

INDICATORS MEASURING ACCURACY APPROPRIATE CULTURALLY SIGNIFICANT SAMPLE



*“Not everything that can be counted counts, and not everything
that counts can be counted.”*

– Albert Einstein



INDICATORS

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What is an indicator?

“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” (Hart, 1999). When chosen and measured correctly, indicators can give a picture of the physical, mental, financial and cultural status of our communities. People use indicators every day in nearly everything they do. A bank balance is an indicator of a person’s financial situation. Of course, just that one number, the bank balance, doesn’t show the whole picture of someone’s financial status. They would need to know other indicators describing all they owe and all they own.

The status of a community is similar. Residents need to consider several carefully chosen indicators. Those indicators need to be accurately measured in order to understand what is going on community-wide. When trying to collect information, set goals or answer questions about the quality of life of a community, measures that show change or demonstrate the status of a population must be established (Scovill, 1998).

A good indicator is...

Important: It means something to people, and it is related to an outcome.

Measurable: It has a high, medium or low value, or it is a number.

Reliable: It measures the same thing study after study. This is especially important for an indicator measuring a trend over time.

Responsive: A change in related factors will cause a reaction in the indicator.

Sensitive: It can be depended on to correctly identify a situation that meets certain criteria.

Specific: It can be depended on to correctly identify a situation that doesn’t meet certain criteria.

Valid: It measures what it is supposed to measure.

Source: Mausner and Kramer, 1985.

How indicators relate to each other

Although it may take some time to see the connections, the indicators selected for this book are related to each other. Ultimately, they combine to portray a picture of the quality of life in this parish. After reading through some of this information, you may have your own questions about your community. When you pose such questions, you are creating your own list of indicators and responding to local needs. Each community has its own concerns above and beyond the indicators that state agencies can provide. Each community needs to add to its profile by seeking answers to other questions.

How to think about data

Data can sometimes be intimidating. Often the numbers seem impersonal and out of context. Understanding the impact that data collection methods have on the numbers can take time and practice. Data in this book are portrayed in different ways, such as rates, trends and prevalences. Sometimes, it may be hard to believe that the data described apply to you or anyone you

know. The data provided here are based on populations, not individuals. Collectively, the data represent aspects of your parish or state. By asking certain questions, community members will see the relationships between people and numbers. The result could be a set or sets of indicators describing different aspects of a community.

Well-known Indicators

Gross National Product (GNP)	Economics
Consumer Price Index (CPI)	Economics
Birth Rate	Health
Mortality Rate	Health
Grade Point Average (GPA)	Education
Decibels	Hearing
Air Pollution Index	Environment
Miles per Gallon (MPG)	Transportation



What a community does in response to the data depends on what the residents want to accomplish. Each person who reads this book will use the data differently. Because this book cannot answer every question, each person will find a different direction for further investigation.

Another characteristic of indicators is that the process of examining them or collecting them brings together different partners in the community. Working on a set of local community indicators can be the starting point for future partnerships (Kingsley, 1998).

Indicators are useful in community development for several reasons. Indicators can be part of deciding which programs or activities are working and which are not. They can be, and often are, collected statewide, regionally or nationally in order to compare communities, regions or states. Good indicators will track the impact of a program or other intervention over time.

“Indicators are often a single number that is expected to represent something very complicated.”

complicated. For example, if a community wanted to investigate local high school educational efforts, someone might suggest using the percent of students in high school who graduate. The truth is that the community needs to know more than that one number (Scovill, 1998).

To understand what is going on in secondary education, they might want to look at the number of students per teacher, the amount of money in the district assigned per student, local bond issues, voting patterns, the percent of students that are attending private high schools in that district, as well as the age, race and economic status of students at the high school. Other important issues to consider could be PTA participation, average distance traveled from home to school, the turnover of teachers and the list goes on. A low percentage of high school graduations might end up being the result of many things, such as low local funding, high student-to-teacher ratio and high dropout rates.

Each of those causes may have contributing factors, such as a weak economy or small workforce in the area. Failing to graduate might not be due to poor teaching or an ineffective principal, although community members could have had reason to think that at first. To make informed decisions about secondary education, a variety of indicators is needed. The indicators in the Profiles were selected from existing

What makes a good indicator?

The previous discussion includes reasons to use, collect and review indicators. However, there are some complications. It is not just as simple as “collect an indicator – get information.” There are some other considerations.

- **Choosing indicators**

Indicators are often single numbers that are expected to represent something very

DID YOU KNOW?

Quality of life means different things to different people:

- *It depends on what people think is important. For a fishing enthusiast, it is being able to fish. For an avid reader it is good libraries.*
- *Health is only one component of “quality of life.” Education (good schools) and economics (ability to get a good job and live comfortably) are often mentioned as being the most important.*

- From an interview with community organizers, unpublished, Louisiana Office of Public Health, 1998.

Some groups that have data and indicators for communities:

1. School boards;
2. PTAs;
3. Hospitals;
4. Nonprofit organizations;
5. Women’s groups;
6. Recreation departments;
7. Police juries; or
8. Business associations.



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Communities around the country have chosen creative indicators, like:

- Packs of cigarettes sold per capita (Jacksonville, FL);
- Number of salmon in the annual run (Columbia Gorge, WA);
- Kilograms of waste per capita per year (Toronto, Canada);
- Income distribution (Seattle, WA); and
- DUI arrests per 10,000 population (Greenville County, SC).

- Tyler Norris Associates, 1997.

data that various programs and agencies had on record. Communities need to select their indicators based on local priorities and issues. Existing program data may only be a small component in a community's investigation.

• What do indicators really tell you

The way that the numbers are collected affects the indicator. If the people who are questioned in a survey are not like the audience the survey is supposed to represent, the numbers can be misleading. Let's say a community group is looking at attitudes towards health services. The group decides to use a questionnaire to be filled out at a clinic. The responses may show a high opinion of health services. However, this is only the opinion of the people who were coming in to use the clinic services. What the community really wanted to know was the opinion of clients and non-clients. The responses of the clinic users and nonusers most likely differ. This difference is because people at the clinic probably have a more favorable attitude about health services than those who don't use the clinics. Much thought and care goes into collecting information for an indicator. How a question is worded on a survey can affect the indicator. The methods that were used to collect an indicator are important to understand.

• What indicators can not measure

Indicators can not measure everything in the social sphere. One indicator, or even a few of them together, can not measure the effects of racism, for example. Police records can be reviewed and the number of hate crimes reported. The likelihood of the death penalty being given to a convicted criminal in relation to his/her race can be calculated. Deeper effects of racism are very difficult to document. Stress,

depressed immune systems from anxiety, long term effects on emotional and physical status are related to racism. Measuring these impacts in the context of racism is challenging. What is true for racism is also true for other profound social issues such as poverty, sexism, classism, inequality and injustice. All of these social realities have an impact on a community's quality of life, but they cannot be easily measured. Slow, methodical work over the long term builds an approximation of such complex issues.

• Causality

Just because an indicator appears to be related to a social, health or economic situation, does not mean there is a direct cause and effect. In

Scientific Criteria to Attribute "Cause"

There is a difference between a factor that "causes" and a factor that is only related to a phenomenon being studied. There are qualities that need to be present to say a factor is the cause of something. There are nine elements a cause has to address:

Strength: It is something important and the effect is strong;

Consistency: The same effect has been confirmed by other studies in other institutions;

Specificity: It is one factor not a combination of factors (which could be working in tandem or cross purposes to each other);

Temporality: First the factor happens then the resulting effect;

Response gradient: The more cause there is, the greater the effect;

Plausibility: The explanation makes sense;

Coherence: The data should concur with other information;

Experiments: Other studies have confirmed the cause;

Analogy: Other similar exposures or risks result in similar outcomes.

Source: Mausner and Kramer, 1985.



most societal circumstances, there are no direct or single causes. Instead, there are a host of contributing reasons for the way things are. For instance, in order to establish “causality” there are certain qualities that need to be present in order to say a certain factor is the cause of something (see the table, Scientific criteria to attribute cause, on the previous page).

The role of individuals, families and communities

We have touched upon what indicators are and the ways they act together to form part of our understanding of our community’s overall health. A community does have some control over these markers. You, your families and your communities can plan around the information in this book. You can ask questions about other indicators to complete your picture. It is with these questions that everyone can identify ways to improve your community’s quality of life.

“...if something is of concern to you, other people... may be interested in it too. Together you can work towards greater change.”

Some of the indicators in this book are favorable. Other indicators look less favorable by comparison with the state or nation. Those indicators are the ones that often get the most attention.

Positive indicators point out community assets. Positive or negative indicators offer insights into the forces that are affecting a community. All the possible factors that are contributing to either the positive or negative indicators should be considered. Often causes are not readily

visible. Remember, if something is of concern to you, other people in your neighborhood, church group or workplace may be interested in it, too. Together, you can work toward greater change.

Summary

Indicators are useful, but they must be chosen carefully. They help us understand where our community stands in comparison to other communities, states and nations. They have to be collected with appropriate methods and interpreted with care. We must remember that they are only a small window on a wide horizon of complex issues. They are affected by social change and the attitudes of society. They are a good beginning in understanding where our communities are and where they are going.

Indicators help point the direction that you, your family and your community can take to improve your quality of life.

Other quality of life indicators are:

Natural Environment - number of “good” air quality days;

Cultural - public library access, number of artistic civic events in the parish;

Business - patterns of corporate relocation, average salary;

Infrastructure - percent of persons with disabilities able to live at home;

Criminal Justice - types of crimes committed; or

Safety - police response time.

- Scovill, 1998.



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References

- Hart M. 1999. What are sustainable indicators? keywords: indicators of sustainability <http://www.subjectmatters.com/indicators>
- Louisiana Office of Public Health. 1998. Results of a Study on Community Organizing, Quotes from Quality Community Organizers. Policy, Planning and Evaluation Department. Office of Public Health. Louisiana Department of Health and Hospitals. (unpublished) .p. 8-9.
- Mausner, J and Kramer, S. 1985. Epidemiology, An Introductory Text. Saunder Company. Philadelphia.
- Tyler Norris Associates. 1997. The Community Indicator Handbook: Measuring Progress toward Healthy, Sustainable Communities. Redefining Progress; Sustainable Communities.
- Kingsley, G. 1998. Building and Operating Neighborhood Indicator Systems: A Guidebook. National Neighborhood Indicators Partnership. The Urban Institute.
- Scovill M. 1998. Community Health Assessment and Moving to Action. VHA Community Health Improvement. Presented at DHH-OPH Healthy Communities Summit "Putting Together the Pieces of a Thriving Community." May 27.