that highlight the links among business, environment and society. An example of this type would be the ecological footprint analysis that measures the amount of biologically productive land and water required to produce resources we need and assimilate our wastes. Other examples would be the hours of work at the average wage that's required to support basic needs, or the amount of local credit available, or the sales of locally produced food.

Indicators focusing on society would take traditional measures such as voter registration, government expenditures per person, health care expenditures, or the number of hospital

⁵ Hart, p.35

⁶ Hart, p.45

⁷Ibid

⁸Hart, p.4

beds, and use instead more sustainable indicators such as the percentage of the population that is physically active, the percent of the population that is unable to afford health care, or the number of residents involved in civic activities, or the number of elected officials who run unopposed. The latter two might better get at citizen involvement and the state of social capital in a community.

Ecosystem indicators would move from largely single-dimension indicators such as the number of days with air quality in the "good" range, the bags of highway litter collected per mile, or the number of permits (building and otherwise) issued, to gallons of water used per day compared to the available supply, the number of prime or unique farmland lost over the long-term, or the percent of land area that is promotes water run-off (roads, buildings, parking lots).

These examples are only a brief indication of what can be done to better mesh the information we seek with sustainability.

Indicators in Use: Surfing the Web

As more and more communities try to decide what progress really is and as the Internet becomes the repository for this information, it is becoming easier to track the best efforts for arriving at sustainability indicators. For example, in the spring, 2000 issue (#17) of Urban Quality Indicators, the lead article, entitled "Guide to Community Indicators Projects on the Web" lists the "top 10 Websites for Community Indicators." The criterion for making it to the top 10 has less to do with the projects themselves, but with "...how potentially useful the site may be to other community indicators groups."⁹

⁹Hart, p.52

¹⁰Urban Quality Indicators, p.1

Table 1: Top 10 Websites for Community Indicators

1. Hamilton & Wentworth County, Ontario <http://www.vision2020.hamilton-went.on.ca/indicators/index.html>
2. Jacksonville, FL <http://www.jcci.org/indic.htm>
3. Missoula, MT <http://www.co.missoula.mt.us/measures/index.html>
4. Olympia, WA <http://www.olywa.net/roundtable/>
5. Pittsburgh <http://www.post-gazette.com/benchmarks/>
6. Portland, OR <http://www.p-m-benchmarks.org/tblcnts.html>
7. Tucson, AZ <http://www.ci.tucson.az.us/lv-toc.html>
8. Ontario <http://www.qli-ont.org/indexe.html>
9. Oregon Benchmarks <http://www.econ.state.or.us/opb/>
10. Hart Environmental Data <http://www.subjectmatters.com/indicators/>

Maureen Hart, writing on page nine of the same Urban Quality Indicators issue directly addresses the issue of the quality of sustainability indicators by stating that it depends on what use they are serving (raise awareness? inform experts, citizens, or elected officials?) and at what level they are serving (set policy? measure project effectiveness?). This simply means that indicator quality is best judged by community members themselves...the insiders in the process. Hart writes that the best way for a community to know if it has a good indicator is to ask itself two simple questions: "What was the purpose and did it succeed?"¹⁰

A Tale of Two Cities: Jacksonville and Seattle

To better judge how indicators operate, let's look at Jacksonville, Florida (one of Maureen Hart's top 10 indicator websites <http://www.subjectmatters.com/indicators/>)

www.jcci.org/qol/qol.htm,) and Seattle, Washington (www.sustainableseattle.org) which was on Hart's complete list.

Jacksonville

"The Quality of Life project is based on a strong motivation for community improvement in Jacksonville/Duval County, Florida."¹¹ With a rapidly growing population of over 750,000 people, this city, located in northern Florida, has developed a quality of life model that is measured in relation to nine, major elements.

- Education...including K-12 public education and higher and adult education
- Economy...concerned with the standard of living for local residents
- Public Safety...includes the perception of public safety and the quality of law enforcement, fire protection, and rescue services
- Natural Environment...includes ecosystems (plus water and air quality) and aesthetics
- Health...fitness and health of residents and medical and health care system
- Social Environment...includes equality of opportunity, racial harmony, family life, human services, philanthropy, and volunteerism
- Government/Politics...participation in public affairs, an informed citizenry, and leadership and performance in local government.
- Culture/Recreation...available supply and use of sports and entertainment events, performing and visual arts, public recreation, and leisure activities
- Mobility...refers to opportunities for travel within Jacksonville and between Jacksonville and other locations.

The Quality of Life report started in 1985, and annual updates were published in 1986 through 1998. "For most indicators, it displays data for 14 years (1985 through 1998); although the accompanying graphic illustration displays data for 16 years (1983 through 1998). For the annual opinion survey, it reports data for 14 years (1986 through 1999), with the exception of four new questions added in 1991."¹²

Plans are underway to adjust the indicators to reflect a) the need for indicators to be reported at the regional level to reflect the population growth outside of Duval County, b) the need for some indicators to be reported at the neighborhood level to avoid changes being hidden in county-wide data, c) the need for linkages among indicators to be identified and recognized, and d) the need for targets to be adjusted to make some more idealistic and some less so and perhaps limit the target to five years. Also, the standards for selecting targets need to be made as objective as possible.

In 1991, targets were set for the quality of life indicators that were to be reached by the year 2000. Additionally, the Targets 2000 committee volunteers chose a single indicator for each of the nine elements that they thought was the most important to reach by 2000. Between 1990 and 1998, the trends towards achieving these targets are detailed in Table 2.

¹¹Urban Quality Indicators, p.9.

¹²Quality of Life in Jacksonville, Indicators for Progress, <http://www.jcci.org/qol/qol.htm>

Table 2: Jacksonville, Florida Trends Towards Meeting Targets 1990-1998

1. Education: public high-school graduation rate			
1989-90	1997-98	Target for 2000	
72.60%	69.20%	90%	
<i>moving away from the target</i>			
2. The Economy: Net job growth			
1990	1998	Target for 2000	
7,402	18,896	avg. 7,000 annually or 70,000 total	
<i>average of 5,477 new jobs annually</i>			
3. Public Safety: % of people who feel safe			
walking alone at night in their neighborhood (telephone poll)			
1991	1999	Target for 2000	
50%	62%	60%	
<i>after fluctuating, the target was surpassed in 1998 and 1999.</i>			
4. Natural Environment: Number of days that the Air Quality Index is in the Good Range			
1990	1998	Target for 2000	
260	284	325	
<i>wavering but slightly positive trend</i>			
5. Health: Resident infant deaths per 1,000 live births			
1990	1998	Target for 2000	
11.8	9.8	8.1	
<i>reached target in 1996, but the indicator rose slightly away from target</i>			
6. Social Environment: % of people who believe racism to be local problem			
1990	1999	Target for 2000	
51%	51%	26%	
<i>rose to 74% in 1994 and fell since then...still far from target</i>			
7. Government/Politics: % of people who rate the quality			
of local government leadership "good" or "excellent" (telephone)			
1990	1999	Target for 2000	
33%	67%	65%	
<i>target exceeded in 1998</i>			
8. Culture/Recreation: City financial support per capita of arts organizations			
1990	1998	Target for 2000	
\$1.88	\$2.17	\$2.42	
<i>indicator has moved slowly towards the target in 1998 constant dollars</i>			
9. Mobility: % of working people surveyed who report commuting times			
of 25 minutes or less			
1991	1999	Target for 2000	
69%	73%	70%	
<i>indicator wavered slightly below its target...no dramatic changes</i>			

Seattle

"Sustainable Seattle, a non-profit corporation and volunteer citizen's network committed to improving its region's long-term health, has developed and produced two reports on Indicators of Sustainable Community, as a means to measure Seattle's real progress."¹³

Since 1991, over 250 citizens were involved in choosing and researching 40 economic, environmental, and social indicators that track Seattle's progress towards sustainability. The indicators were selected from an initial 99 recommended by a panel of 150 citizens convened by Sustainable Seattle in 1992.

Since 1999, Sustainable Seattle has become a non-profit organization, Center for Applied Sustainability, with a core staff and about 50 volunteers. Redefining Progress, an independent organization, recently surveyed over 170 sustainability projects around the U.S. and found that 90 of them used Sustainable Seattle's approach and indicators for their own local initiatives.¹⁴ Five, sample indicators are briefly described in Table 3.

In a press release on Earth Day, 1998, the 1998 report was analyzed and though Seattle was judged to be making progress towards sustainability, many areas show declining or neutral trends indicating more needs to be done.

Table 3: Sustainable Seattle Sample Indicators

1. Vehicle Miles and Fuel Consumption Sustainability Trend:
Fuel consumption per capita and vehicle miles traveled per capita have both increased by 7% over the last 4 years.
2. Voter Participation Sustainability Trend:
More residents are voting, but participation levels are still fairly low-with only one-fifth of eligible adults voting in the last primary election.
3. Water Consumption Sustainability Trend:
Aggressive rate structures, strong conservation programs, and efficient system operations have reduced total water consumption 12% in the last five years.
4. Wild Salmon Sustainability Trend:
Local wild salmon runs have dramatically declined by 50 %-75% since the 1980s but have leveled off at dangerously low levels over the last six years.
5. Youth Involvement in Community Service Sustainability Trend:
Almost half of Seattle high school students are involved in community service, 14% points above the national average.

What can Small Communities Do?

Though Jacksonville and Seattle are large cities, smaller cities can also systematically measure their progress towards sustainability. Numerous very helpful resources are only a

mouse click away. The North Central Regional Center for Rural Development, for example has an excellent interactive workbook (downloadable for free) that can help a community develop its own indicators.¹⁵ Maureen Hart's Guide to Sustainable Community Indicators (2nd edition) is another

¹³Jacksonville web site, p.2 of 9).

¹⁴Sustainable Seattle web page, www.sustainableseattle.org

¹⁵Ibid.

treasure trove of sources and web sites.¹⁶ There are many other web sites that can offer help to a community. Going to the Minnesota Office of Environmental Assistance web site could be a good next step. In fact, that's the site's title: <http://www.nextstep.mn.us>.

Perhaps the most important first step is to begin the all-important community dialogue about what is important in a community.

People must have a vision of what the sustainable "good life" is and then they must develop indicators that let them know if they are successful in attaining it. Focusing on sustainability indicators helps us to keep our eye on the good life prize, because as I noted earlier, what people measure reflects what they think is important.

¹⁶http://www.ag.iastate.edu/centers/rdev/Community_Success/about.htm

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the minnesota project

The Minnesota Project is a nonprofit organization dedicated to sustainable development and environmental protection in rural Minnesota. Since 1979, the Minnesota Project has worked to promote healthy, rural communities through building broad-based coalitions, facilitating statewide, regional and national networks and connecting communities to resources and policy forums.

Chapters from this report, and more information about the Minnesota Project can be found at www.mnproject.org.

Additional copies of the report can be purchased for \$6.00.

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