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The Cascadia Scorecard Design

The details and methodology on how Sightline created the project to track seven key trends for the Northwest.

In design, the Cascadia Scorecard is simple. It is seven indicators. Its creation, however, was complex. Sightline Institute selected the indicators from a list of nearly 1,000 candidates during three years of research.

In addition to primary and secondary research, the selection process involved formal consultations with more than 40 leading experts, extensive peer review of individual indicators and of the index overall, in-depth interviews with a dozen opinion leaders, three formal focus group discussions, and scores of informal discussions with diverse audiences.

Sightline chose the components of the Scorecard because they passed seven tests:

1. They reflect progress toward the Northwest's shared aspirations of healthy, prosperous people and thriving, unpolluted ecosystems.
2. They complement one another to provide a good range of coverage of different aspects of human well-being and of environmental conditions and stresses.
3. They are scientifically valid proxies for the larger trends they aim to reflect.
4. They are easy to understand.
5. They can be measured in most of Cascadia.
6. They are relevant in most of the region.
7. They give meaningful readings at least every two years.

The components of the Scorecard are few so that it tells the most important stories. Yet each Scorecard indicator actually reflects an array of major concerns for the future. Some--such as health, economy, and forests--measure progress toward northwesterners' ultimate ends, such as good health, shared prosperity, and ecological integrity.

Others--such as energy and sprawl--track underlying trends that systematically move the region toward or away from those ends. Still others--such as population and pollution--serve as proxies for both ends and means.

Together, these indicators give the long view on Cascadia's future.

More information:

Cascadia Scorecard's seven indicators

View full page here: http://www.sightline.org/research/cascadia_scorecard/design/seven_trends

The Cascadia Scorecard: Why These Measures Matter

Why Sightline chose to track pollution, sprawl, health, and other key trends.

The Cascadia Scorecard is Sightline's index of progress for the Northwest, an alternative to influential but misleading indicators such as the Dow Jones or GDP. Here's why we chose the seven trends.



Health: Sightline chose lifespan because it is widely considered the best single measure of a population's health. Lifespan reflects all of the diseases, accidents, and lifestyle choices that shorten people's lives, as well as the effectiveness of medical care in helping us live longer. And contrary to first impressions, it does not simply reflect medical practices that extend lives without improving them: across nations, every added month of life expectancy tends to bring more than a month of good health. For mortal beings, time is the most precious resource, and a nonrenewable one at that. So health-how much time we have, our lifespan-is perhaps the most fundamental indicator of human well-being. Go to health.



Economy: Conventional statistics like GDP and average personal income often obscure the economic status of ordinary people, a key trend measured by the Cascadia Scorecard. Since 1990, for example, the top-earning fifth of households in the Northwest states have added enough to their income to buy a new SUV every year, while others have seen little gain. In order to gauge the economy's real-world effects on working families, Sightline researchers created a fourfold index that integrates typical household incomes, the unemployment rate, the poverty rate, and the child poverty rate. Economic security is also important to measure because the fortunes of ordinary people are so closely tied to the region's future. Long-term poverty has enduring social consequences, among them slowed learning in children, increases in crime and delinquency, and teen pregnancy. Go to economy.



Population: Population trends are an excellent gauge of women's-and families'-well-being. Around the world, as women's opportunities improve, birthrates decline, family size shrinks, and women postpone childbearing. Teen birthrates and the frequency of unplanned pregnancies diminish especially quickly. Population also powerfully shapes the Northwest's environment, driving most increases in ecological harm. The measure that the Scorecard examines is birthrates, which-unlike migration-account for the share of this population growth that has global as well as local implications. Globally, human numbers are rising more slowly than in years past, but are still increasing by 74 million a year. And adjusted for northwesterners' resource-intensive lifestyles, the Northwest's growth counts for more in the global equation. Go to population.



Energy: Of all the commodities produced and consumed in the region, none casts a longer shadow than energy; it affects everything from salmon survival to climate stability, and national security to economic development. The Northwest produces very little petroleum or natural gas, for example, so dependence on fossil fuels siphons tens of millions of dollars a week out of the regional economy. And energy use is an indicator of northwesterners' overall consumption of natural resources, because it rises and falls in tandem with most other consumption trends. The Northwest's residents, like others in North America, consume their body weight each day in raw materials, and the resulting waste, pollution, resource depletion, and habitat disruption are the principal environmental shortcomings of the Cascadian economy. Achieving vastly greater efficiency of resource use is the region's primary test of sustainability. Go to energy.



Sprawl: Sprawl-dispersed, automobile-oriented urban development-figures into the Scorecard because it contributes to a distressing array of ills. Sprawl locks northwesterners into an auto-dependent lifestyle, with an attendant burden on their pocketbooks, the world's oil fields, and the planet's atmosphere. Sprawl also consumes farmland and open space, and ruins lowland ecosystems. It endangers health by putting people behind the wheel, by tainting the air and water with toxic pollutants, and by turning walking into recreation rather than transportation. The Scorecard measures the best single indicator of sprawl: residential density, or the number of people who live on each acre. Density reveals to what extent growing populations are consuming new land. And studies of more than 100 cities on four continents show that neighborhood density is the most important determinant of how much people drive. Go to sprawl.



Forests: Monitoring the health of the Northwest's ecosystems may be the Scorecard's greatest challenge, given the lack of good data on the condition of natural systems, the innate complexity of these systems, and the many stresses they endure. As a limited but informative substitute, the Scorecard tracks forest cover in five areas of the region by measuring acres of clearcuts over a 30-year period with imagery from the NASA Landsat system. Clearcut logging alters natural ecosystems and constricts the habitat of old-forest species. All forms of logging emit greenhouse gases, which are responsible for global warming, and require road building, which causes erosion and degrades streams. Tracking clearcuts provides a rough gauge for how extensively humans have altered the forests of the Northwest-and for how effectively northwesterners are safeguarding their distinctive natural heritage. Go to forests.



Pollution: All living things in Cascadia contain within their tissues a thin soup of dozens or even hundreds of chemicals that didn't exist a century ago. The most worrisome share three characteristics: they break down slowly; they harm bodily functions; and they accumulate in living tissue, reaching high concentrations in humans. The Cascadia Scorecard analyzes human breast milk in mothers across the Northwest for three such toxics: PCBs and dioxins, which have been linked to health problems ranging from intellectual impairments to cancer; and PBDEs, chemicals that are

widely used as flame retardants and are suspected of similar effects. Pollution in breast milk is a good indicator for contaminants in the bodies of both men and women; it's also the pollution that most poignantly shapes the future. Go to pollution.

Next: Why the GDP needs to be fixed

View full page here: http://www.sightline.org/research/cascadia_scorecard/design/gdp

What's Wrong With the GDP?

Why gross domestic product and other financial indicators don't measure what matters to the region and what to do about it.

(Excerpted from *This Place on Earth 2002*)

In the immediate aftermath of the September 11 terrorist attacks, even in the grip of the world's rage and grief, one of the media's most persistent questions was, What was the death toll? People searched for a frame of reference, for some quantification of the incomprehensible. In that way, the question was profoundly revealing.

Counting things is a deeply human impulse; it's one way we understand our world. From deaths to births, from economic growth to standardized test scores, measurement permeates contemporary life. Hundreds of measurements--or indicators--fill the news, shape public opinion, and inform the millions of actions that individuals and organizations take each day. They serve as proxies for larger, more complicated trends, telling us whether the state of the human enterprise is getting better or worse.

But many of the indicators we rely on, particularly economic ones such as the Dow Jones industrial average, are deeply flawed. They conceal what they purport to reveal and, in the process, systematically misinform us, misdirecting our actions on a grand scale. The Dow Jones industrial average, for example, is the undisputed king of stock market yardsticks. In popular consciousness, the Dow is the market; the NASDAQ composite, the S&P 500, and other measures merely color the news.

But the Dow is the least-accurate regularly published stock indicator. Not only is its roster of 30 companies assembled without benefit of any particular methodology--two people at Dow Jones & Co. simply pick them--the index is also mathematically spurious. The Dow averages stock prices without attention to the number of shares in circulation.

The Dow's odd structure is explained by its genesis. Charles Dow, first editor of the Wall Street Journal, created it in 1896, scribbling out the calculations by hand. A short list of stocks and a simple formula let him report his average easily and often. Incorporating market capitalization (the number of shares times the price of each) would have necessitated a lot of multiplying and adding, followed by one gigantic division problem. The world's most quoted economic gauge may therefore be erroneous because of a fear of long division.

If the Dow measures badly, another leading indicator, gross domestic product (GDP), measures well the wrong thing--or rather, it does not measure what we think. North Americans take GDP as the bellwether of national well-being, but GDP doesn't track how people are, only how much they spend.

GDP fails to distinguish between losses and gains, because it only adds and doesn't subtract. Gutting ecosystems for commodities--and leaving fisheries depleted, forests cleared, or rivers dammed--shows up as a plus in the accounts. So do expensive misfortunes: Whether money is spent on vacations or hospital stays, playground equipment or car wrecks, births or funerals, it's all the same in the GDP ledger.

Likewise, GDP goes up regardless of whether consumers may regret the purchase (such as spending on alcohol, tobacco, and gambling) or when consumers may regret the need for the purchase (such as

spending on car alarms, firearms, gated communities, and private guards). Blind to services provided free by families, friends, and communities, GDP math values an hour of paid daycare more highly than an hour of unpaid parenting and a book from a store more than one from a library.

With its blinkered accounting, the GDP cannot see much of what is important. It tells only about the growth of economic production, not of economic satisfaction or quality of life. Since 1957, for example, US real GDP per capita has more than doubled, but the share of Americans who describe themselves as "very happy" has remained unchanged at about one-third. Even Simon Kuznets, Nobel Prize-winning economist and inventor of the GDP, warned against treating it as a gauge of progress; in 1962, he wrote, "Goals for 'more' growth should specify more growth of what and for what."

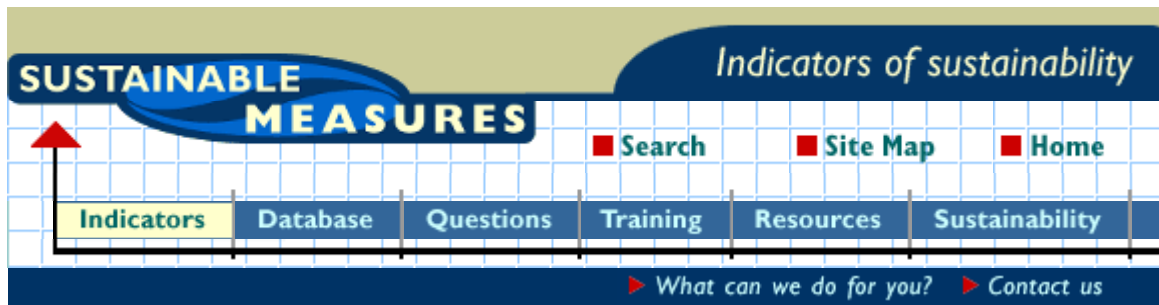
Just as the Dow and GDP deceive us, other indicators also give inaccurate readings. The consumer price index exaggerates inflation (because part of its rise reflects tastes that elevate with purchasing power); the unemployment rate understates unemployment (because it excludes those who have given up on finding jobs); and the poverty rate undercounts the poor (because the US poverty definition is the most miserly standard of basic needs in the industrial world).

The Northwest's chosen indicators should not be historical flukes, matters of convenience, or perquisites of power. They should spring from the region's values, its aspirations for the future. Financial security ranks high among those values, so it is fitting that the Northwest monitor its financial capital. But it is not fitting that financial measurements should overwhelm all others in how often they are tabulated; that stock quotes, commodity prices, and other yardsticks of the marketplace should crowd out indicators of community vitality, human well-being, and ecological integrity.

The Cascadia Scorecard is a step toward better indicators, indicators that measure what matters to northwesterners over the long run and that can thereby realign people's actions with their deeper values. Ideally, indicators of the Northwest's lasting progress--its sustainability--would measure to what extent northwesterners are secure and thriving, to what extent Northwest nature is thriving, and to what extent northwesterners' way of life is benign in its impacts on nature and cultures outside the region.

Until the Northwest begins measuring what it values, rather than valuing what it measures, it will not be able to seize the opportunity or to avoid the danger. When the region does regularly monitor its environmental and social, along with its economic, performance, however, this place on Earth may yet achieve a way of life that can last—one that nurtures human community while honoring nature's limits.

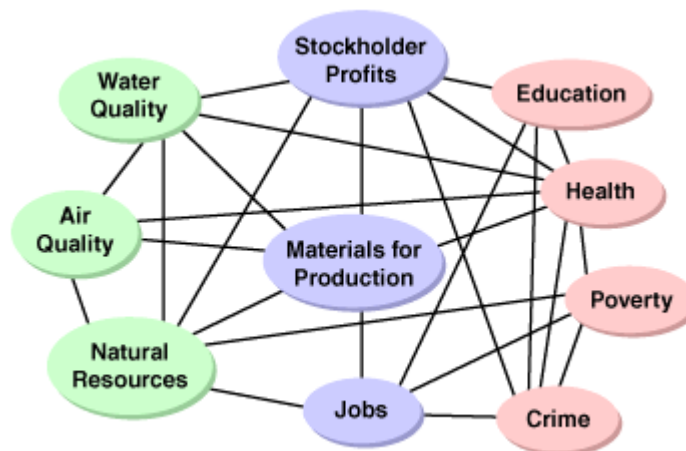
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What is an indicator of sustainability?

An indicator is something that helps you understand where you are, which way you are going and how far you are from where you want to be. A good indicator alerts you to a problem before it gets too bad and helps you recognize what needs to be done to fix the problem. Indicators of a sustainable community point to areas where the links between the economy, environment and society are weak. They allow you to see where the problem areas are and help show the way to fix those problems.

Indicators of sustainability are different from traditional indicators of economic, social, and environmental progress. Traditional indicators -- such as stockholder profits, asthma rates, and water quality -- measure changes in one part of a community as if they were entirely independent of the other parts. Sustainability indicators reflect the reality that the three different segments are very tightly interconnected, as shown in the figure below:



Communities are a web of interactions among the environment, the economy and society.

As this figure illustrates, the natural resource base provides the materials for production on which jobs and stockholder profits depend. Jobs affect the poverty rate and the poverty rate is related to crime. Air quality, water quality and materials used for production have an effect on health. They may also have an effect on

stockholder profits: if a process requires clean water as an input, cleaning up poor quality water prior to processing is an extra expense, which reduces profits. Likewise, health problems, whether due to general air quality problems or exposure to toxic materials, have an effect on worker productivity and contribute to the rising costs of health insurance.

Sustainability requires this type of integrated view of the world -- it requires multidimensional indicators that show the links among a community's economy, environment, and society. For example, the Gross Domestic Product (GDP), a well-publicized traditional indicator, measures the amount of money being spent in a country. It is generally reported as a measure of the country's economic well-being: the more money being spent, the higher the GDP and the better the overall economic well-being is assumed to be. However, because GDP reflects only the amount of economic activity, regardless of the effect of that activity on the community's social and environmental health, GDP can go up when overall community health goes down. For example, when there is a ten-car pileup on the highway, the GDP goes up because of the money spent on medical fees and repair costs. On the other hand, if ten people decide not to buy cars and instead walk to work, their health and wealth may increase but the GDP goes down.

In contrast, a comparable sustainability indicator is the Index of Sustainable Economic Welfare. In order to get a more complete picture of what is economic progress, the ISEW subtracts from the GDP corrections for harmful bases or consequences of economic activity and adds to the GDP corrections for significant activities such as unpaid domestic labor. For instance, the ISEW accounts for air pollution by estimating the cost of damage per ton of five key air pollutants. It accounts for depletion of resources by estimating the cost to replace a barrel of oil equivalent with the same amount of energy from a renewable source. It estimates the cost of climate change due to greenhouse gas emissions per ton of emissions. The cost of ozone depletion is also calculated per ton of ozone depleting substance produced. Additionally, adjustments are made to reflect concern about unequal income distribution. The correction for unpaid domestic labor is based on the average domestic pay rate. Some health expenses are considered as not contributing to welfare, as well as some education expenses. (See Indicator Spotlight for more on the ISEW as a sustainability

"Trying to run a complex society on a single indicator like the Gross National product is like trying to fly a 747 with only one gauge on the instrument panel ... imagine if your doctor, when giving you a checkup, did no more than check your blood pressure."

Hazel Henderson,
Paradigms of Progress

indicator.)

Like the GDP, the ISEW bundles together in one index tremendous amounts of information, but the key difference is that the information takes into account the links between environment, economy and society.

Indicators of sustainable community are useful to different communities for different reasons. For a healthy, vibrant community, indicators help monitor that health so that negative trends are caught and dealt with before they become a problem. For communities with economic, social, or environmental problems, indicators can point the way to a better future. For all communities, indicators can generate discussion among people with different backgrounds and viewpoints, and, in the process, help create a shared vision of what the community should be.



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[Traditional vs. sustainable](#)

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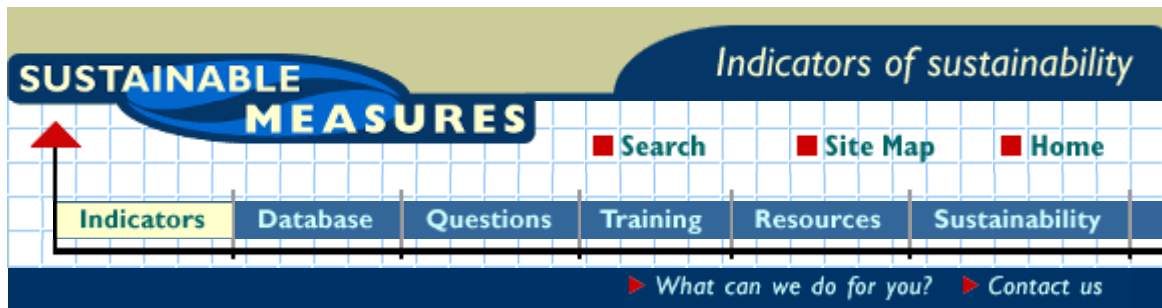
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Characteristics of effective indicators

An indicator is something that points to an issue or condition. Its purpose is to show you how well a system is working. If there is a problem, an indicator can help you determine what direction to take to address the issue. Indicators are as varied as the types of systems they monitor. However, there are certain characteristics that effective indicators have in common:

- Effective indicators are **relevant**; they show you something about the system that you need to know.
- Effective indicators are **easy to understand**, even by people who are not experts.
- Effective indicators are **reliable**; you can trust the information that the indicator is providing.
- Lastly, effective indicators are based on **accessible data**; the information is available or can be gathered while there is still time to act.

An example of an indicator is the gas gauge in your car. The gas gauge shows you how much gasoline is left in your car. If the gauge shows the tank is almost empty, you know it's time to fill up. Another example of an indicator is a midterm report card. It shows you whether a student is doing well enough to go to the next grade or if extra help is needed. Both of these indicators provide information to help prevent or solve problems, hopefully before they become too severe.

Indicators can be useful as proxies or substitutes for measuring conditions that are so complex that there is no direct measurement. For instance, it is hard to measure the 'quality of life in my town' because there are many different things that make up quality of life and people may have different opinions on which conditions count most. A very simple substitute indicator is 'Number of people moving into the town compared to the number moving out.'

Examples of familiar measurements used as indicators in everyday life include:

- Wave height and wind speed are indicators of storm severity
- Barometric pressure and wind direction are indicators of upcoming weather changes
- Won-lost record is an indicator of player skills
- Credit-card debt is an indicator of money-management skills
- Pulse and blood pressure are indicators of fitness

Note that these are all numeric measurements. Indicators are quantifiable. An indicator is not the same thing as an indication, which is generally not quantifiable, but just a vague clue. In addition to being quantifiable, effective indicators have the four basic characteristics noted above. These characteristics are:

Relevant

An indicator must be relevant, that is, it must fit the purpose for measuring. As indicators, the gas gauge and the report card both measure facts that are relevant. If, instead of measuring the amount of gas in the tank, the gas gauge showed the octane rating of the gasoline, it would not help you decide when to refill the tank. Likewise, a report card that measured the number of pencils used by the student would be a poor indicator of academic performance.

Understandable

An indicator must be understandable. You need to know what it is telling you. There are many different types of gas gauges. Some gauges have a lever that moves between 'full' and 'empty' marks. Other gauges use lights to achieve the same effect. Some gauges show the number of gallons of gasoline left in the tank. Although different, each gauge is understandable to the driver. Similarly, with the report card, different schools have different ways of reporting academic progress. Some schools have letter grades A through F. Other schools use numbers from 100 to 0. Still other schools use written comments. Like the gas gauge, these different measures all express the student's progress or lack of progress in a way that is understandable to the person reading the report card.

On the other hand, a gas gauge that showed the number of BTU's left in the tank would probably not be very useful to you in deciding when to fill up the tank. Likewise, a report card that gave grades in ancient Greek script would be a mystery to most people. In order for you to know when action is needed, you must be able to understand what an indicator is telling you.

Reliable

An indicator must be reliable. You must trust what the indicator shows. A good gas gauge and an accurate report card give information that can be relied on. A gas gauge that shows the tank is

empty when in fact it is half full would make you stop for gasoline before it is needed. A gas gauge that shows the tank is half full when in fact it is empty would cause you to run out of gas in an inconvenient place. Similarly, if a student's grade were reported wrong, an honors student could be sent for remedial work and a student who needs help would not get it. An indicator is only useful if you know you can believe what it is showing you.

Reliability is not the same as precision. When your gas gauge registers empty, you know there is still a gallon or so of gasoline left as a reserve. The gas gauge reliably under-reports the amount of gasoline. An indicator does not necessarily need to be precise; it just needs to give a reliable picture of the system it is measuring.

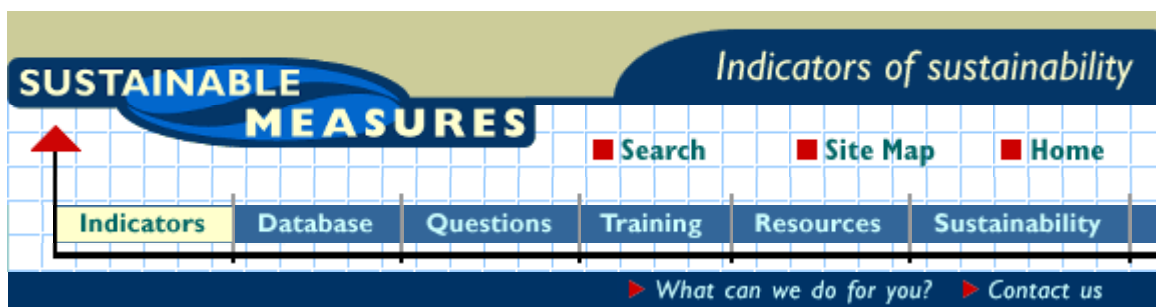
Accessible Data

Indicators must provide timely information. They must give you information while there is time to act. For example, imagine a gas gauge that only gave you the amount of gasoline in the tank when the engine was started. After you have been driving for several hours, that reading is no longer useful. You need to know how much gasoline is in the tank at each moment. Similarly, a report card distributed a week before graduation arrives too late to give a student remedial help. In order for an indicator to be useful in preventing or solving a problem, it must give you the information while there is still time to correct the problem.

One of the biggest problems with developing indicators of sustainability is that frequently the best indicators are those for which there is no data, while the indicators for which there is data are the least able to measure sustainability. This has led many communities to choose traditional data sources and measures for indicators. There are several advantages to traditional indicators. First, the data is readily available and can be used to compare communities. Second, traditional indicators can help to define problem areas. Third, traditional indicators can be combined to create sustainability indicators.

However, there is a real danger that traditional data sources and traditional indicators will focus attention on the traditional solutions that created an unsustainable community in the first place. It may be tempting to keep measuring 'number of jobs,' but measuring 'number of jobs that pay a livable wage and include benefits' will lead to better solutions. Discussions that include the phrase 'but you can't get that data' are not going to lead to indicators of sustainability. In fact, if you define a list of indicators and find that the data is readily available for every one of them, you probably have not thought hard enough about sustainability. Try to define the best indicators and only settle for less as an interim step while developing data sources for better indicators.





Sustainable community indicator checklist

The sustainable community indicator checklist consists of the following 14 questions:

1. Does the indicator address the carrying capacity of the natural resources -- renewable and nonrenewable, local and nonlocal -- that the community relies on?
2. Does the indicator address the carrying capacity of the ecosystem services upon which the community relies, whether local, global, or from distant sources?
3. Does the indicator address the carrying capacity of esthetic qualities -- the beauty and life-affirming qualities of nature -- that are important to the community?
4. Does the indicator address the carrying capacity of the community's human capital -- the skills, abilities, health and education of people in the community?.
5. Does the indicator address the carrying capacity of a community's social capital -- the connections between people in a community: the relationships of friends, families, neighborhoods, social groups, businesses, governments and their ability to cooperate, work together and interact in positive, meaningful ways?
6. Does the indicator address the carrying capacity of a community's built capital -- the human-made materials (buildings, parks, playgrounds, infrastructure, and information) that are needed for quality of life and the community's ability to maintain and enhance those materials with existing resources?
7. Does the indicator provide a long-term view of the community?
8. Does the indicator address the issue of economic, social or biological diversity in the community?
9. Does the question address the issue of equity or fairness -- either between current community residents (intra-

generational equity) or between current and future residents (inter-generational equity)?

10. Is the indicator understandable to and useable by its intended audience?
11. Does the indicator measure a link between economy and environment?
12. Does the indicator measure a link between environment and society?
13. Does the indicator measure a link between society and economy?
14. Does the indicator measure sustainability that is at the expense of another community or at the expense of global sustainability?

These questions are discussed in detail on the following page.



[About the checklist](#)



[Checklist questions](#)

Subjects Covered in This Topic:

[Is there a checklist](#) that a community can use to evaluate indicators?

The **[Sustainable Community Indicator Checklist](#)**.

The checklist **[questions in more detail](#)**.

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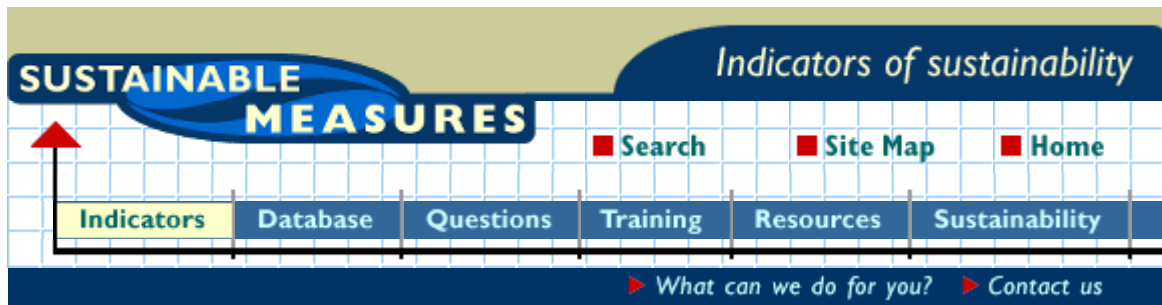
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Traditional vs. sustainability indicators

The tables below compare traditional indicators with sustainable community indicators.

Economic Indicators		
Traditional Indicators	Sustainability Indicators	Emphasis of Sustainability Indicators
Median income Per capita income relative to the U.S. average	Number of hours of paid employment at the average wage required to support basic needs	What wage can buy Defines basic needs in terms of sustainable consumption
Unemployment rate Number of companies Number of jobs	Diversity and vitality of local job base Number and variability in size of companies Number and variability of industry types Variability of skill levels required for jobs	Resilience of the job market Ability of the job market to be flexible in times of economic change
Size of the economy as measured by GNP and GDP	Wages paid in the local economy that are spent in the local economy Dollars spent in the local economy which pay for local labor and local natural resources Percent of local economy based on renewable local resources	Local financial resilience

Environmental Indicators		
Traditional Indicators	Sustainability Indicators	Emphasis of Sustainability Indicators
Ambient levels of pollution in air and water	Use and generation of toxic materials (both in production and by end user) Vehicle miles traveled	Measuring activities causing pollution
Tons of solid waste generated	Percent of products produced which are durable, repairable, or readily recyclable or compostable	Conservative and cyclical use of materials
Cost of fuel	Total energy used from all sources Ratio of renewable energy used at renewable rate compared to nonrenewable energy	Use of resources at sustainable rate

Social Indicators		
Traditional Indicators	Sustainability Indicators	Emphasis of Sustainability Indicators
SAT and other standardized test scores	Number of students trained for jobs that are available in the local economy Number of students who go to college and come back to the community	Matching job skills and training to needs of the local economy
Number of registered voters	Number of voters who vote in elections Number of voters who attend town meetings	Participation in democratic process Ability to participate in the democratic process



[What is a sustainability indicator?](#)



[Characteristics of effective indicators](#)

Subjects Covered in This Topic:

[What is an indicator](#) of sustainability?

[Traditional vs. sustainability](#) indicators

SDI (2001)	UN CSD (2001)	OECD (1999 draft)	UK	Canada
Economic Indicators - Long-term Endowments and Liabilities				
Capital assets				
Labor productivity		Total factor productivity		
	Debt to GNP ratio	Net foreign debt/GDP		
		Net & gross gov't debt/GDP		
	Investment share in GNP			
	Total overseas development assistance given/recd as % GNP			
Economic Indicators - Processes				
Energy per capita and intensity of use, use of renewable energy	Annual energy consumption per capita	Intensity of use of non-renewable resources (e.g., minerals, energy)		Energy consumption
	Share of consumption of renewable energy resources			
	Intensity of energy use			
Materials use per dollar of investment and per PCE	Intensity of material use			
Investment in R&D as a percentage of GDP	Expenditure on R&D as percent of GDP	Net saving rate		
Economic Indicators - Current Results				
Economy management index	GDP per capita	GDP/capita	GDP & GDP/head	
		Net national income/capita		
	Unemployment rate	Unemployment rate	Percentage of people of working age who are in work	Employment
Consumption and government expenditures per capita				
Homeownership				
Percentage of households with housing problems			Non-decent housing	
Vehicle ownership, fuel use and travel per capita	Distance traveled per capita by transport mode		Road traffic (road traffic by type of vehicle)	Transportation (# vehicles, distance covered, fuel)
	Balance of trade in goods/services			

SDI (2001)	UN CSD (2001)	OECD (1999 draft)	UK	Canada
Environmental Indicators - Long-term Endowments and Liabilities				
Surface water quality	BOD in water bodies Concentration of fecal coliform in freshwater		Rivers of good or fair quality	
Land use history	Area of selected key ecosystems Protected area as percent of total area Arable and permanent crop land area Land affected by desertification Area of urban formal and informal settlements Percent of total population living in coastal areas	Protected areas	New homes built on previously developed land	
Biodiversity	Abundance of selected key species	Share of threatened species	Populations of wild birds	
Contaminants in biota	Algae concentration in coastal waters			
Status of stratospheric ozone				
Greenhouse climate response index				
Environmental Indicators - Processes				
Ratio of renewable water supply to withdrawals	Annual withdrawal of ground and surface water as percent of total available water	Intensity of use of renewable resources (e.g., water, forest)		
Fisheries utilization	Annual catch by major species			
Invasive alien species				
Soil erosion rates	Use of fertilizers Use of agricultural pesticides			
Timber growth to removals balance	Wood harvesting intensity Forest area as percent of land	See intensity of use of renewable resources (above)		

SDI (2001)	UN CSD (2001)	OECD (1999 draft)	UK	Canada
Greenhouse gas emissions	Emissions of greenhouse gases	CO2 emission intensities	Emissions of greenhouse gases	Pollutant emissions (Greenhouse gases, Ozone-depleting substances, Acid gases, Toxics) Recycling of natural resources
Waste inventory	Consumption of ozone depleting substances	Waste generation intensities	Waste arisings and management	
	Generation of hazardous and radioactive waste			
	Generation of industrial and municipal solid waste			
	Waste recycling and reuse			
Environmental Indicators - Current Results				
Metropolitan air quality nonattainment	Ambient concentration of air pollutants in urban areas	Sox and Nox emission intensities	Days when air pollution is moderate or higher	Hospital admissions and smog Days of air pollution
Outdoor recreational activities				
	Economic and human loss due to natural disasters			
Social Indicators - Long-term Endowments and Liabilities				
U.S. population	Population growth rate			Population
	Population of urban formal and informal settlements			
Children living in families with at least one parent present				
Teacher training and applications of qualifications				
Telecommunications	Number of internet subscribers per 1000 inhabitants			
	Main telephone lines per 1000 inhabitants			
Wealth distribution	Gini index of income inequality			

SDI (2001)	UN CSD (2001)	OECD (1999 draft)	UK	Canada
Social Indicators - Processes				
Contributing time and money to charities				
Births to single teenage mothers				
Educational attainment by level	Adult secondary education achievement level	Attainment participation		
	Adult literacy rate			
People in census tracts with 40% poverty	Percent population living below poverty line			Average incomes/ percentage of people below the poverty line
				Food production/ number of people using food banks
Citizen's participation				
			Total and social investment as a	
Social Indicators - Current Results				
Crime rate	Number of reported crimes per 1000 population		Level of crime	
Life expectancy	Mortality rate under five years old		Expected years of healthy life	
	Life expectancy at birth			
Educational achievement rates			Educational qualifications at age 19	
Access to health care or health	Percent population with access to primary health care facilities			
	Immunization against infectious childhood diseases			
	Contraception prevalence rate			

SDI (2001)	UN CSD (2001)	OECD (1999 draft)	UK	Canada
Homelessness	Floor area per person			
	Ratio of average female wage to male wage			
	Percent population with adequate sewage disposal facilities	Population connected to waste water treatment plants		
	Population with access to safe drinking water			
Percentage children living in poverty	Nutritional status of children	Incidence of poverty	Indicators of success in tackling poverty and social exclusion (Children in low income households, adults without qualifications and in workless households, elderly in fuel poverty)	
Institutional Indicators				
	National sustainable development strategy			
	Implementation of ratified global agreements			