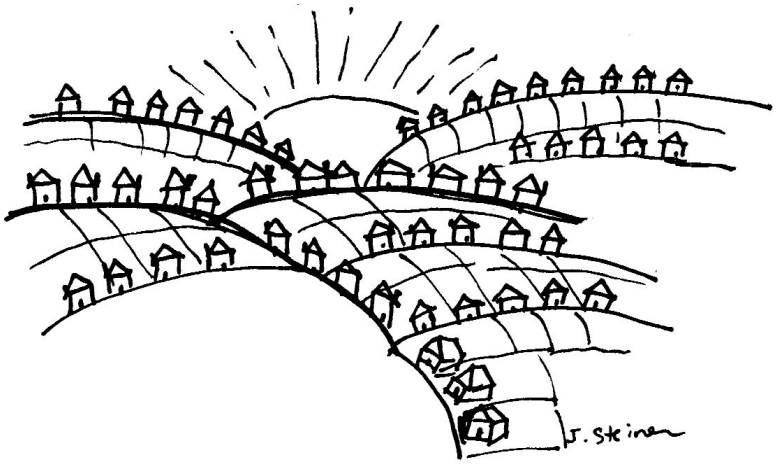
Sustainability Starts in Your Community



A Community Indicators Guide

by **Redefining Progress**
and **Earth Day Network**

April 2002

earth day network

REDEFINING PROGRESS

Table of Contents

SUSTAINABILITY STARTS IN YOUR COMMUNITY

GUIDE FOR COMMUNITY INDICATORS

PREFACE

Tracking Progress Toward Sustainability suggests a process that communities can use to identify key concerns and gather relevant data to enhance their community's ecological and social well-being. This resource draws significantly on Redefining Progress' *Community Indicators Handbook,* (1997) while incorporating lessons learned from a decade of community indicators projects.

Indicators of community well-being can be an invaluable tool for addressing key challenges and concerns of a municipality or region. They help to raise public awareness, inspire hands-on action, and bring about change.

Since the publication of the *Community Indicators Handbook,* a first generation of community indicator projects has mobilized communities around the world. On the one hand, the steps outlined in the original *Handbook* remain solid. The process of collecting data and generating initial community interest has not changed. On the other hand, there is much to learn from this early round of projects. Important lessons have emerged—not only about how such initiatives can be even more successful, but also how they can focus more effectively on the most difficult challenge we face: creating a just and sustainable way of life for all on this planet.

We are at a crossroads. The tide is beginning to turn toward sustainability, but not nearly fast enough. Overall, human pressure on our planet's ecosystems is increasing, while a large part of the human family cannot get their most basic material needs met. In spite of many inspiring initiatives, the concept of sustainability has not fully taken root—globally, individually, and at the community level.

Yet there is reason to hope. A growing number of committed people are using better and better tools to move us towards a sustainable way of life. Communities engaged in indicator initiatives are a living example.

In preparing this resource, we have drawn substantially on Donella Meadows' definitive work, *Indicators and Information Systems for Sustainable Development.* We highly recommend that you take further advantage of her excellent systems insights and her ability to make sustainability relevant, specific, and operational. The full document is available as a downloadable .pdf file at <http://www.sustainer.org/pubs/>.

Best of luck! We wish you much success in helping your community track its progress toward sustainability and human well-being. We would love to hear about your community's experience with this process.

— *Redefining Progress and Earth Day Network*

About The Authors

Redefining Progress and Earth Day Network have recently joined forces to move the world towards sustainability. This joint publication was co-written by Mathis Wackernagel and Kim Rodgers (Redefining Progress) and Jan Thomas and Charlotte Youngblood (Earth Day Network).

Creating good measures of community health, well-being, and sustainability requires a lot of collaboration. It is only fitting that the original version of ***Community Indicators Handbook*** was also an exercise in collaboration, drawing on the experience of three organizations:

- **Redefining Progress** (Alan Atkisson and Kate Besleme)
- **Sustainable Seattle** (Mark Aalf, Richard Conlin, Lee Hatcher, and Kara Palmer)
- **Tyler Norris Associates** (Heidi VanGenderen and Tyler Norris)

Redefining Progress was the overall editor and publisher of the original Handbook, but the ideas, descriptions, tips and case studies in the original version were drawn from all three partners. You can order the *Community Indicators Handbook* at <http://www.redefiningprogress.org>.

In addition, the circle of collaboration for a project like this extends far beyond the authors. We would like to extend special thanks to those who served as reviewers at various stages of the revision process: Jim Adams-Berger, Darvin Ayre, Barbara Bellows, Susan Boyd, Carol Brunelli, Dan Chiras, Gruffie Clough, Dr. Ross Conner, Linda DeWolf, Carolyn Drummond, Len Duhl MD, Doug Easterling PhD, and Serryn Janson. In addition, we are grateful for the contributions of many friends and colleagues, and to all who are working to advance sustainability and human well-being in communities around the world.

Redefining Progress is a public policy institute based in Oakland, California whose studies of the community indicators movement led to the creation of a Community Indicators Network. *http://www.redefiningprogress.org*

Earth Day Network works for a healthy environment and a peaceful, just, sustainable world through environmental education, capacity-building, year-round programs, and support of worldwide Earth Day organizing. *http://www.earthday.net*

Sustainable Seattle was the winner of a United Nations citation for "Best Practices in Community Indicators" at the 1996 Habitat II conference in Istanbul.

Tyler Norris Associates, a consulting firm, provides consultation to organizations and civic partnerships working to build healthy and sustainable communities.

INTRODUCTION

What Are Indicators?

Indicators are small bits of information that reflect the status of larger systems. Your body temperature is a classic example. Body temperature indicates the state of your entire body's well-being. When we can't see the condition of something directly and in its entirety — whether it's a car, a person, an educational system, or a whole community — we need indicators to make the condition visible. Usually an indicator focuses on a small, manageable, and informative piece of a system to give people a sense of the bigger picture.

Indicators can't tell us everything, but they can tell us enough to make better decisions possible. Without proper feedback, no organism — be it bacteria, an organization, or a society — can secure its health and vitality.

Many of the measures currently used to measure our collective health and well-being are inadequate, or even inaccurate. For example, if a city measures success only in traditional terms like job growth, new housing and road construction, it may interpret growth in these numbers as proof of a vital place to live. However, the reality may be one of urban sprawl, air pollution, and the loss of small business. In other words: you get what you measure.

Community indicators attempt to present a more accurate picture of the quality of life in an area that people call home. When done well, they illuminate linkages among economic, environmental, and social issues. They present vital information in a format that is easy to understand.

Indicators can represent the current state of a community, or they can measure change over a period of time. Both types of indicators can help raise awareness and inspire change.

Indicators can be powerful points of leverage within systems. They are a useful way to point a community toward specific initiatives or policy changes that will have a tangible effect on people's quality of life.

Simply making information visible can strongly affect what people do. For example, when new Dutch houses were built with electric meters in the front hall where they were easily visible, instead of down in the cellar where they were normally placed, people began paying more attention to their electricity consumption. They were able to see the connection between their energy use and their energy bill. Household electricity use decreased by one-third, which helped local communities meet energy conservation goals.

Get It "Right"

It is important to invest as much time in designing and planning the process of indicator development as it is in determining and researching the indicators themselves. Design a process that meets your needs. Consider beginning your indicators project with a collaborative community forum at which you introduce the concept of indicators, do some initial brainstorming, and recruit people for your Working Group. You might precede that by asking children in the community what their vision for the future is, and use that vision as a rallying point for your efforts. Encourage thinking big. Identify critical issues and concerns to be explored further. Small communities might compress the event into a single day or weekend.

One of the most vital elements of indicators is that they be relevant to the community they serve, which makes it more possible for them to spur constructive change. Citizens are more receptive to the value of sustainability when it is specific and has direct application to their own city, and when it is addressed by people who live there.

Developing community indicators will take time. Creating a vibrant vision of a healthy community can take a day. Creating an initial report card to measure your progress can be done in a matter of months. Realizing the vision may take a generation.

Stay On Track

It is important to keep in mind that community indicators projects are a means to an end, not an end in and of themselves. How can such initiatives maintain momentum, avoid getting stuck in excess detail, and succeed in bringing about positive and enduring change?

In some cases, just gathering and presenting information is powerful enough to generate change. However, we have learned that developing clear strategies for moving beyond information-gathering makes community indicator projects far more successful.

It is helpful to keep your project goals in mind at every stage of the process. A strategy that focuses clearly on the big picture, the goals, and the rationale for the project helps participants avoid getting bogged down in details and long lists. It keeps participants engaged, and it makes meaningful action much more likely.

We believe that the next generation of indicator projects will achieve even greater success if participants can answer the following four questions:

1. ***What is the underlying purpose of your project?*** If the goal is to gather information, you will get just that: information. It sounds obvious, but defining a clear purpose will move you faster towards that purpose and help you keep the project on track. So, before anything else, define the specific change or improvement you want to see in your community. Guide your project toward this goal.

   Be careful to avoid vague generalizations—what do you mean by "sustainability" or "better education"? Make sure the definitions you use are both measurable and observable. Determine what information is needed to measure progress towards that goal, and show how the data and your goals are linked.

2. ***What dynamics lie at the heart of what you want to change or accelerate in your community?*** A local fish population may be crashing because everyone can catch unlimited amounts. When no one tracks how much we are using compared to how much is available, it becomes all too easy to consume more than nature can regenerate. Identifying what is happening and gathering the most relevant data makes it easier to develop strategies for addressing the problem.

   One thing to be cautious about is over-emphasis of a particular variable that may not accurately reflect what you are trying to address. For example, does the total fish catch alone tell you what your community needs to know to manage the system wisely? If not, what additional information is needed?

3. ***How do you expect your initiative to generate change?*** Based on your evaluation of existing barriers, can you identify points of intervention for achieving your stated purpose? What types of information would help you to engage more effectively with the problem you have identified? Who has the power to make this change happen, and how can you encourage them to act?

4. ***What are the next steps once you have gathered information?*** Before you begin, envision next steps beyond the project. Brainstorm ways that you can use the information that you gather. Consider, even before you have begun to gather information, how you can use the finished product to engage with the public and with your community's decision-makers.

The ultimate test of an indicators project is the change in societal behavior that is stimulated as a result of gathering and publicizing this information.

LAY THE GROUNDWORK

STEP 1: FORM A WORKING GROUP

At the heart of any community environmental health assessment project is a team of people who are the real "doers" — the people who design the process, wade through the technical details, do the research (or coordinate it), and promote the final product. Let's call this team the Working Group. The Working Group does whatever needs to be done to make the project happen. It might assemble the historical data, draft a list of prospective indicators, design the community involvement process, and — if part of a broader effort — ensure coordination with the rest of the project.

Diversity of all kinds is critical in undertaking any community effort, including indicator projects. Begin with a Working Group that reflects the diversity of your community. Involve people from different cultural, ethnic, and professional backgrounds, with a wide variety of interests and perspectives. This will add richness and creativity to your process that are impossible to achieve any other way.

Diversity also gives your project important credibility with the community at large. If you do not create a diverse Working Group from the very beginning, you may find it difficult to get broad community support, or to have your work be endorsed by key sectors (e.g., business, environmental groups, or social justice advocates).

Another important component of your Working Group is technical expertise, or at least access to it. Since indicators are about data and statistics, you need people who are comfortable working with numbers, charts and graphs. You might want to create a separate Research Committee or Technical Advisory Group as well, to help with data analysis.

A typical Working Group is comprised of anywhere from 5 to 25 people (depending on the size of the community), and might include individuals and organizational representatives such as:

- A health care worker
- A farmer
- Program staff from local government agencies
- An elected official
- A professor of statistics from a local college
- A teacher

COMMUNITY INDICATORS WORK: NINE STEPS

In brief, the process of creating an initial indicator report looks like this:

STEP 1
Form a Working Group

STEP 2
Develop an Initial Set of Indicators

STEP 3
Review Existing Models, Indicators and Data

STEP 4
Facilitate Community Dialogue and Visioning

STEP 5
Select Indicators for Measurement

STEP 6
Collect the Data

STEP 7
Publish and Promote the Report

STEP 8
Explore Linkages

STEP 9
Move from Indicators to Action

- A high school student
- A media professional
- A professional facilitator
- A researcher from a local environmental group
- A community planner
- An energy conservation specialist
- A leader from the faith community

These are just examples, but they illustrate the basic principle: include representatives from as many sectors as possible, right from the beginning.

Step 2: Develop an Initial Set of Indicators

In your Working Group, identify a shared vision and purpose for your project. Next, develop some sample indicators that your Working Group thinks may be relevant for your community's central concerns. Choose indicators that:

- Reflect something fundamental to your specific objective
- Have existing data, or data that can be measured readily
- Will show change over time
- Are easy for the public to understand
- Will attract the attention of the media
- Inspire action

A simple list with a small amount of general explanation is what you will need to take the work to the next stage. This is the list that you will present to the public, as a starting point. At this stage, the list can—and should—have something of a rough feel. If it is overly developed, with data tables and charts and written interpretations, other people may feel that their feedback will not be taken seriously.

Step 3: Review Existing Models, Indicators, and Data

Invest time at the front end clarifying the questions that your Working Group is trying to address. This will help you streamline your strategy and set priorities.

With your Working Group, gather and review as much relevant material as possible early on to help focus your questions. Performing this review will benefit you in many ways. Surveying other people's work will help you decide what your group wants to achieve and identify how you may reach your goal. Reviewing what is already being measured for the location you are working on will help you identify gaps and decide on priorities.

A number of published (or publicly available) indicator reports about your community may already exist, although these sources of data may be more narrowly defined than the kind of projects we are describing here. For example, local government agencies or universities may have reports on environmental quality. Clinics, hospitals, or social welfare agencies may have prepared reports on the status of youth or of others who are in need.

How you organize your data is as important as the indicators you select. You need an overarching framework that quickly communicates your core message, but also allows people to dig deeper. Once a framework is chosen and adapted, selecting appropriate indicators becomes much simpler.

In sum, this is about doing your homework. Not only will this prepare you for the remainder of the process, it also could help you develop new partnerships with existing experts, enlist new members for your Working Group, and build a broader constituency for your final product.

Focus Your Efforts

One of the most important things you can do to ensure a successful project is to continually bear in mind the questions, "What are we trying to achieve? What problems is it most important that we address?"

Seldom does an interesting list of facts and figures generate action in and of itself. Don't fall into the trap of trying to describe anything and everything that is happening in your community. When indicator projects gather information in a broad and random manner, without recognizing the underlying questions that most need to be addressed by the community, they are rarely successful in catalyzing change. Most of the groups that have achieved strong results from their indicators projects did so by highlighting a single indicator in relation to a targeted priority concern. We encourage you to draw on the experience of those who have gone before: narrow your focus and keep your objectives continually in mind. Center your indicators project around information that helps you address your community's core questions and concerns.

In addressing sustainability, it is also important to choose a framework that communicates your core message. For example, a project that is driven by core questions about human health issues warrants a framework with a human health focus.

One example of a framework that provides an overall picture of sustainability separates indicators into two categories:

- **Ecological health**
- **Social well-being**

This framework is meant to emphasize the importance of both of these components to sustainability. Often, social well-being and the health of the natural environment are addressed as though they are unrelated. This framework attempts to underscore that both ecological health and social well-being are essential to community sustainability, and that ecological health is a necessary basis for long-term social well-being.

In this framework, aspects to consider might include:

Ecological Health

- **Local Environmental Quality:** Stream monitoring data—for example, average levels of dissolved oxygen or of pollutants such as PCBs, metals and bacteria; number of days per year that governmental air quality standards are not met; acres of forest lost per year in the area surrounding your community
- **Overall Demand on the Biosphere's Capacity:** Size of individuals', communities', and nations' Ecological Footprints (in acres of hectares per person) compared to total available biosphere capacity (in acres or hectares per person). For more information on measuring your ecological footprint, see *http://www.earthday.net/goals/footprint.stm* or *http://www.redefiningprogress.org/programs/sustainability/ef/*
- **Resource Consumption and Waste Generation:** Daily average water consumption per capita; monthly gasoline/diesel use per capita; per capita waste production; percentage of total waste that is recycled

Social Well-Being

- **People's Health:** Number of deaths per year caused by HIV/AIDS; number of people without access to any formal health care; percentage of low-weight live births, yearly rates, per 10,000 children, percentage of childhood hospitalizations and deaths caused by asthma; deaths from all cancers per 100,000 people

- **Economic Vitality:** Percentage of adults with access to paid employment
- **Educational Possibilities:** School enrollment by level and graduation rates
- **Public Safety and Security:** Percentage of community residents affected by violent crime per year

For another example of how indicators could be organized, see Donella Meadows and Herman Daly's pyramid framework for sustainability indicators in Meadows' *Indicators and Information Systems for Sustainable Development*, pp. 40-47.

INVOLVE THE LARGER COMMUNITY

Step 4: Facilitate Community Dialogue and Visioning

Hold a community dialogue and present the initial indicator list that has been developed by your Working Group. A community dialogue process will allow the community to look into the future and think creatively about what it could become, describing that ideal picture in ways that guide policy-making and goal-setting. Such a visioning process offers a framework for understanding people's concerns and helps the community identify long-term goals, build participation, set priorities, develop action plans, and track progress toward achieving the new vision.

If your Working Group develops an initial draft indicators list, the community will have a better idea of what indicators are and what types of measurements might be useful to the community. At the dialogue, the community will be able to contribute to the list and actively engage with your Working Group.

In order for this visioning to be effective, the Working Group will need to facilitate the community dialogue. Most communities will benefit from some active visioning work before they begin selecting indicators. Here are a few suggestions that the Working Group may use to facilitate the visioning process:

- Start with a question that generates concrete images, such as, "You get magically transported to the year 2020. What do you see?"

- Ask participants, “What are the issues of greatest concern in our community?”

- Set general boundaries to help people focus their attention — a time frame, a specific geographic area. (Be flexible enough to allow changes if the need arises.)

- Engage people’s different capacities. Encourage people to think broadly, and prompt their creativity with interesting ideas and questions.

- Follow basic brainstorming rules: list everything that comes up, and do not make any preliminary judgments about the ideas that people mention.

- Include a diverse group of people who can provide a broad perspective.

An experienced facilitator can help the Working Group decide what kinds of decision-making methods to use at different stages of the process. Sometimes consensus is called for; at other times, some kind of preference voting will be needed to move things along. Facilitation is the critical skill for keeping you on course, making sure all voices get heard, and managing the process so that it is both inclusive and effective.

When community residents and stakeholders come together to create a vision for their community’s future and set goals for its attainment, developing indicators is a natural next step. At the close of the community dialogue, an extensive list of ideas and indicators will have been selected for the Working Group to pursue.

Step 5: Select Indicators for Measurement

In a diverse community process, people inevitably will choose an indicator that has never been measured before, or that is defined slightly differently from existing or similar indicators. Sometimes they may choose an indicator that seems intuitively sound, but for reasons of data or methodology is not adequate to support real decision-making.

This "wish list" of indicators has to be translated into a set that actually can be measured, and that is solid in purely technical terms. For this reason, many community indicator efforts develop a separate "technical advisory

group" comprised of academics, government experts, consultants, or others with a solid grasp of the details of effective measurement. This may be a formal body, or it may be an informal network of contacts, depending on what seems appropriate to your context.

We offer the following guidelines for managing this part of the process:

- The technical advisors need to work in service to the community. The final product needs to be accessible to the whole community, so the experts should try to accommodate the community's stated desires as much as possible.

- The indicators need to be technically sound. While accessibility is a major concern, clearly there is a threshold of technical acceptability. No matter how "beloved" an indicator is by the community, it should not be used if technical experts are convinced that it is not solid and reliable, due to poor data or some other problem.

- When changes to an indicator need to be made, the Working Group and its technical advisors should be guided by the intent of the community members who originally chose the indicator. For example, your participatory process may choose "access to health care" as a vital measure, but that isn't specific enough to be an indicator. Rather than dropping the idea, respect the community's wishes and look for a good substitute, like "the number of people using the local health clinic."

The goal is to end up with a list of measurable indicators that everyone feels they can stand behind — the community forum participants, technical experts and, of course, the Working Group.

Other Selection Criteria

Selection criteria help ensure that indicators meet tests of accuracy and usefulness. They also create common guidelines within which a diverse team of people can work together.

When selecting indicators of community environmental health, choose ones that are:

- ***Relevant.*** Does the proposed indicator illustrate an important aspect of the long-term economic, environmental, and social well-being of your community? Does it reflect your community's culture and the type of people that live there? Does it relate to specific policy decisions?

- ***Valid.*** Is the indicator truly measuring what it is intended to measure, and not just a by-product? Is the indicator well-grounded and founded in fact? Can you support, defend and justify it in logical or scientific terms?
- ***Credible.*** Is the indicator believable in the eyes of the community participants who selected it, as well as to the community at large? Does the source of the data for each indicator help reinforce credibility or detract from it?
- ***Measurable.*** Is it possible to obtain the needed data at a reasonable cost?
- ***Consistent and reliable.*** Is the information source likely to produce high-quality data over a number of years?
- ***Comparable.*** The more standardized each indicator is to similar indicators from other communities, the greater your ability to compare your community with others. Many indicators from different communities will not be exactly alike, but the intent and spirit of them will be close enough for some comparison to be made.
- ***Understandable.*** The indicators you choose should show you clearly which aspects of environmental health in your community are "getting better" and which are "getting worse." The clearer your indicators are, the more effective catalysts they will be for positive action.
- ***Leading.*** Good "leading" indicators are like canaries in the coal mine: they can forewarn you of problems well before they become dangerous or impossible to solve.
- ***Hierarchical.*** Provide different levels of information so that a user can either investigate the details or get a quick overall picture. Media and policy-makers in particular will be looking for the "sound-bite" version.
- ***Physical.*** Money and prices do not make good indicators because they are subject to inflation and unstable exchange rates. Much of what you will want to measure relates to physical things — food, water, pollutants, forests, houses, health. For this reason, it is best wherever possible to measure in physical units. (Tons of oil, not dollars worth of oil; years of life, not expenditures on health care.)

Indicators Projects: Things to Avoid

Not all indicators are good. Poorly chosen indicators can lead you down the wrong path even faster than if you had no indicators at all. Donella Meadows points to some *common pitfalls to avoid:*

OVER-AGGREGATION. If too many things are lumped together, their combined message may be hard to grasp. The GDP, used as a measure of human well-being, is a classic example. Adding together money flows caused by "good" economic changes (more education or better food) and "bad" changes (more accidents) only reflects the amount of money changing hands, but not the well-being these activities generate.

MEASURING WHAT IS MEASURABLE RATHER THAN WHAT IS IMPORTANT. For example, don't just measure the area covered by a forest; consider the size, diversity, and health of the trees. Don't just assess the amount of money people have; consider the quality of their lives and their overall well-being.

"If you manage a national economy to maximize GDP, you get GDP. You do not necessarily get justice, or freedom or environmental quality or even, sometimes, real wealth."
—Donella Meadows

DEPENDENCE ON A FALSE MODEL. We may think that the birth rate reflects the availability of family planning programs, when it actually may reflect the freedom of women to use those programs. We may think that the price of oil tells us about the underground abundance of oil, whereas it may refer to the current ability of wells to produce oil compared to the rate of consumption by cars and other devices.

INTENTIONAL MISPRESENTATION. If an index carries bad news, someone may be tempted to alter or delay it, change the terms, take money away from it, lose it, or otherwise suppress it. For example, the U.S. counts as unemployed only those people actively looking for jobs, not those who have given up looking.

OVERCONFIDENCE AND INCOMPLETENESS. Indicators are not the real system. They may be faulty. They may miss many of the subtleties of your community. They are most useful when kept in context and perspective. Always keep in mind that while indicators are an important part of the picture, they are not the total picture.

Step 6: Collect the Data

Now that the indicators have been identified for measurement, it is time to collect the data. Data are the raw material for indicators. Measures of community progress depend upon consistent, reliable, scientifically accurate sources of data.

Some indicators are easier to find good quality measurements for than others. For some, you may find that a pre-existing report thoroughly documents the data, its sources, and how best to present it graphically. For others, you

must start from scratch, poking into databases and government documents, surfing the Web, or perhaps hiring survey research professionals to collect and measure the data for you. You may find you have to abandon an indicator, or retain it while declaring it impossible to measure or not-yet-measured. Or you may discover new indicators that no one has mentioned before but that are clearly in line with the goals and spirit of the project.

This phase of the work is time-intensive, but it is very important and often extremely interesting. It also is an opportunity to expand your base of volunteers by engaging student interns, government employees, librarians, consultants, and other interested people who have a knack for research and a desire to make a contribution.

Data for community indicators can be found in a wide variety of places, including:

- The national census
- National, regional, or local government agencies
- Local, state and national non-governmental organizations
- Academic institutions
- The Internet
- Economic development groups and business associations
- Health care institutions
- Libraries
- Schools
- Newspapers, radio and television stations
- Maps
- Insurance companies

Much of your task may involve using pre-existing information — finding it, analyzing it, and sometimes combining it in new ways. However, in some cases you may be able to collect information that has not been identified before. For example, you might conduct surveys or interviews with members of your community. Data also may be collected by observing noticeable changes in local watersheds and other local ecosystems.

An important part of your role will be to present the data you have gathered in ways that are easily understood and likely to stimulate responsive action. Most indicator efforts have some means of showing overall trends (for example, by noting how many indicators in any one category are improving or worsening). Wherever possible, show your data as a time trend to indicate how what you are measuring is changing over time. Some reports highlight those that are most urgent, or those identified by community members as the most important.

Step 7: Publish and Promote the Report

Congratulations! All the hard work is done, and you are ready to present the results to the public, the media, decision-makers, and perhaps the world.

The guiding principles for presenting your report should be clarity, accessibility, interest, and graphic appeal. The skills you will need include writing, editing, design, and publishing. Make your report easy to read and attractive to look at. If you want to distribute paper copies of your report, you will need a budget for printing and distribution.

An indicator report can be structured in many different ways. At a minimum, try to include:

- Graphic depictions of the data trends
- Explanations of how and why the indicators were chosen
- The data sources, and a definition of what is being measured
- Some interpretation of the data, and of what the indicator is saying
- An evaluation of the trend, if possible (are things getting better or worse?)

Your official report should be professional in substance and appearance, but you also need to plan for communicating with a popular audience. Some projects present their indicators in a "Community Report Card," an abbreviated version of the full indicator set that shows overall trends in several key categories. Report Cards can communicate overall trends by using arrows that point up or down, or by using letter grades (as in a school report card) that evaluate the community's performance in specific issue areas. Use whatever is likely to reach your fellow citizens, and try to fit a report summary onto just one page.

When presenting the results, you can provide varying levels of detail. For example, to convey a larger trend, you could say that three out of five environmental indicators show deterioration over the past decade. People who are interested in learning more can then explore the data in greater detail.

The key to success is effective marketing of the report. This involves identifying your audience, focusing your message on a few key understandable points, and getting the information in front of as many people as possible. Let the public know that these indicators provide an instrument panel by which they can steer their community toward a better future. You also may want to issue an alert that points to overlooked community problems, or

praises recent accomplishments. What you *don't* want to do is bore people with long recitations of data and statistics.

You may wish to:

- Provide copies of the report to all the members of a local government council, and meet with them to discuss the most urgent issues that are highlighted by the indicators.
- Ask members of your participatory process to carry the message and outcomes of your project back to their constituency groups.
- Meet with the editorial board of the local newspaper to highlight the key findings and urge them to write about your report and its implications. Better yet, urge them to include a summary of the report as an insert in the daily paper.
- Speak to local service clubs, business associations, schools, religious groups, and others about the report and the priority areas that need to be addressed by the community.
- Write opinion pieces and articles for local publications.
- Appear on local radio and TV talk shows.
- Develop a speakers' bureau with people who are good at talking to the many different kinds of audiences highlighted above.

The bottom line is, enjoy the process! Let your enthusiasm for the work speak for itself. Aim to inspire your fellow citizens, and yourself, toward greater accomplishments in solving community problems. Put the indicators to work doing the job for which they were designed: measuring progress and helping to make it happen.

Elements of Effective Presentation

CLARITY. Clarity means simplicity: avoid unnecessary details, jargon, technical symbols, or other elements that are likely to confuse the general reader. It also means ensuring that there is enough information to make the data and its interpretation clear.

DIRECTIONAL CHANGE. Your presentation should make it clear which direction the indicator is going — and whether the current direction suggests that things are "getting better" or "getting worse." Presenting this clearly can be a challenge, because for some measures (like graduation rates) a rate increase is a positive thing, while for others (like juvenile crime) the

goal is for the rates to go down. You will need to devise a method for conveying directional change in both absolute (up or down) and qualitative (better or worse) terms.

TURN YOUR REPORT INTO A STORY. "Report on Long-Term Trends in Boomtown Just Released" is not a story. "Boomtown's Quality of Life Threatened" is a story. It's unfortunate, but true, that the media thrives on danger, conflict, and feel-good features. Adjust your media outreach accordingly.

HIGHLIGHT THE URGENT ISSUES. While your report may focus on the systemic linkages between economic, environmental, and social issues, that is too much for the media to swallow. In your press materials, focus on just a few of the most urgent indicators — a steep rise in child poverty, for example, together with a catastrophic decline in local biodiversity. Include at least one piece of good news — for example, improving air quality—to demonstrate that positive change is possible.

MAKE YOUR CONTACT INFORMATION CLEAR. While this may sound basic, some projects have neglected to include an obvious name, address, and phone number for reporters to use to follow up on a story.

CHOOSE A SPOKESPERSON. The media generally prefer that one person be identified as the source for quotes and the point of contact for answering their questions. You might want to designate one or two additional spokespeople who represent the diversity of the project team, to whom the lead spokesperson can refer reporters for different perspectives.

SEEK HIGH-LEVEL ENDORSEMENTS. It helps to have the mayor or a member of city government say nice things about your report. Sustainable Seattle, for example, had the President of the City Council introduce its 1995 report at a press conference, helping to assure front-page coverage.

BE PERSISTENT. If you don't get the attention you want the first time around, don't give up! It took the Jacksonville, Florida group five years to get significant press coverage for their annual indicators report. By coming back regularly, continuing to improve your product, and increasing the legitimacy of the report in the eyes of the community as a whole, you will get to the point where the media can no longer ignore you.

Step 8: Explore Linkages

An effective community indicator report goes beyond just presenting the data; it also shows linkages between various trends in a community. It is helpful to include some descriptions of the linkages among indicators, especially if you can show how one trend causes, or contributes to, another.

Demonstrating linkages between different core issues is one of the most valuable products of a community environmental health report, but it is also one of the most challenging. As John Muir wrote, "everything is hitched to everything else" — which means your list of linkages is potentially infinite! Concentrate on identifying a few powerful and intriguing linkages to reframe issues and revive political interest.

For example, the linkage between the environment and human health is a crucial one. Air pollution in cities around the world is severe, and getting worse. Research has linked pollutants such as particulate matter, nitrogen oxides, sulfates, and ozone to premature deaths, cardiovascular disease, asthma hospitalizations, and reduced lung function. Biological and chemical contaminants pollute water and soil, causing a variety of human health problems. If you choose to focus on the link between human health and the environment, pay attention to possible sources of pollutants and contaminants in your community such as industry, transportation, inadequate sanitation, chemical fertilizers, and waste dumps.

Step 9: Move from Indicators to Action

Indicators are not substitutes for action. However, positive change often results from the process of developing indicators, researching them, studying the trends that they reveal, and getting the community talking.

Indicators are powerful. They frame debates, steer planning, affect budgets, and motivate action. Indicators often turn into action by indirect means, simply by stirring up interest in an issue or shining a more direct light on a problem. Of course, that will only happen if there is effective research and presentation of results to the public.

In an increasingly complex world, the search for better ways to measure our communities' well-being must be a continuous one. The process of choosing our measures of progress needs to be collaborative, drawing on the creativity of the whole community. As researcher Elizabeth Kline has noted,

"Community-based experiments [are] replacing the way we have worked so far, relying on the government and the private sector to be the engines of change." In these times, it takes a whole village to raise the standards of performance, and to steer our communities toward a better course.

Many communities now understand that ***measuring*** progress is not the same as ***making*** it, and they are turning to action. With indicators as their guide, they are working to reverse negative trends and strengthen positive ones, creating the kind of communities that they envision handing down to the next generation.

We hope you and your community will be similarly inspired, and we look forward to seeing your reports and tracking your progress in the years ahead!

Q & A

Many indicators seem to focus on problems and to have a "negative" tone (like crime rates). Shouldn't indicators focus on the positive and measure progress, not problems?

Sometimes indicators can be framed positively, but often the data have not been defined that way. Also, it should be a community's call as to what communicates the issue most effectively. For example, reporting that 20% of children live in poverty sends a stronger message and call for action than saying that 80% of children are not in poverty. Alternatively, saying "1 in 5 children live in poverty" can send an even stronger message.

In general, if an indicator can be presented positively, try doing it that way to see if it has greater effect in encouraging the desired action. Here are a few examples of positively-framed indicators:

- Bushels of food grown per unit with no chemical fertilizers and pesticides
- Percentage of families with adults earning a livable wage
- Percentage of waste material that is recycled
- Percentage of commuters traveling by foot, bicycle, or public transport
- Amount of park land or green spaces per capita

When should you rely on outside experts and consultants?

Important stages where expertise can be useful are: evaluating proposed indicators to analyze trends, assessing data quality, and designing new indicators for things previously unmeasured. Experts can advise the group about what data is actually available, realistically determine what can be measured, and add credibility to the process. Other experts and consultants also may be useful to you, including professional facilitators, public relations experts, graphic artists, editors, and administrative managers.

Often you can find these skills among the staff or volunteers of an indicators project. If not, you may wish to hire those skills not available to you. As a general rule, try to draw on your existing resources before resorting to paid help. However, if you do need professional assistance, and your budget is tight, it is often preferable to get small doses of very high-quality help at strategic points in the process.

"Air quality is related to increasing population, increase of single occupancy vehicles, and sprawling land use patterns. Poor air quality can increase short-term and long-term health care costs. It can also affect economic activity, especially tourism. People come to our region to see crystal clear skies, not brown clouds."

—Healthy Mountain Communities, Roaring Fork / Grand Valley, Colorado, USA

Glossary

Baseline — An initial data point (or collection of data points) against which all future data points will be compared to determine a trend.

Benchmark — A specific measurement point against which other measurement points are calibrated for accuracy. (Not to be confused with "Indicator" or "Target.")

Data — Individual measurements, facts, figures, pieces of information, statistics (either historical or derived by calculation), experimentation, surveys, etc. serving as evidence from which conclusions can be inferred.

Healthy and Sustainable Community — A community that develops and maintains a strong quality of life for its residents while helping to protect social and ecological assets everywhere.

Indicator — A measurement that reflects the status of some social, economic, or environmental system over time. Generally an indicator focuses on a small, manageable, tangible and telling piece of a system to give people a sense of the bigger picture. Most frequently, community indicators are in the form of time-series data, presented as charts and graphs.

Linkage — A direct or indirect causal relationship between two or more systems, where changes in one affect the status of another. Linkages among systems are often reflected in the indicators that measure the health of those systems.

Per Capita — Latin for "by heads." A measurement that is presented in terms of units per person, as opposed to a total or aggregate figure. To get a "per capita" measure, divide the total each year by the population for that year, and then graph the result. That would be a quick way to make a trend understandable to most people and, in fact, this is the format that most community indicator efforts choose.

Reliability — The extent to which a change in value of an indicator is caused by a change in what it measures and not by measurement error. Reliability of polls or surveys is often an issue, since small changes in the wording of questions can elicit remarkably different responses.

Report Card — A document that summarizes a community's indicators. Report cards are commonly issued annually to the larger community to provide feedback on progress.

Sustainability — Maintaining the ability of nature's ecological assets to provide for us. This depends on creating an economy that meets the basic survival needs of the earth's present inhabitants, while protecting the natural systems upon which future generations will depend.

Sustainable Development — The United Nations World Commission on Environment and Development popularized sustainability and defined the path to get there as "development which meets the needs of the present without endangering the ability of future generations to meet their own needs" (*Our Common Future,* 1987). Sustainable Seattle has described it as economic and social changes that promote human prosperity and quality of life without causing ecological or social damage.

System — A set of actors or entities bound together by a set of rules and relationships into a unified whole. A system's health is dependent on the health of the whole pattern, which can sometimes be reflected (and thus measured) in the status of a key part of the system.

Trend — A direction demonstrated through observation of data and/or indicators over time.

Validity — How well an indicator actually represents what one intends to measure. This is similar to accuracy but refers more to the relation between the measurement and its underlying concept.