Measuring Community Success and Sustainability: An Interactive Workbook

Developed by the North Central Regional Center for Rural Development in collaboration with the Resource Conservation & Development Program and the Social Sciences Institute of the USDA Natural Resources Conservation Service and Rural Community Assistance Program of the USDA Forest Service

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Measuring Community Success and Sustainability: An Interactive Workbook was initiated as part of a project by the Aspen Institute’s Rural Economic Policy Program, funded by the Ford Foundation. The workbook’s development was supported by the North Central Regional Center for Rural Development with funding from the Resource Conservation & Development Program and the Social Sciences Institute of the USDA Natural Resources Conservation Service and the Rural Community Assistance Program of the USDA Forest Service.

Measuring Community Success and Sustainability: An Interactive Workbook (RRD 180) may be ordered from:

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August 1999

Version 3.1
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# Measuring Community Success and Sustainability
## An Interactive Workbook

## Contents

- Preface.................................................................................................................................................. v
- How Do Vital Communities Spell Success? ....................................................................................1
- Performance Based Measurement and Community Building:
  - Outcomes, Outputs, Activities and Inputs................................................................................3
- Planning for Action.............................................................................................................................7
- An Introduction to Measuring ..........................................................................................................9
  - Measurement Vocabulary..........................................................................................................14
  - Sample Indicators and Measures for Each of the Five Outcomes........................................17
- Outcomes and Measurement ..........................................................................................................19
  - Outcome 1: Increased Use of the Skills, Knowledge and Ability of Local People ............23
    - Examples of Indicators and Measures for Outcome 1.....................................................24
    - Creating a Measurement Plan for Goals Related to Outcome 1 ........................................27
    - Outcome 1: Case Study ......................................................................................................28
    - Measurement Plan ..............................................................................................................30
    - Community Year-end Assessment for Outcome 1..........................................................33
  - Outcome 2: Strengthened Relationships and Communication ............................................35
    - Examples of Indicators and Measures for Outcome 2.....................................................36
    - Outcome 2: Case Study ......................................................................................................38
    - Measurement Plan ..............................................................................................................40
    - Community Year-end Assessment for Outcome 2..........................................................42
  - Outcome 3: Improved Community Initiative, Responsibility and Adaptability..............43
    - Examples of Indicators and Measures for Outcome 3.....................................................44
    - Outcome 3: Case Study ......................................................................................................47
    - Measurement Plan ..............................................................................................................49
    - Community Year-end Assessment for Outcome 3..........................................................51
  - Outcome 4: Sustainable, Healthy Ecosystems with Multiple Community Benefits .......53
    - Examples of Indicators and Measures for Outcome 4.....................................................54
    - Outcome 4: Case Study ......................................................................................................56
    - Measurement Plan ..............................................................................................................62
    - Community Year-end Assessment for Outcome 4..........................................................66
  - Outcome 5: Appropriately Diverse and Healthy Economies...........................................67
    - Examples of Indicators and Measures for Outcome 5.....................................................68
    - Outcome 5: Case Study ......................................................................................................71
    - Measurement Plan ..............................................................................................................73
    - Community Year-end Assessment for Outcome 5..........................................................75
- Afterword...........................................................................................................................................77
Preface

Why Use This Workbook?

Measuring Community Success and Sustainability: An Interactive Workbook describes a process to help communities learn how to measure the local or regional impacts of economic and community development processes that enhance rural community sustainability. The principal purpose is to help communities learn how to measure the concrete results of rural community development and conservation efforts. The entire process is anchored in research that determined the ways in which communities define success in their local development efforts. The measures that came from those communities were analyzed in terms of existing research on community and ecosystem sustainability.

The workbook provides guidance to communities, nonprofit organizations and agency personnel who want to get a better idea of the possible ways to gather information that details progress toward community-established outcomes.

Rural communities use these outcomes to develop practical ways to measure progress toward both them and locally-established goals in terms of outputs, activities and inputs. Communities can relate their projects to the various outcomes and pick a single measure of that outcome from the menu or design their own measure. To date, a number of communities and multicommunity groups, such as Resource Conservation and Development Councils, have found the menus serve a basis to create their own measures to gather over time. Nonprofit organizations and agencies can then aggregate the data from each community by outcomes to report multi-area impacts over time. The principal purpose, however, remains to provide a way for local communities to measure progress toward local goals. A vital community has the capacity to use, sustain and renew the resources and skills it needs to thrive over time—and to become the kind of community its residents want it to become. Measurement gives feedback to make communities more effective.
How Do Vital Communities Spell Success?

When the North Central Regional Center for Rural Development asked rural communities to name the outcomes associated with their community activities that spell “success,” the communities consistently named five types of outcomes.

1. Increased use of the skills, knowledge and ability of local people.

2. Strengthened relationships and communication.

3. Improved community initiative, responsibility and adaptability.

4. Sustainable, healthy ecosystems with multiple community benefits.

5. Appropriately diverse and healthy economies.

The first three outcomes—increasing skills, strengthening relationships and improving initiative—relate to how development happens. The first uses and enhances human capital. The next two enhance social capital. The last two outcomes—sustainable, healthy ecosystems and appropriately diverse economies—relate to what happens when development succeeds. Environmental, financial and constructed capital are conserved and improved. Taken together, these five community outcomes define what a vital community in a healthy ecosystem looks like.

The Five Outcomes

1. Increased use of the skills, knowledge and ability of local people.

   Local people are the basis for community success. At times, much of a community’s existing human capacity is neither recognized nor used in community efforts. At other times, a lack of skills or knowledge keeps community members from making good decisions or achieving what they set out to do. Ongoing improvements in the knowledge and ability of a community’s residents help build rural community progress. Leadership skills can help mobilize people and resources.

2. Strengthened relationships and communication.

   Typically, a community is home to a wide variety of people with diverse backgrounds and views. Community efforts benefit when everyone has a voice, when all voices are encouraged, and when residents understand the means to express their views and contribute to the community. Respect, active
outreach, and information-sharing inside and outside the community—among individuals, organizations, businesses and agencies—can lead to collaborative ventures no one group could do alone. Relationships with the outside are strong in vital communities. There are linkages with other communities and with organizations, enterprises and agencies outside the community.

3. **Improved community initiative, responsibility and adaptability.**

A community that is responsible for its own future shares a well-crafted and widely considered vision for the future, turns it into reality through strategic local action, and makes changes when conditions or assumptions change. A community that monitors and documents the results of its actions, and that regularly reflects on its progress and barriers, learns from its experience. It becomes more resilient, more capable of adapting to change, and better able to improve its efforts and sustain itself over time.

4. **Sustainable, healthy ecosystems with multiple community benefits.**

Human communities are part of natural ecosystems. The responsible stewardship of natural resources sustains businesses and families in communities over the long term. Finding the common ground among people who have emotional, symbolic or economic identification with a place, whether or not they live there, is essential to making decisions about development and resource use that will enable communities and their resource base to survive and thrive. Human communities plan and act in concert with the natural systems in which they are located.

5. ** Appropriately diverse and healthy economies.**

Vital economies deploy financial, natural and human resources to create, maintain and improve local livelihoods. A diverse industry base helps maintain services, businesses and households when the economy fluctuates. In healthy economies, community residents move toward self-sufficiency and prosperity, local businesses modernize and find new markets, local ownership of homes and businesses increases, and local people and financial institutions invest in the community.
Performance Based Measurement and Community Building: Outcomes, Outputs, Activities and Inputs

Investors of all sorts—private foundations, local citizens, state and local governments—want more than assurance that their resources were legally spent and appropriate activities were carried out. They want to know the outputs of the supported activities and the outcomes the outputs lead to in the short and the long term.

Successful communities focus on outcomes. Planning starts from where a community wants to go. Once that is clear (often in a vision or mission statement which states specific outcomes), alternative ways of getting there can be considered (outputs). The actions (activities) necessary to achieve the various outputs can be considered. Finally, the inputs of time, skills, technical assistance, equipment, space and dollars can be calculated. If the actions to get to an output that lead to an outcome are too costly, then another output that leads to the same outcome can be considered. This is a typical strategic planning activity, which builds on the Total Quality Management literature, which focuses on results.

Implementation of outcomes-based monitoring has been resisted, misunderstood and problematic. A major reason behind the struggle of implementation is because while the entity can control inputs (invest x $), actions (planning and construction of a water system) and to some degree outputs (y meters of sewer line), it cannot control the outcomes. The outcomes to which the sewer line was supposed to contribute include increased public health, a more diverse and stable economy, and a healthier ecosystem. The outcomes justify the mission of the organization and the reason for the investment of public dollars.
Starting from a Vision: The Importance of Outcomes

Traditionally, success has been measured by input-output analyses. However, we know now that successful communities also look at actions and outcomes. Inputs that come from within the organization as well as other partners are used to institute actions by people and organizations in both programs and projects that produce outputs in state and federal agencies as well as in other organizations. Outputs, which can be controlled almost completely by the organization, are designed to contribute to outcomes—the reasons for the programs in the first place. Outcomes are generally described in global and abstract terms, yet for performance-based measurement to both improve accountability and improve effectiveness of outcomes, such as vital communities or healthy ecosystems, outcomes must be made concrete and linked to inputs, activities and outputs.

Outcomes drive the inputs—which resources are allocated in what amounts at what times; the activities—who does what, when, where, in what ways; the outputs—in terms of products that are controlled by the organization and stem directly and measurably from the inputs and activities.

A community or group can have goals related to any of these and too often the goals focus on increasing inputs or carrying out actions. The more goals can be related to outcomes, the more flexibility and creativity an organization or community has—and greater probability of sustainable outcomes.

A key attribute of this approach is that it allows for serious consideration of alternatives. A focus on outcomes enhances appreciation of diversity, as more perspectives increases the alternatives considered. Still, many of us balk at the ambiguity of considering alternatives. We are comfortable with the answer. But any answer or solution simply opens a new set of issues. Focusing on outcomes is a critical part of dealing with the world we live in—a complex world of constant change.
Example of Assumed Relationships to Be Tested

Outcomes ← Outputs ← Activities ← Inputs

Increased use of skills of local people
Increased communication
Increased initiative
Healthy ecosystem
Vital economy

CPR ← CPR class ← $  
CPR certified individuals
Sewer system ← Sewer construction
Visitor's center ← Planning construction
People ← Land
Planning for Action

What Are We Going to Do?
How Are We Going to Do It?

Planning for action begins with identifying one or more actions that are expected to bring a community closer to its outcome(s) and then assigning responsibility to groups or individuals to carry out the planned action(s). Each action should have a time line, a way to access the necessary resources, and someone in charge of making sure it gets done. Planning for continuous learning means planning to gather information to determine the results of the actions. It means establishing a yardstick that allows the entire community to determine whether or not this action helped achieve the community’s goals, which are linked to outputs and outcomes.

There is an important difference between measuring the success of an action in and of itself, and determining whether or not the action moved the community closer to its goals. For example, a community may decide to hold a series of summer events for teenagers in order to reduce teenage crime. The community may succeed in holding a series of summer events for teenagers, and those who attend may have a good time, but if the goal of involving teens in community activities was to reduce the teenage crime rate, there’s no guarantee that the summer events were effective in moving the community toward its goal. Further, there is no way to know this without collecting the necessary information about teenage crime before and after the summer events take place.

Guiding Questions
◆ What are the actions the community is considering to move toward its goals?
◆ Who will take responsibility for each action?
◆ Is there a realistic plan to accomplish each action with available resources and within a reasonable time frame?
◆ How will the community know if the action was carried out properly?
◆ How will the community know if the action contributed to reaching its goal?
◆ Who will take responsibility for collecting the necessary information?
◆ How will this information help the community make better decisions in the future?
Resources

Take Charge: Economic Development in Small Communities, North Central Regional Center for Rural Development, Iowa State University, 108 Curtiss Hall, Ames, IA 50011-1050; (515) 294-8321.

The Economic Renewal Guide: How to Develop a Sustainable Economy Through Community Collaboration, by Michael Kinsley, Rocky Mountain Institute, 1739 Snowmass Creek Rd., Old Snowmass, CO 81654; (970) 927-3851.


Guide to Sustainable Community Indicators, Maureen Hart, QLF/Atlantic Center for the Environment, 55 Main St., Ipswich, MA 01938; (508) 356-0038.

Where We Live: A Citizen’s Guide to Conducting a Community Environmental Inventory, Donald F. Harker and Elizabeth Ungar Natter, Mountain Association for Community Economic Development; Island Press, P.O. Box 7, Covelo, CA 95428; (800) 828-1302.
Why We Measure

Measuring is a tool for reflection, and reflection is key to continuous learning. The information we collect through the measuring process helps us understand the real connections between our actions and our goals. Measuring allows us to test the assumptions we all make about how things work. If we find that our assumptions are wrong, which many times they are, through measuring we can get new ideas about what’s true for our community. Then we can refocus our actions to make sure we can achieve our goals.

Communities measure to learn and also to demonstrate accountability. When we do things together with resources entrusted to us by the public, we are obligated to be accountable in a systematic way. These measurement tools allow us to inform our community and our partners how well we and they are doing with the scarce resources available.

This section of the workbook is an introduction to the process of measuring progress toward community outcomes. It includes guidelines for measuring, a vocabulary of measurement, and examples of indicators and measures for each of the five outcomes.

Guidelines for Measuring

Choosing Our Measures

What we measure is what we do. The process of measuring focuses our attention on how our chosen action is changing the world around us. It makes a great deal of difference what we choose to measure, because what we measure is what we pay attention to.

For example, if our goal is economic security, one indicator is more jobs available in the community. We could measure the number of jobs created, which would reflect a focus on creating jobs. However, if what we really mean by economic security is better employment options for low-income people, then we would want to measure how many new jobs employ low-income people at an adequate pay rate. New jobs may have been created, but perhaps only a small number have gone to low-income people in our community. Different actions than simply creating jobs may be needed to create better employment options for low-income people that increase their financial security. For example, we might invest in training, develop a mentoring program, and establish childcare and transportation services.

What we choose to measure matters, because what we choose to measure will help shape our actions and help us understand more about the real problem or opportunity we are trying to address.
Measuring 'Goods' Versus 'Bads'

Measures can focus on good things or bad things. For example, we could count the number of people who are unemployed (a bad), or we could count the number of people who are employed (a good). By focusing on a good, we acknowledge the strengths and assets of our community and create a positive base from which to build. Our actions will tend to focus on increasing the number of people who are employed, rather than reducing the number who are unemployed.

This is an important distinction, since official unemployment rates don’t include people who are no longer looking for work. Therefore, more people could become employed without necessarily reducing the number who are counted as unemployed. Whenever we have a choice between focusing our measures on a good or a bad, choosing the good will give us a stronger, more positive foundation.

Measuring Progress Toward Community Goals Versus Measuring Actions

Typically, when we are asked to measure our progress, what we are really being asked to do is count the number of times we have performed some action. When we measure progress toward community goals, we are not counting actions, nor are we interested in whether the action was a success in itself—what we want to know is if the action (whether a success or a failure) moved our community closer to its goals.

This is a community-centered process, not a government-centered process. Communities may and do work with a broad array of partners. The question is whether the way that all these resources are engaged is actually helping a community reach its goals.

What Can and Should be Measured

The following guidelines will help you decide what to measure with respect to each of the five outcomes.

♦ **Measure progress toward meeting community goals.**
  
  If it was worth defining a goal, then it’s worth knowing how well that goal has been accomplished.

♦ **Measure only those things that will give needed information.**
  
  There is no use wasting time and resources collecting statistics which will serve no useful purpose.
♦ Concentrate on those indicators that have the most potential to help redirect activities.
What information will be most useful in making decisions concerning the community’s plan?

♦ Where direct measurement of important factors seems impossible or prohibitive, select proxy indicators.
Choose an indicator that seems close to the information sought.

♦ Balance the need to know with the ability to find out.
Attempt to measure only what the available skills and resources can reasonably be expected to measure.

Adapted from:
Measurement Vocabulary

Visions and Outcomes

To begin the process of measuring progress, a community must first establish a vision for itself. Community visions are generally very broad, like economic security, healthy natural resources or good quality of life. Achieving that vision usually requires a change in the way the community will look and feel to the people who live there. Community vision statements usually suggest community outcomes. An outcome is the condition the community wants to achieve.

Most community visions are related in some way to at least one of the five outcomes that characterize vital rural communities. When communities consider the relationship of their goal(s) to all five outcomes, communities structure their actions to achieve lasting benefits. By measuring progress toward their outcomes, communities define a focal point for reflection and refocusing.

Actions

Actions are the steps a community takes to attempt to achieve its goal(s). Most communities simultaneously pursue a number of actions that may or may not be well-coordinated or effective in moving the community closer to its vision and outcomes. The process of measurement helps communities tie their actions more consciously to their vision.

Communities often confuse their actions with their outcomes. For example, if an outcome is economic security, then creating jobs may be one action to move toward that goal. If communities list actions instead of outcomes, one way of figuring out the relationship between the action and the community’s outcomes is to ask “why” the community wants to do that action. What is the condition the community wants to achieve?

Indicators

An indicator is one component that must be changed or a condition that must be achieved by the actions the community undertakes in order to claim that progress has been made toward the vision. It is put in terms of an output or an outcome. Since visions are generally quite broad, there are many possible actions and many possible indicators that could suggest progress toward the goal.

Different people in the community will interpret the vision in different ways and will, therefore, suggest different indicators of progress. It is important that a community recognize and respect the diversity of interpretations of its vision.
A measure provides a way to actually count or value the status of an indicator. For example, things may be measured in terms of the number of, percent of, quality of, or rating of.

To track a measure over time, you must have:

♦ A unit, which defines the increments of the measure; that is, what you are counting—such as inches, tons, people, hours, conversations, column inches of newsprint, etc.

♦ A unit of analysis, which sets the limit on the units you count—such as the city of Greeneville, Victoria County, or the Salinas watershed.

♦ A base line, which defines the value of the measure at a starting point that you determine.

The purpose of measuring is to help communities determine for themselves if their actions are really helping them progress toward their vision.

The relationship among outcomes, indicators and measures is illustrated on page 17. Community visions, as with outcomes, will be the broadest statements of the conditions the community wants to achieve.

Here is how the town of Henrietta used the vocabulary:

The community chooses the outcome of a healthy diverse economy.

The goal is to reduce the number of people in poverty.

The indicator is a higher proportion of the population able to meet their basic needs.

The measure is the percent of utility bills paid on time.

The unit is utility billing units.

The unit of analysis is the western part of the county, which share four different zip codes for billing purposes.

The baseline is the number of late payment notices sent out in the four zip codes, divided by the number of utility hookups in the area on March 1, 1996.

Henrietta, after looking carefully at the gifts of local people and the environmental resources in the area, organized a pine needle craft enterprise together with a firm that
bundles pine needles for mulch. That **action** in April 1996 offered employment to those who did not have transportation to leave the community or the educational level to undertake a desk job.

By March of 1998, the measure had moved from 56 percent of utility bills paid on time to 77 percent of the utility bills in the area of analysis paid on time. The citizens of Henrietta believed that their **actions** had moved them toward their **goal**.

For more information about visioning, see *Community Visioning/Strategic Planning Programs: State of the Art*, by Norman Walzer et. al., 1995, North Central Regional Center for Rural Development: Ames, IA; (515) 294-8321.
<table>
<thead>
<tr>
<th>OUTCOMES</th>
<th>INDICATORS</th>
<th>MEASURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Increased Use of the Skills, Knowledge and Ability of Local People</td>
<td>Identification of local skills for local projects</td>
<td>Number of cooks participating in the community mid-winter dinner.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Strengthened Relationships and Communication</td>
<td>Increased interaction among different segments of the community.</td>
<td>Number of organizations represented on the community improvement committee.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Improved Community Initiative, Responsibility and Adaptability</td>
<td>Loss of the victim mentality.</td>
<td>Ratio in letters to the editor and editorials of the term “if someone would” to “we will.”</td>
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<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Sustainable, Healthy Ecosystems with Multiple Community Benefits</td>
<td>Finding common ground in conflicts.</td>
<td>Number of times that state/federal authorities reference local environmental or natural resource management plans as part of their decision-making process.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Appropriately Diverse and Healthy Economies</td>
<td>Enhanced business efficiency.</td>
<td>Number of local businesses which have access to the internet.</td>
</tr>
</tbody>
</table>
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Outcomes and Measurement
The Measurement Plan

A measurement plan only makes sense when the community has a shared vision on where they want to be in the future. Goals come from that vision statement. The breadth of the vision statement is shown by the number of the basic five outcomes the goals relate to.

Some communities, when they put together a measurement plan, classify their current projects according to their vision and the five outcomes. Projects often can contribute to more than one outcome. For example, James Brown was eager to identify cooks to participate in the mid-winter festival because he sees it as important in using local skills and knowledge. Sherry Blackhorse sees that increasing the number of cooks in the event leads to increased diversity and communication in the community. Sven Nelson is convinced that getting more cooks to participate in the mid-winter festival could lead to a number of micro-food processing enterprises, which would help economic diversity. All are right. But each would measure a different outcome as a result of that action.

Once community projects or actions are linked to outcomes, it becomes easier to decide what to measure. Sometimes it is hard to link an action to any outcome. In that case, communities sometimes decide to engage in different actions.

We have listed a menu of measures that might be helpful in determining the degree to which your community is successfully moving toward its goal. But these are only a beginning. The ideal measure is what makes sense in your community when you consider how to invest your resources (inputs) into actions that create a sustainable future.
Outcome 1

Increased Use of the Skills, Knowledge and Ability of Local People

Explanation

An ongoing increase in the use of the knowledge and ability of local people, including the leadership skills that can help mobilize people and resources, builds rural communities.

At times, a lack of skills or knowledge keeps community members from making good decisions or achieving what they set out to do. At other times, much of a community’s existing human capacity is neither recognized nor used in community efforts.

Choosing a Community Assessment Indicator

The first step in measuring progress toward community goals is identifying one or more key indicators of progress. You may wish to consider three separate, but related, aspects of indicators of progress toward increasing skills, knowledge and ability of local people. These three aspects are:

♦ Using the skills, knowledge and ability of local people
♦ Enhancing the skills, knowledge and ability of local people
♦ Recombining the skills, knowledge and ability of local people

Your community will need to identify one or more specific key indicators related to Outcome 1. The indicators you choose should be relevant to your community. The following pages present some examples of indicators and measures for you to consider. You may choose to modify these examples or develop entirely new indicators and measures of greater relevance to your community goals.

Examples of Indicators and Measures

See the following chart for some examples of ways communities might measure an increase in use of the skills, knowledge and ability of local people.

<table>
<thead>
<tr>
<th>Indicator 1. Using Skills, Knowledge and Ability of Local People</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measure</td>
</tr>
</tbody>
</table>

23
1.A. Percentage of training program/leadership class graduates who participate in and serve on the boards of directors of organizations serving the community.

Even more important than training is using the skills and information gained. When people trained in group processes and facilitation take an active role in community organizations, these groups will be more effective and a wider audience will be exposed to the value of effective organizational methods.

1.B. Number of local residents listed in community skills bank.

A community skills bank lists the gifts and talents of community members that can be used for both business and community ventures. Often citizens’ skills are unrecognized and thus under-used. Schools, churches and/or community groups—especially those that rely on volunteer labor—may have skills banks. The skills bank should be updated regularly.

<p>| Indicator 2. Enhancing Skills, Knowledge and Ability of Local People |</p>
<table>
<thead>
<tr>
<th>Measure</th>
<th>Sources</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.A. Number of training programs available to community members.</td>
<td>Universities, community colleges, churches, cooperative extension, businesses, community organizations</td>
<td>Review enrollments and match with organization memberships, and/or phone, mail or in-person surveys of community group members</td>
</tr>
</tbody>
</table>

Provision of training programs measures an action intended to influence the skills, knowledge and ability in a community. The range of training opportunities available locally from vocational schools, community colleges, public service organizations, private businesses and local governments reflects community support for continuous learning.
## Outcome 1. Increased Use of the Skills, Knowledge and Ability of Local People, continued

<table>
<thead>
<tr>
<th>Indicator 2. Enhancing Skills, Knowledge and Ability of Local People, continued</th>
<th>Sources</th>
<th>Method</th>
</tr>
</thead>
</table>
| **2.B. Number of people from diverse parts of the community trained (or being trained) in leadership or community development.**  
The number of people trained from different parts of the community—young, old, different ethnic groups, different parts of town and country, old-timers and newcomers—provides a strong basis for community action. Diverse and renewed leadership within a community results from training programs that succeed in enrolling a diverse group of participants. | Universities, community colleges, churches, cooperative extension, businesses, local government, individuals | Contact sources (phone, mail or in person) and review enrollment records |
| **2.C. Number of citizens with access to a personal computer and modem.**  
Citizens who can access information from the outside can greatly increase the store of knowledge available to individuals and to the community as a whole. Access can occur at home, at work, at school, or in the public library or community center. Access to and knowledge of on-line services indicate an ability to facilitate communication and gather and process information that may aid community development efforts. | Households, local Internet providers, local computer sales/repair stores, public library, school computer access | Survey by phone or mail |
| **2.D. Number of community organizations and local government bodies that hold skills training workshops for their members.**  
When local organizations originate training, it is more likely to meet community needs. The priority that organizations give to increasing the skills of their members increases the likelihood that these skills will be incorporated into the daily operations of the organization. | Community organizations and local government bodies | Review agendas or documents, survey by phone, mail or in person |
Outcome 1. Increased Use of the Skills, Knowledge and Ability of Local People, continued

<table>
<thead>
<tr>
<th>Measure</th>
<th>Sources</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.A. Number of times local decision-making bodies consult community and regional data before making decisions.</td>
<td>Community organizations and local government bodies</td>
<td>Review minutes and funding proposals, reporting by members or attendees, survey, interviews for evidence of use of data most relevant to community goal</td>
</tr>
<tr>
<td>This shows that the community makes decisions using the information-gathering skills of its citizens.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.B. Number of community organizations and local government bodies that use group process techniques to address issues or solve problems.</td>
<td>Community organizations and local government bodies</td>
<td>Review minutes, reporting by members or attendees, survey, interviews for evidence of use of group process techniques</td>
</tr>
<tr>
<td>This measure shows that the skills, knowledge and abilities of local citizens are used. Group process techniques aim to increase the diversity of participation and the range of ideas which are considered in a discussion. There are many group process techniques such as brainstorming, force-field analysis and story boarding. They all rely on formal or informal facilitation. The long-term and cross-sector implications of a community organization’s efforts are strengthened by these processes.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.C. Number of community meetings held to accommodate citizens who would otherwise not attend.</td>
<td>Community organizations</td>
<td>Each reports annually on a form the innovative actions taken to increase inclusiveness and the number of new participants as a result.</td>
</tr>
<tr>
<td>Very often inviting a diverse group is not enough. Poor and elderly citizens may need transportation to attend. Meetings at the country club at noon may discourage factory workers from attending. Signing and translation can encourage participation from those with difficulties understanding spoken English.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Creating a Measurement Plan for Goals Related to Outcome 1

To measure progress toward our goal(s) on at least an annual basis, we need a base line that we identify or can gather now to tell us our current situation on this measure. In order to know the progress we’ve made toward our goal, we need to know where we started. Base line data are the initial evidence we have as to where we are now, so that when we measure a second, third and fourth time, we can see if our action is actually moving us toward our goal.

1. What is an important indicator of increased use of the skills, knowledge and ability of local people?

2. What is a measure related to this indicator?

3. What is the base line measure?

4. What is the unit of measure?

5. Where will we get the information we need?

6. How will we get the information we need?

7. Who will collect the information we need?

8. Will they be paid?

9. How many hours will it take?

10. When will the information be collected?

11. How will we measure progress from the base line?

12. How else can we use this information to achieve our community’s goals?
OUTCOME 1: Increased Use of the Skills, Knowledge and Ability of Local People

The Clifton Choctaw Reservation is a small community in rural Louisiana. The community was founded in the late 1700s by Jesse Clifton and was originally settled by individuals who escaped the Trail of Tears by hiding in the swamps of Louisiana. Presently 326 Clifton Choctaw live in the area, about 85 households.

A Clifton Choctaw representative and coordinator highlights three priorities for the community: 1) poverty reduction (healthy economy), 2) education (increased local skills and abilities), and 3) health care (local initiatives and adaptability). Ninety-nine percent of Clifton Choctaw residents have incomes below the poverty rate. The nearest outside job prospects are located 30 to 40 miles away, and most Clifton Choctaw community members do not own automobiles. The high illiteracy rate in the community makes the search for jobs even more difficult. In 1990, 85 percent to 95 percent of students dropped out of school without graduating.

A USDA Forest Service Rural Development officer first met with community leaders to discuss possible community projects that could be funded by the Forest Service in the early 1990s when he was looking for new projects in the area. This began an ongoing partnership and provided a spark for new developments and activities by the tribe. Even before this meeting, an awakening had begun in the tribe with the election of new leadership in 1984. In 1987 residents donated funds and built a community center. The center became a place for GED classes and after-school tutoring, as well as other activities.

In the first meeting between the Forest Service and the residents, the group deliberately worked to match projects to existing skills. A number of community residents grow gardens or rake pine straw, bale hay or work in houseplant potting factories. One woman previously had worked in a nursery and now was running her own small nursery with approximately 150 plants. Thus, the first Clifton Choctaw—Forest Service project constructed a plant nursery and greenhouse next to the community’s craft shop. The nursery became very successful and new nursery customers have increased sales in the craft shop as well.

A second joint project involved raking and baling pine straw in the Kistachie National Forest. The bales are sold to a transportation service and taken to the market. By 1995 the tribe was selling 20,000 bales annually.

Shortly after the pine straw project got underway, the community learned that the Forest Service was looking for growers of containerized long leaf pine seedlings. They provided the Forest Service Rural Development officer with information and a draft proposal for a nursery and seedling project. The officer assisted the residents with their
proposal, providing the experience in grant writing that increased the proposal’s chance of getting funded.

Again, the opportunity matched the skills and experience of local community members who grew up in and around the forests and had worked with trees. At the same time the organization and implementation of the project provided opportunities for community members to learn new skills and to take on some leadership responsibilities. In 1994 the Clifton Choctaw and the Forest Service signed a five-year contract whereby the tribe agreed to supply the Forest Service with containerized seedlings. Using local financing for start up costs, the first growing season produced 100,000 seedlings. A federal loan financed the second season and the tribe produced 200,000 seedlings. With contract production increasing annually by 100,000 increments, the Clifton Choctaw will supply the Forest Service with 500,000 seedlings by 1998. The seedling business provides four year-round jobs and potentially another 15 or so seasonal jobs.

The Clifton Choctaw community leadership is working to reduce poverty in its community, but has also recognized that using and building on the skills and abilities of community members had important values as well. By 1995 most households had at least one member raking and baling straw and potting plants. One of the local leaders reported tribal members now believe “there is something out there that we can do, and we are doing it.” She also has observed a renewed work ethic and renewed pride in the community. Meaningful productive work opportunities that value the existing human capacity help define success in the Clifton Choctaw community.
Measurement Plan for Outcome 1

1. What is an important indicator of increased use of the skills, knowledge and ability of local people?
   ♦ Meaningful productive opportunities.
   ♦ More individuals involved in meaningful work.

2. What is a measure related to this indicator?
   ♦ Number of people locally employed (while this might be difficult to follow in a larger community, a community of 325 people makes it possible).
   ♦ Number of people involved in leadership positions in local industries.

3. What is the base line measure?
   ♦ Number of people locally employed in 1990.
   ♦ Number of people involved in leadership positions in local industries in 1990.

4. What is the unit of measure?
   ♦ Number of meaningful job opportunities.
   ♦ Number of people.

5. Where will we get the information we need?
   The seven-member Tribal Council meets once a month, and the entire tribal membership meets quarterly. This information will be gathered in both of these settings. Also a member of the Tribal Council will be selected to visit old and new projects and to talk with members of the community in different settings about changes in employment possibilities.

6. How will we get the information we need?
   A. The Tribal Council will select a member to pay special attention to the development of meaningful job opportunities in the community.
   B. BASE LINE. The selected member of the Tribal Council will visit old and new projects to find out when they were founded and how many employees they had in 1990.
   C. ONGOING. Have someone from the tribal administration visit old and new projects annually to observe the developments that have taken place.
   D. ONGOING. Progress on the development of meaningful job opportunities will be a standing agenda item for the monthly Tribal Council and quarterly tribal membership meetings—in these meetings changes and developments will be
discussed and new information will be collected. People involved in old and new projects will be encouraged and occasionally specially invited to present information about their projects in these meetings.

7. **Who will collect the information we need?**

The person selected by the Tribal Council to pay special attention to the development of meaningful job opportunities will oversee the collection of information on community progress toward this outcome. She or he will also be responsible for proposing the key aspects of jobs that should be monitored—this might include the kind of work involved, the potential for advancement or training, the pay, the availability of benefits, as well as other items.

8. **Will they be paid?**

Yes, as part of his or her work with the Tribal Council.

9. **How many hours will it take?**

A. **INITIALLY.** Monitoring progress in this area initially will require significant thought and planning. Meeting with local businesses and ongoing projects to collect background information for the baseline numbers will take several days because it will be important to take the time to talk with each one about the intent of the council in measuring progress toward this goal.

B. **ONGOING.** Ongoing monitoring should take no more than 10-20 minutes in each meeting, depending on the nature of the discussion and an occasional one-half day to visit a new project or update information about an ongoing project.

10. **When will the information be collected?**

Information will be collected continuously, through already scheduled monthly and quarterly meetings. Progress as compared to the baseline will be compiled and presented annually unless there is a reason to review developments more frequently.

11. **How will we measure progress from the base line?**

Increase in number of people employed locally (or in number of meaningful local jobs) and in number of people taking leadership roles.

12. **How else can we use this information to achieve our community’s goals?**
Knowing how many people are working and what kinds of skills they are developing through their work can help us plan for future industry and future training opportunities. It can also increase pride in the skills and abilities of community members, as well as confidence in the potential success of future projects.
Community Year-End Assessment
For Outcome 1

1. What was our indicator of progress toward Outcome 1?

2. What measure did we use to track progress toward Outcome 1?

3. What was our base line measure?

4. What was our unit of measure?

5. To what extent did the use of the skills, knowledge and ability of people in our community increase during the reporting period? (Circle One)

   DECLINED  ABOUT  INCREASED  INCREASED
   THE SAME  SOMEWHAT  SIGNIFICANTLY

6. What was our plan for collecting data on this measure?
   - Frequency:
   - Sources:
   - Method:

7. What did we learn about progress toward our goal?

8. How will our community goal or actions change because of what we learned?

9. What did we discover—good or bad—about using this measure that may be helpful to our future efforts or to other rural communities?
Outcome 2

Strengthened Relationships and Communication

Explanation

Typically, a community is home to a wide variety of people with diverse backgrounds and views. Community efforts benefit when everyone has a voice, when all voices are encouraged, and when residents understand the means to express their views and contribute to the community. Respect, active outreach, and information-sharing inside and outside the community—among individuals, organizations, businesses and agencies—can lead to collaborative ventures that no one group could do alone.

Choosing a Community Assessment Indicator

People feel better about themselves and their community when they know and respect others who live there. Sharing local information with each other increases community identity and sense of belonging. You may wish to consider three separate, but related, aspects of indicators of progress toward strengthened relationships and communication. These three aspects are:

♦ participation
♦ communication
♦ relationships

Your community will need to identify one or more specific key indicators related to Outcome 2. The indicators you choose should be relevant to your community. The following pages present some examples of indicators and measures for you to consider. You may choose to modify these examples or develop entirely new indicators and measures of greater relevance to your community goals.

Examples of Indicators and Measures

See the following chart for some examples of ways that communities might measure strengthened relationships and communication within their community.
## Outcome 2. Strengthened Relationships and Communication

### Indicator 1. Participation

<table>
<thead>
<tr>
<th>Measure</th>
<th>Sources</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.A. Number of newcomers or minority citizens participating in community’s actions for the first time.</td>
<td>Participants at community meetings, officers of key community organizations</td>
<td>Survey or interviews</td>
</tr>
<tr>
<td>Diversity and openness of participation have been shown to be critical for community success. Community development depends on active participation of a large cross-section of stakeholders.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.B. Number of community members at youth events.</td>
<td>Youth-sponsored events</td>
<td>Counting non-youth participants</td>
</tr>
<tr>
<td>Building new community connections depends on bringing together individuals who feel more comfortable with people like themselves. Cross-group participation—particularly across generations—strengthens community participation.</td>
<td></td>
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</tr>
</tbody>
</table>

### Indicator 2. Communication

<table>
<thead>
<tr>
<th>Measure</th>
<th>Sources</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.A. Number of organized public opportunities for discussion.</td>
<td>Newspapers and public notices</td>
<td>Content analysis</td>
</tr>
<tr>
<td>Good community decisions are based on listening to and valuing diverse ideas and speakers. Several opportunities for discussion at different locales, times, and dates facilitate this inclusive communication. Chances for discussion of alternatives help in choosing and modifying actions.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.B. Number of inches of newspaper space devoted to public issues/community actions.</td>
<td>Newspapers</td>
<td>Count total inches of print</td>
</tr>
<tr>
<td>Newspapers have been shown to be critical in generating community success by laying out issues and alternatives over time. Diverse participation in community actions in part is a function of the level of media publicity to increase awareness of community actions.</td>
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</tr>
</tbody>
</table>
### Outcome 2. Strengthened Relationships and Communication, continued

<table>
<thead>
<tr>
<th>Measure</th>
<th>Sources</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.C. Percentage of residents with internet access.</td>
<td>Internet service providers</td>
<td>Actual number at the same date each year.</td>
</tr>
<tr>
<td>Linkages inside and outside of the community can be facilitated by internet access. Connectedness can help communications.</td>
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<td></td>
</tr>
</tbody>
</table>

#### Indicator 3. Relationships

<table>
<thead>
<tr>
<th>Measure</th>
<th>Sources</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.A. Number of civil cases in the local court.</td>
<td>Court records</td>
<td>Annual count of civil legal actions filed</td>
</tr>
<tr>
<td>When relationships are strong, neighborliness and alternative dispute resolution keeps antagonism down. Decline in the number of civil suits indicates better intra-community relationships.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.B. Number of organizations that cosponsor events, activities or projects.</td>
<td>Meeting minutes, advertisements, interviews</td>
<td>Content analysis and count</td>
</tr>
<tr>
<td>The ability of organizations to work together and share credit is critical to community success. Combining the financial, human and logistical resources of different groups leads to achievements not possible for single organizations.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.C. Percentage of members of the community's largest organization that belong to at least one other organization (cross-membership).</td>
<td>Organization rosters and directories</td>
<td>Content analysis (cross-referencing) and count</td>
</tr>
<tr>
<td>Informal communications occur through cross-membership and are often more critical than formal communications. The sharing of ideas and goals is facilitated when community members are actively involved with more than one community organization.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.D. Number of technical assistance visits and contacts with or from state or federal agencies with community organizations.</td>
<td>Interviews with agency staff and community leaders</td>
<td>Content analysis</td>
</tr>
<tr>
<td>Linkages to outside agencies are important in mobilizing the resources needed to reach community goals. Community development is enhanced when local groups know how to access and use state and federal resources.</td>
<td></td>
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</tr>
</tbody>
</table>
OUTCOME 2: Strengthened Relationships and Communication

Strengthened relationships and communication are illustrated by a USDA Forest Service employee involved with the Rural Community Assistance Program.

“In about the last four or five years, through community projects in our forest, the community of Ducktown has turned the corner in building community trust. When we are active and work with our communities and with our district ranger and others, everything goes easier. If we participate in the community, community residents can look at us in the Forest Service and say, ‘These people are for real, they want to help. I am not going to object to their timber sale or road construction or new campground. We can trust them.’ There is this thing called trust.

“I was with the county commissioner yesterday, a guy named Mike Stennet. Our timber staff officer and I went to see him just to talk and have a visit about several things. He said, ‘Guys, I want to tell you, in the last several years you all have shown our county that you want to be a neighbor.’ That is what we are after.

“We want to be a good neighbor. The Forest Service often owns 50 or 60 percent of a county; it had better be a good neighbor. It owns half of the county and gives 25 percent returns to compensate the county for not collecting taxes. What does that amount to? Seventy-five cents an acre? That’s nothing. We have to be a better neighbor than that. We used to be able to fall back on the job opportunities we offered. This is not true today. Our workforce has slimmed down so much that we don’t have bragging rights there any more. At the same time my budget for community projects certainly isn’t growing in the age of balanced budgets. Good relations not only help in time of change, be it timber sales or new roads, but they also allow me to match my budget up with others to really help the community.

“We are working with a little 400-student elementary school over here—Ducktown Elementary School—on a project, the Ducktown Green-Gold Conservancy. The school owns a land conservancy that adjoins school grounds. Located on the conservancy is one of the southernmost native cranberry bogs in the United States. The school building is a rather ornate building originally constructed as a college. It is listed on the National Register of Historic Places. The college never materialized and it instead became a grammar school. The school has restructured its curriculum to utilize the conservancy for fieldwork. Additionally, Ducktown recently purchased more acreage to use as part of a trail to connect the conservancy to the Ducktown Basin Museum for a complete interpretive trail on the environmental history of the Copper Basin.

“We went to see the county commissioner yesterday partly because he also owns a pallet mill, and we are looking for donations of lumber to make a boardwalk out near a beaver pond so that Ducktown school kids can go there to study the beavers and the environment. We went to him to see if he would be able to join us in the project. We did
not have the budget to buy lumber. Lacking money we promised to put up a nice partner sign saying, *These materials donated by Mike Stennet Pallet Mill.* Stennet thought about it and said, `Hey, you know that’s a good idea. It shows that I am a partner. It shows I am part of the community. It shows that I think environmental education is important.’ Then you just say bingo. You have scored one point for the neighborhood.

“It is like another project we did with five local schools. Again we didn’t bring any money. We brought support and the national forest as an outdoor lab. The schools want to help keep children in the community, to displace the all-too-common goal of moving to the city to work in the carpet mill or something else. They wanted to encourage young people to stay home and to fill the needs in the community and thought that learning about the forest might develop in the young people a sense of place. Hopefully, an outdoor lab can encourage the young people to stay home and to realize they have a good place here. People look at the ecosystem, giving them a sense of value and a reason to stay home, and there is a way to make money here without going off.”

These are just two examples of community projects that have expanded and enhanced the educational opportunities for the children of our region. While the development of an outdoor classroom or a beaver viewing presents an accomplishment, a greater success lies in networks that created them. This forester recognizes the importance of strengthened relationships and community for healthy communities and works to involve a wide variety of people and organizations in his projects as an investment in the future.
Measurement Plan for Outcome 2

1. **What is an important indicator of strengthened relationships and communication?**

   Increased joint sponsorship of Forest Service projects by a wide variety of community individuals, organizations, businesses and agencies, and increased participation by the Forest Service in projects initiated by others.

2. **What is a measure related to this indicator?**

   - Number and diversity of partners that cosponsor events, activities or projects.
   - Number and diversity of projects initiated by other partners in which the Forest Service participates.

3. **What is the base line measure?**

   - Number and diversity of partners that cosponsor events, activities or projects in previous fiscal year.
   - Number and diversity of projects initiated by other partners in which the Forest Service participates in the previous fiscal year.

4. **What is the unit of measure?**

   Number and diversity of partners and number and diversity of projects.

5. **Where will we get the information we need?**

   Activity reports of Forest Service staff members and local newspapers.

6. **How will we get the information we need?**

   Forest Service staff members will be encouraged to inform the Rural Community Assistance Program team of all appropriate activities. We will also review local newspapers because it is helpful to see how the community is reflecting on joint projects as well.

7. **Who will collect the information we need?**

   The Rural Community Assistance Program team.

8. **Will they be paid?**

   It will be part of their regular duties.
9. **How many hours will it take?**

It will only take a few minutes to register the information and to read the papers with care. Progress should be compiled annually and published locally. This will take more time, perhaps one day of work.

10. **When will the information be collected?**

Information should be collected on an ongoing basis, otherwise it is easy to overlook activities. Information should be published annually so that other members of the community can also recognize the developing relationships.

11. **How will we measure progress from the base line?**

- Change in number and diversity of partners that cosponsor events, activities or projects.
- Change in number and diversity of projects initiated by other partners in which the Forest Service participates.

12. **How else can we use this information to achieve our community’s goals?**

Often outside funders are more eager to work with communities that actively work to strengthen relationships and avenues of communication. System documentation of these developments may be useful in communicating with outside funders about potential projects.
Community Year-End Assessment
For Outcome 2

1. What was our indicator of progress toward Outcome 2?

2. What measure did we use to track progress toward Outcome 2?

3. What was our base line measure?

4. What was our unit of measure?

5. To what extent were relationships and communication strengthened during the reporting period? (Circle One)

   DECLINED  
   ABOUT  
   INCREASED  
   INCREASED
   THE SAME  
   SOMEWHAT  
   SIGNIFICANTLY

6. What was our plan for collecting data on this measure?

   Frequency:

   Sources:

   Method:

7. What did we learn about progress toward our goal?

8. How will our community goal or actions change because of what we learned?

9. What did we discover—good or bad—about using this measure that may be helpful to our future efforts or to other rural communities?
Outcome 3

Improved Community Initiative, Responsibility and Adaptability

Explanation

A community that is responsible for its own future shares a well-crafted and widely considered vision for the future, turns it into reality through strategic local action, and makes changes when conditions or assumptions change. A community that monitors and documents the results of its actions and that regularly reflects on its progress and barriers, learns from its experience. It becomes more resilient, more capable of adapting to change, and better able to improve its efforts and sustain itself over time.

Choosing a Community Assessment Indicator

You may wish to consider four separate, but related, aspects of indicators of progress toward improved community initiative, responsibility and adaptability. These four aspects are:

♦ shared vision
♦ building on local resources
♦ seeking alternative ways to improve
♦ loss of victim mentality/community-based hope

Your community will need to identify one or more specific key indicators related to Outcome 3. The indicators you choose should be relevant to your community. The following pages present some examples of indicators and measures for you to consider. You may choose to modify these examples or develop entirely new indicators and measures of greater relevance to your community goals.

Examples of Indicators and Measures

See the following chart for some examples of ways that communities might measure an improvement in the initiative, responsibility and adaptability of their community.
## Outcome 3. Improved Community Initiative, Responsibility and Adaptability

### Indicator 1. Shared Vision

<table>
<thead>
<tr>
<th>Measure</th>
<th>Sources</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.A. Amount of local public and private organization budgets allocated to community planning and plan implementation.</td>
<td>Community organizations and local government bodies</td>
<td>Documentation review (annual reports), interviews with group treasurers</td>
</tr>
</tbody>
</table>

This shows the level of community investment in actions intended to bring them closer to their vision. The level of monetary investment in community planning, implementation and monitoring processes indicates initiative.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Sources</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.B. Percentage of community initiatives that are linked to the overall community vision.</td>
<td>Community organizations and local government bodies</td>
<td>Documentation review (mission statements and plans, existing community-wide vision statement), survey, interviews</td>
</tr>
</tbody>
</table>

The more community initiatives that are linked to the overall community vision, the greater the chances that the vision will be realized. Often there will be many actions, but, because they are not linked to a vision or goals, they do not necessarily move the community closer to its goals.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Sources</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.C. Number of times the community vision is referred to publicly.</td>
<td>Organization minutes, city signage, newspapers</td>
<td>Document review, windshield survey</td>
</tr>
</tbody>
</table>

### Indicator 2. Building on local resources

<table>
<thead>
<tr>
<th>Measure</th>
<th>Sources</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.A. Number and diversity of volunteers participating in actions related to the community’s vision or plan.</td>
<td>Community organizations and local government bodies</td>
<td>Documentation review, survey, interviews</td>
</tr>
</tbody>
</table>

Community development depends on active, voluntary participation of a large cross-section of stakeholders. When a small number of people who are very similar to one another do everything in a community, they get burned out and, as a result, the community may lack alternative ways of reaching community goals.
### Outcome 3. Improved Community Initiative, Responsibility and Adaptability, continued

#### Indicator 2. Building on local resources

<table>
<thead>
<tr>
<th>Measure</th>
<th>Sources</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.B. Dollar value of in-kind services invested by community organizations, government bodies, and business groups in a community action. Reported as a range.</td>
<td>Community organizations and local government bodies</td>
<td>Documentation review, survey, interviews</td>
</tr>
<tr>
<td>&lt;$5,000 -- $5,000-$10,000 -- $10,000-$20,000 -- $20,000-$50,000 -- &gt;$50,000 (or the amounts can be greater if the size of the population is greater)</td>
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</tbody>
</table>

The degree to which a community invests in itself is critical. Self-investment comes from the public and private sectors, and includes labor, money, land, machinery, and even food for community events. Investments of staff time and equipment toward a community action show that groups and individuals take responsibility for their local development.

#### Indicator 3. Seeking alternative ways to improve

<table>
<thead>
<tr>
<th>Measure</th>
<th>Sources</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.A. Number of community organizations, business groups and local government bodies that regularly evaluate their progress as compared to their goals.</td>
<td>Community organizations and local government bodies</td>
<td>Review of meeting minutes, survey, interviews with officers</td>
</tr>
<tr>
<td>A good development process includes steps to measure progress toward goals and to adjust future actions to reflect lessons learned. If there is no evaluation of progress toward a goal, there is no way to improve the actions taken to achieve it.</td>
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<td></td>
</tr>
<tr>
<td>3.B. Ratio of number of alternatives to number of issues raised for public consideration.</td>
<td>Newspaper, county and city government minutes, broadcasts of county and city government meetings</td>
<td>Document review/counting alternatives per issue</td>
</tr>
<tr>
<td>The ability to separate problems from solutions is a major factor in adaptability and responsibility.</td>
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</tr>
</tbody>
</table>
### Outcome 3. Improved Community Initiative, Responsibility and Adaptability, continued

<table>
<thead>
<tr>
<th>Indicator 4. Loss of victim mentality/community-based hope</th>
<th>Measure</th>
<th>Sources</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.A. Ratio of newspaper articles/letters to the editor that mention limitations imposed by outside forces to those which mention opportunities.</td>
<td>Local newspaper</td>
<td>Content analysis</td>
<td></td>
</tr>
<tr>
<td>While it is important to be realistic about economic and political factors, the belief that local action can make a difference is critical.</td>
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<tr>
<td>4.B. Ratio of number of homes, including manufactured housing, that present a neat appearance (yard kept up) vs. those that are clearly not cared for.</td>
<td>Observation and classification</td>
<td>At the same time each year, (second Saturday in May, for example) neighborhood groups do community walks and count and classify yards. Not all will be classified—only extremes</td>
<td></td>
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</tbody>
</table>
OUTCOME 3: Improved Community Initiative, Responsibility and Adaptability

The Four Corners region includes parts of Utah, Arizona, New Mexico and Colorado, and the Jicarilla Apache, Southern Ute, Ute Mountain Ute and Navajo nations. The region is isolated from large metropolitan settings and contains large public land holdings as well as abundant water and other natural resources. The residential population, from Indian, Spanish, Anglo and other descents, includes people whose families have lived in the area for generations and others who have moved to the region more recently. The region has a mix of poverty and affluence, and a changing economy that includes agriculture, forestry, tourism, business and government activities. In the past, conflicting interests have led to tense relations between different regional stakeholders. One notable area of conflict has been declining timber harvests and the resultant strain on the forest products industry.

The San Juan Forum, a nonprofit corporation founded in 1991, works to enhance economic development in the Four Corners region while preserving and advancing the quality of life for area residents. The Southern Ute Tribe; the Ute Mountain Ute Tribe; the Navajo Nation; the Jicarilla Apache Tribe; San Juan County of New Mexico; La Plata, Archuleta, Montezuma, Dolores and San Juan counties in Colorado; San Juan County, Utah; and the state governments of New Mexico, Colorado and Utah participate in the Forum. The Forum addresses regional concerns and issues including transportation, waste management, natural resource development, tourism and agriculture. The Forum emphasizes the concept of regional, multi-actor cooperation across the state, tribal and county boundaries currently existing in the San Juan Basin.

In early 1993, the San Juan Forum brought together people from USDA agencies, land-grant universities and regional colleges to plan a regional working conference titled “Strengthening Partnerships for Active Rural Communities” (SPARCs) in July and December 1993. The SPARCS conference and resultant partnerships and working groups initiated and encouraged discussions on region-wide, local, interagency and multidimensional planning. SPARCs was intended to facilitate information exchange, networking and collaboration not just during the conference, but on an ongoing basis.

Reviewing the work of the Forum and others doing similar work in the region, one local leader noted an increased interest among governmental agencies, nongovernmental organizations, and companies in looking at the big picture. “Folks in parts of the community or industry are looking beyond ‘what’s going to keep me in business tomorrow’ and looking instead at the balance of that particular industry with a healthy ecosystem and forest.” He used La Plata County as an example. La Plata County experienced substantial growth in population and housing development during the early 1990s. Previously the county had approved residential development projects one at a time as proposals were submitted, but now began looking at bigger areas and considering elements such as the impact of the development on the health of the
ecosystem and wildlife. Another leader noted “a lot more interest in long-range planning.” He reported that five counties had collaborated to develop a 20-year transportation plan. This included individual community meetings, then countywide meetings, then meetings across the counties. In the meetings participants considered quality of life, the need for open spaces, and population needs.

People involved in regional tourism reported similar progress. “There have been a lot of efforts in the past 10 years to build tourism in the county. More recently there has been a shift away from grandiose marketing intended to get as many people here as we can in hopes that they drop a dollar.” This leader reported that planning sessions were considering the impact of the tourists on the cultural and recreational resources that the people come to see. He said efforts had shifted to “a quality experience for a fewer number of people.” He noted the importance of developing tourism that is “in balance with the infrastructure and the resources.”

Clearly one of the overarching concerns and ambitions of the San Juan Forum is to improve community initiative, responsibility and adaptability—to encourage “well-crafted and widely considered plans that are implemented through local action and regularly evaluated and modified as needed.” The Forum has identified improved planning and greater involvement in planning by people from all sectors, social groups and geographical regions as one of the outputs that may contribute to this outcome. Furthermore, by hosting conferences and working groups (actions) it has sought to foster the relationships between individuals that it believes are conducive to multidimensional participative planning while at the same time providing information and resources that may be helpful. The Forum’s director suggests that “local empowerment is people-to-people, having those sitting on opposite sides of an issue actually agreeing. It’s working on an issue and realizing the other person is a person with similarities.”
Measurement Plan for Outcome 3

1. What is an important indicator of improved community initiative, responsibility and adaptability?

Greater community involvement in developing, implementing and monitoring long-term planning.

2. What is a measure related to this indicator?

♦ Frequency of use of planning by regional organizations, industry and businesses.
♦ Number and diversity of people and organizations participating in regional planning.

3. What is the base line measure?

♦ Number of regional projects, organizations, industries and businesses that worked from a plan at the time of the SPARCS conference.
♦ Number and diversity of people and organizations involved in regional planning efforts at the time of the SPARCS conference.

4. What is the unit of measure?

♦ Organizations.
♦ People and/or organizations.

5. Where will we get the information we need?

♦ Community/regional organizations.
♦ Local newspapers.

6. How will we get the information we need?

Participating in local and regional meetings, networking with other regional organizations, and reading local and regional newspapers.

7. Who will collect the information we need?

A list of important organizations that impact the future of the area was made at a Forum meeting. Different members agree to attend each meeting to gather data on participants and use of planning, or to make sure someone else did it. At each meeting they would pass around a sign-up sheet with the name, address and occupation of each person attending. Those collecting the lists could note such
aspects as age, gender, ethnicity and whether or not the individual is a newcomer to the area. Members of the Forum who participate regularly in such meetings and are willing to take the responsibility to document participation and agendas on an ongoing bases will collect the information. The information will be compiled at the Forum offices.

8. Will they be paid?

No

9. How many hours will it take?

A few minutes at each meeting and extra attention while reading the papers and an hour at the end of the year to compile the data on numbers attending, number of time plans were made or referred to, and the age, ethnic, gender, occupational and newcomer status distribution of the attendees.

10. When will the information be collected?

On an ongoing basis. Each volunteer will report the information at the annual Forum meeting (where they will also collect basic information from the attendees).

11. How will we measure progress from the base line?

♦ Change in frequency of planning.
♦ Change in number and diversity of participants or organizations.

12. How else can we use this information to achieve our community’s goals?

Articles can be written in local newspapers about new developments or about new partnerships with special emphases on reasons the system is successful. At the same time, understanding what is happening on a regional basis can allow relevant information to be shared and good ideas to be disseminated. The sign-up lists can be used to keep mailing lists updated. Missing ages or ethnic groups can be invited to attend the meetings, or meetings changed so it is more convenient for them to attend. For example, moving the meeting from a lunch meeting to an early evening meeting allowed teenagers and timber workers to attend.
Community Year-End Assessment
For Outcome 3

1. What was our indicator of progress toward Outcome 3?

2. What measure did we use to track progress toward Outcome 3?

3. What was our baseline measure?

4. What was our unit of measure?

5. To what extent was there improved community initiative, responsibility and adaptability during the reporting period? (Circle One)

   DECLINED   ABOUT   INCREASED   INCREASED
   THE SAME   SOMEWHAT  SIGNIFICANTLY

6. What was our plan for collecting data on this measure?

   Frequency:

   Sources:

   Method:

7. What did we learn about progress toward our goal?

8. How will our community goal or actions change because of what we learned?

9. What did we discover—good or bad—about using this measure that may be helpful to our future efforts or to other rural communities?
Outcome 4
Sustainable, Healthy Ecosystems with Multiple Community Benefits

Explanation

Human communities are part of natural ecosystems. The responsible stewardship of natural resources sustains businesses and families in communities over the long term. Finding the common ground among people who have emotional, symbolic or economic identification with a place, whether or not they live there, is essential to making decisions about development and resource use that will enable communities and their resource base to survive and thrive. Ecosystems include air, water, soil, biodiversity and landscape. Ecosystem health is maintained best when citizens have and use knowledge about their ecosystem to guide their behavior.

Choosing a Community Assessment Indicator

The first step in measuring progress toward community goals is identifying one or more key indicators of progress. You may wish to consider six separate, but related, aspects of indicators of progress toward sustainable, healthy ecosystems:

♦ Air quality
♦ Water (quantity and quality)
♦ Biodiversity (plants and animals)
♦ Soil
♦ Landscape (sense of place)
♦ Ecosystem knowledge and appreciation of the environment

Your community will need to identify one or more specific key indicators related to Outcome 4. The indicators you choose should be relevant to your community. The following pages present some examples of indicators and measures for you to consider. You may choose to modify these examples or develop entirely new indicators and measures of greater relevance to your community goals.

Examples of Indicators and Measures

The following chart contains examples of ways that communities might measure ecosystem health.
## Outcome 4. Sustainable, Healthy Ecosystems with Multiple Community Benefits

### Indicator 1. Air Quality

<table>
<thead>
<tr>
<th>Measure</th>
<th>Sources</th>
<th>Method</th>
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</thead>
<tbody>
<tr>
<td>1.A. <strong>Number of complaints about ambient air odor.</strong>&lt;br&gt;These complaints, formal and informal, indicate air quality concerns.</td>
<td>Local environmental authority, letters to the editor, environmental advocacy organizations, local government, county health and human services agency</td>
<td>Interview, telephone to ask for information, count reports in local papers</td>
</tr>
<tr>
<td>1.B. <strong>Number of asthma cases treated (sales of asthma/allergy medicines).</strong>&lt;br&gt;An portion of asthma attacks are a result of air quality. An increase or decline in asthma medicine sales or cases treated can indicate changes in air quality.</td>
<td>Sales of asthma/allergy medicine from pharmacy, county clinics, county health and human service agencies</td>
<td>Obtain sales data from pharmacy, obtain number of cases from county health and human services agency</td>
</tr>
<tr>
<td>1.C. <strong>Number of days of high particulate matter in the air.</strong>&lt;br&gt;Amount of particulate matter in the air is a concrete measure of poor air quality.</td>
<td>Local EPA office, local media</td>
<td>Compare to level of particulates from local EPA office or weather service, on consistent selected days annually</td>
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</table>
**Outcome 4. Sustainable, Healthy Ecosystems with Multiple Community Benefits, continued**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Sources</th>
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</thead>
<tbody>
<tr>
<td><strong>2.A. Number of complaints to municipality of poor water taste, appearance, smell. Newspaper mention of problem.</strong></td>
<td>Local government records, town meetings’ records, local newspaper, advocacy groups</td>
<td>Content analysis, interviews</td>
</tr>
<tr>
<td>This is a general measure of water quality concerns.</td>
<td></td>
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<tr>
<td><strong>2.B. Test-kit levels of bacteria, amoebae and microbes in water.</strong></td>
<td>High school nature/science club/class, advocacy group, local water/sewage officer, local government agency, extension office</td>
<td>Collect information from groups doing systemic testing</td>
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<tr>
<td>Indicator of health problems.</td>
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<tr>
<td>Test-kit measures of sediment in the water.</td>
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<tr>
<td>Indicator of erosion problems.</td>
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<tr>
<td>Test-kit levels of phosphorous, nitrates, trace minerals, compounds.</td>
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<td></td>
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<tr>
<td>Indicator of water quality and erosion problems.</td>
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<tr>
<td><strong>2. C. Number of fish-kills in streams/rivers/ponds.</strong></td>
<td>Local DNR, local newspaper</td>
<td>Count number of articles, ask DNR for reported cases</td>
</tr>
<tr>
<td>The number of fish kills indicates how often the water system became severely poisoned.</td>
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<tr>
<td><strong>2.D. Clarity measure: Number of feet in water where one can see a red weight (or the tennis shoe test).</strong></td>
<td>Nature/science class/club, advocacy groups</td>
<td>On a specific date, determine the depth where visibility is possible</td>
</tr>
<tr>
<td>Water clarity may be a useful measure of water quality, particularly in streams, where it indicates pollution and siltation. In some ponds and lakes water clarity may be reduced by desirable plankton and the measure may not be as useful.</td>
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<tr>
<td><strong>2.E. Number of fish.</strong></td>
<td>Audubon Society, Nature Conservancy, other environmental advocacy organizations, school/science clubs or classes</td>
<td>Compare yearly, systematic counts done by groups</td>
</tr>
<tr>
<td>Fish are a good indicator of aquatic system health—which, as a major component in the ecosystem—is a major component of ecosystem health.</td>
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</tbody>
</table>
### Indicator 3. Biodiversity (Plants and Animals)

<table>
<thead>
<tr>
<th>Measure</th>
<th>Sources</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>3.A. The amount and arrangement of habitat types.</strong></td>
<td>Audubon Society, Nature Conservancy, school/science clubs or classes</td>
<td>Collect information from groups doing annual counts</td>
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<tr>
<td>The different types of habitat (woodlots, fields, riparian areas,</td>
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<tr>
<td>residential, urban, etc.) indicate the overall diversity of the</td>
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<td>landscape. The pattern of the types may indicate critical areas, such</td>
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<td>as corridors. (This type of measure is extremely valuable in areas</td>
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<td>which are growing and the land use is changing rapidly.)</td>
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<tr>
<td><strong>3.B. The diversity of vegetation in the community.</strong></td>
<td>Environmental activist groups, school/science clubs or classes</td>
<td>Conduct a plant diversity index which establishes a score based on the</td>
</tr>
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<td></td>
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<td>number of species present. This score can be compared over the years.</td>
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<tr>
<td>This can be an indicator of overall ecosystem health, although caution</td>
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<td>must be used in increasing vegetative diversity by introducing exotic</td>
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<td>species or species from outside that ecosystem.</td>
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<tr>
<td><strong>3.C. Number of birds counted in community counts.</strong></td>
<td>Audubon Society, Nature Conservancy, other environmental advocacy</td>
<td>Compare yearly, systematic counts done by groups</td>
</tr>
<tr>
<td>Birds are a good measure of overall ecosystem health as they tend to</td>
<td>organizations, school/science clubs or classes</td>
<td></td>
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<tr>
<td>migrate to areas with ecosystems which can support them.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>3.D. Number of types of birds.</strong></td>
<td>Audubon Society, Nature Conservancy, other environmental advocacy</td>
<td>Compare yearly, systematic counts done by groups</td>
</tr>
<tr>
<td>Numbers of types of birds is a good measure of overall ecosystem</td>
<td>organizations, school/science clubs or classes</td>
<td></td>
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<tr>
<td>health.</td>
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### Outcome 4. Sustainable, Healthy Ecosystems with Multiple Community Benefits, continued

<table>
<thead>
<tr>
<th>Indicator 3. Biodiversity (Plants and Animals)</th>
<th>Measure</th>
<th>Sources</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.E. Number of types of fish.</td>
<td>The numbers of types of fish in an aquatic system will indicate the biodiversity of the system.</td>
<td>Audubon Society, Nature Conservancy, other environmental advocacy organizations, school/science clubs or classes</td>
<td>Compare yearly, systematic counts done by groups</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Indicator 4. Soil</th>
<th>Measure</th>
<th>Sources</th>
<th>Method</th>
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</thead>
<tbody>
<tr>
<td>4.A. Number of earthworms or other organisms in soil in parks, lawns or other key areas.</td>
<td>Earth worms in a cubic foot of soil are a good measure of soil health.</td>
<td>Local science or nature clubs, environmental advocacy groups, county extension agent</td>
<td>Collect information from group/organization/agency collecting in systematic way</td>
</tr>
<tr>
<td>4.B. Amount of land in the winter covered by residue.</td>
<td>Residue on the soil reduces erosion and can increase soil organic content.</td>
<td>Local FFA chapter, vocational agriculture or science class</td>
<td>Visual scan of random local fields in the late fall each year</td>
</tr>
<tr>
<td>4.C. Rise in spring/river level after hard rain.</td>
<td>Runoff is often an indicator of soil porosity and erosion.</td>
<td>Local dock, school science class, environmental advocacy group, government agent—Environmental Protection Agency</td>
<td>Collect from group/organization/agency measuring in systematic way</td>
</tr>
<tr>
<td>4.D. Number of times per year storm sewers overflow.</td>
<td>This is an indicator of potential contamination of the water supply.</td>
<td>Municipal water and sewer authority, environmental advocacy groups</td>
<td>Collect numbers</td>
</tr>
</tbody>
</table>
### Indicator 5. Landscape (Sense of Place)

<table>
<thead>
<tr>
<th>Measure</th>
<th>Sources</th>
<th>Method</th>
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</thead>
</table>
| 5.A. Percent of local governments with a strategic plan and community vision that includes environmental goals.  
Including the environment as part of a desirable future helps to balance the ecosystem with other community goals. When there is no plan or vision, ad hoc actions often have negative ecosystem impacts. | Local governments (town, county, school, district, hospital district, water district, etc.) | Ask about or read their plan—divide number with environmental goals by the total number of governments |
| 5.B. Percent of land use plans with explicit environmental goals.  
Land use plans that do not have environmental goals as well as social and economic goals often have unintended environmental consequences. | Local governments with control over land use | First year, map the area, link with GIS efforts. Following years, using site visits and key information, note changes |
| 5.C. Number of “brown” sites being remediated.  
Activities to restore ecosystem health—wetland restoration, restoration of scenic views, toxic cleanup, etc.—show community commitment to environmental quality. | Environmental advocacy group, municipal planning authority | Collect information from source |
| 5.D. Percent of new construction where homes are clustered rather than spread out widely.  
Better land use, with less risk to water quality from septic tanks. | Environmental advocacy group, municipal planning authority | Collect information from source |
| 5.E. Change in “green”/open area in community.  
Shows the progress in improving land use and providing for natural areas; and limiting community sprawl. | Environmental advocacy group, municipal planning authority | Collect numbers/information from source |
## Outcome 4. Sustainable, Healthy Ecosystems with Multiple Community Benefits, continued

<table>
<thead>
<tr>
<th>Indicator 6. Ecosystem Knowledge and Appreciation of the Environment</th>
<th>Sources</th>
<th>Method</th>
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</thead>
</table>
| **6.A. Inter-governmental collaborations for environmental ends.**  
Maintaining and increasing ecosystem health requires many different partners. No single agency or organization can do it without collaborating with others. | Newspapers, local governments, state and federal agencies | Count number of intergovernmental collaborations during year |
| **6.B. Local newspaper coverage of local environmental issues.**  
The more information appears on the environment, the more opportunity for citizens to inform themselves. | Local newspapers during a year | Number of inches on environment in local newspaper per year |
| **6.C. Number of farm stewardship groups in the area.**  
Farm stewardship groups share with each other ways to increase ecosystem health, long-term profitability and quality of life. Generally they have from four to 10 households participating. | County Extension agent, organization/agency personnel | Count the number of farm stewardship groups on a given date each year |
| **6.D. Number of pounds of trash recycled.**  
A healthy ecosystem in our consumptive society depends on maximizing recyclables and minimizing waste disposal in landfills. Community-based recycling shows awareness of its impact on the environment and decreases negative impacts. | Environmental advocacy group, recycling organization, waste disposal organization/Agency | Collect information from source by telephone request, in person or in writing |
| **6.E. Number and percent of local businesses that recycle.**  
Shows interest on the part of the business community in environmental issues. | Environmental advocacy group, recycling organization, waste disposal organization, Chamber of Commerce, business organization | Collect information from source by telephone request, in person or in writing |
## Outcome 4. Sustainable, Healthy Ecosystems with Multiple Community Benefits, continued

<table>
<thead>
<tr>
<th>Indicator 6. Ecosystem Knowledge and Appreciation of the Environment</th>
<th>Measure</th>
<th>Sources</th>
<th>Method</th>
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<tbody>
<tr>
<td>6.F. Number of community associations interested in environmental issues (e.g. Trees Forever, Ducks Unlimited, Sierra Club).</td>
<td>Shows community interest in environment/natural resources at organization level.</td>
<td>County organization guide from Extension or EPA office, phone book, U.S. Forest Service</td>
<td>Call and ask for information, look in telephone book and call organizations, interviews</td>
</tr>
<tr>
<td>6.G. Attendance at environmental events during the year.</td>
<td>Shows community interest in environment.</td>
<td>Environmental organizations, EPA, schools, U.S. Forest Service, county extension/USDA, NRCS</td>
<td>Ask organizations to take attendance counts to share, review newspaper articles about events</td>
</tr>
<tr>
<td>6.H. Number of environmental awareness events sponsored by local groups (bird count, tree plantings).</td>
<td>Shows level of initiative on the part of local environmental leadership and reflects community support of these efforts.</td>
<td>Environmental organizations, municipal organizations, EPA, schools, U.S. Forest Service, county extension/USDA, NRCS</td>
<td>Interview organizations, search local paper</td>
</tr>
<tr>
<td>6.I. Number of times that federal and state authorities reference local environmental and/or natural resource management plans as part of their decision-making process.</td>
<td>To the extent that federal and/or state actions are tied to local goals for ecosystem health, many interests can be served by the same action.</td>
<td>Meeting minutes and funding proposals of local government and public committees</td>
<td>Documentation review</td>
</tr>
<tr>
<td>6.J. Number of government, business and non-profit organizations that have written policies requiring decision-makers to consider the long-term and indirect effect of important decisions on the community economy and environment.</td>
<td>These policies show local commitment to ecosystem health. Written policies denote the first step toward an operational mentality which guides an organization’s efforts.</td>
<td>Newspapers; meeting minutes and written policy statements of local government, business and community groups</td>
<td>Documentation reviews, content analysis</td>
</tr>
</tbody>
</table>
### Indicator 6. Ecosystem Knowledge and Appreciation of the Environment

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<tr>
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<th>Sources</th>
<th>Method</th>
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<tbody>
<tr>
<td>6.K. Number of memoranda of understanding among local and/or local and non-local groups regarding natural resource management.</td>
<td>Newspapers; meeting minutes and written policy statements of local government, business and community groups; key officers of these groups</td>
<td>Documentation review, content analysis, interview</td>
</tr>
</tbody>
</table>

Collaboration is crucial for ecosystem health. Cooperative efforts among diverse community groups facilitate progress toward shared goals.
OUTCOME 4. Sustainable, Healthy Ecosystems with Multiple Community Benefits

In the early 1980s, government agencies and environmental activists became very concerned about the pollutant levels in the Chesapeake Bay Basin. Because the pollution originated from non-point source pollution as much as from large corporate or municipal polluters, clean up efforts became extremely complex involving a broad base of people. Successful clean up required voluntary cooperation rather than simply stricter regulations. Government agency representatives and activists had to convince multiple community stakeholders to adopt measures to improve water quality in the bay and its feeder rivers.

Bernie Fowler, a Maryland state senator from Broomes Island, became involved in encouraging people to help prevent erosion. He spoke frequently about the environmental health of the Patuxent River, which ran past Broomes Island into the Bay. He wanted to teach people in the area the importance of adopting erosion control measures at home and to convince them to urge their municipalities to spend resources on better rainwater runoff collection and sewage treatment facilities.

Initially, he found it difficult to illustrate the reality and severity of the problem to citizens. When speaking about the issue he tried to illustrate the deteriorating state of the river by recalling his experience as a young man in the 1940s. “Why, I can remember being able to walk out into the bay until I was up to my chest in water and still see my feet,” he would say. Older folks in Broomes Island confirmed his recollections as they sat around the coffee shop with Senator Fowler talking about community issues and history.

Tom Wisner, a sixth-grade science teacher at the St. Mary’s County Elementary School, first suggested a real live tennis shoe test to Senator Fowler. “That story you tell about wading into the water is such a good story. It really resonates with people. Why don’t you do it again? Why don’t you wade into the water now until your feet disappear? It would be a great way to illustrate how polluted the river has gotten. If you did it yearly, you could show how much progress is being made in cleaning up the river.”

On the second Sunday in June 1988, Wisner and his colleague Betty Brady joined Senator Fowler in putting on white tennis shoes and wading into the Patuxent River. They invited the media and local activists, but school children composed most of the audience. That year their shoes disappeared into the muck when the water was about 10 inches deep. When the event made the local paper more townspeople began to reflect on the critical state of the river. The occasion sparked an opportunity to share local memories of the river and to talk about the state of the Chesapeake Bay Watershed in terms much more meaningful to the local community than toxicity or particulate matter readings.
Since then, every year on the second Sunday in June, with great pomp and ceremony, now former-Senator Fowler laces up his white tennis shoes and wades in to the Patuxent River. He invites local activists, the media, and others to bring their picnic baskets and to join in a barbecue. While he could only see his shoes through eight inches of river water in 1989, in 1990 he waded into water 16 inches deep before the white tennis shoes disappeared. Most years Senator Fowler has made it farther into the bay, although some years excessive rainfall or storm events have obscured progress. The test is done as accurately and honestly as possible. The progress is, in fact, incremental. As Senator Fowler puts it, “it took us 50 years to make the river so murky, so it will take time to clean it up again.” The annual “wade-in” is a big event, an event now promoted by the Maryland State Office of Planning. Even today, the indicator resonates with people throughout the bay area. By 1998, three other communities in the Chesapeake Bay Basin were holding their own wade-ins.

Senator Fowler and friends have chosen an indicator that is locally meaningful. Most people in the Chesapeake Bay Basin watershed could find an older family member or friend who would confirm that the water was less murky in the past. It took Fowler and other activists to help people in the area to make the connection between the turbidity of the rivers and the sewage, dumping, erosion and runoff. Because this is an indicator that is responsive, in most years, to local action over a year’s time, Fowler could relate the increasing visibility to actions taken to clean up the Patuxent River (and the bay more generally).

Agency representatives and scientists still come to do the more sophisticated ecological assessments of the bay. Those assessments take much longer to carry out and are more difficult for lay people to comprehend. Yet the scientific measurements are important for describing the ecological health of the bay to the scientific community. One level of monitoring does not preclude the other. Some indicators of a sustainable, healthy ecosystem should meet the standards of the scientific community of scholars, their expertise is essential to planning and understanding. However, we also need to develop indicators that will help to encourage public participation.
Measurement Plan for Outcome 4

1. **What is an important indicator of sustainable, healthy ecosystems with multiple community benefits.**

   Depth of water clarity.

2. **What is a measure related to this indicator?**

   How deep can Senator Fowler walk in to a water source and still see his white tennis shoes (or how far does a white weight remain visible).

3. **What is the base line measure?**

   For Senator Fowler, the base line measure will be the depth where he clearly saw his tennis shoes the first time he walked into the river, i.e. 10 inches.

4. **What is the unit of measure?**

   Inches.

5. **Where will we get the information we need?**

   At the riverside when Senator Fowler walks out of the river.

6. **How will we get the information we need?**

   Each year we will witness the event and participate in measuring the depth.

7. **Who will collect the information we need?**

   Senator Fowler will collect the test and we will collect the information.

8. **Will they be paid?**

   No, he will do it as part of his civic activities.

9. **How many hours will it take?**

   It will take about 30 minutes each year to walk in, take the measurement, and walk out.
10. **When will the information be collected?**

   Each year on the second Sunday in June

11. **How will we measure progress from the base line?**

   Progress will be measured by how deep Senator Fowler can walk into the river and still see his white tennis shoes as compared to earlier years.

12. **How else can we use this information to achieve our community’s goals?**

   As the river is central to the community, this measure of the health of the river could help in planning environmental protection programs. The involvement of the community in the annual testing and measurement furthers Senator Fowler’s original goal of increasing community interest in and connection to the health of the river. In addition, the interest of the media and the Maryland Office of Planning has encouraged other communities to monitor the health of the rivers near them as well.
Community Year-End Assessment
For Outcome 4

1. What was our indicator of progress toward Outcome 4?

2. What measure did we use to track progress toward Outcome 4?

3. What was our base line measure?

4. What was our unit of measure?

5. To what extent were healthy ecosystems with multiple community benefits sustained during the reporting period? (Circle One)

   DECLINED    ABOUT    INCREASED    INCREASED
   THE SAME    SOMEWHAT  SIGNIFICANTLY

6. What was our plan for collecting data on this measure?

   Frequency:

   Sources:

   Method:

7. What did we learn about progress toward our goal?

8. How will our community goal or actions change because of what we learned?

9. What did we discover—good or bad—about using this measure that may be helpful to our future efforts or to other rural communities?
Outcome 5

Appropriately Diverse and Healthy Economies

*Explanation*

Vital economies deploy financial, natural and human resources to create, maintain and improve local livelihoods. A diverse industry base helps maintain services, businesses and households when the economy fluctuates. In healthy economies, community residents move toward self-sufficiency and prosperity, local businesses modernize and find new markets, local ownership of homes and businesses increases, and local people and financial institutions invest in the community.

*Choosing a Community Assessment Indicator*

You may wish to consider four separate, but related, aspects of indicators of progress toward appropriately diverse and healthy economies. These four aspects are:

♦ reducing poverty
♦ enhancing business efficiency
♦ increasing business diversity
♦ increasing community resident assets

Your community will need to identify one or more specific key indicators related to Outcome 5. The indicators you choose should be relevant to your community. The following pages present some examples of indicators and measures for you to consider. You may choose to modify these examples or develop entirely new indicators and measures of greater relevance to your community goals.

*Examples of Indicators and Measures*

The following chart contains some examples of ways that communities might measure increased diversity and health of the economy.
## Outcome 5. Appropriately Diverse and Healthy Economies

### Indicator 1. Reducing Poverty

<table>
<thead>
<tr>
<th>Measure</th>
<th>Sources</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.A. Number and percent of utility bills paid on time.</strong>&lt;br&gt;For many households with low income, utilities are critical but forgiving providers. Increase in income and increased stability in income result in more bills paid on time and a concomitant sense of pride in providing for one’s own household.</td>
<td>Local utility company</td>
<td>Written or phone request to the utility</td>
</tr>
<tr>
<td><strong>1.B. Number of children on free or reduced school lunches.</strong>&lt;br&gt;These data, which can be gathered from local sources, allow for measures in changes of household income among the portion of the population with school-age children.</td>
<td>Local schools</td>
<td>Written or phone request to the school</td>
</tr>
<tr>
<td><strong>1.C. Number of food stamp cases.</strong>&lt;br&gt;These data, available from county health and human services by community, suggest what is happening with the low-income population.</td>
<td>County health and human services department</td>
<td>Written or phone request to health and human services department</td>
</tr>
</tbody>
</table>

### Indicator 2. Enhancing Business Efficiency

<table>
<thead>
<tr>
<th>Measure</th>
<th>Sources</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2.A. Number of commercial phone lines and frequency of hookups and disconnects.</strong>&lt;br&gt;This is an easy way to measure the combination of numbers of businesses and the volume of business.</td>
<td>Local phone company</td>
<td>Written or phone request to the phone company</td>
</tr>
<tr>
<td><strong>2.B. Local businesses which have asked for modernization assistance.</strong>&lt;br&gt;These data must be obtained from service providers—SBDC, Forest Service, Cooperative Extension, etc. For wages to improve and for businesses to stay competitive, productivity must improve. This can occur through more effective management, capital investment or more skilled labor.</td>
<td>State economic development agency, Small Business Administration, USFS, local business groups, business management consultants in area</td>
<td>Interviews, surveys of business assistance providers</td>
</tr>
</tbody>
</table>
### Indicator 2. Enhancing Business Efficiency

<table>
<thead>
<tr>
<th>Measure</th>
<th>Sources</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.C. Increase of private dollars invested in local businesses.</td>
<td>State economic development agency, banks, Small Business Administration, USFS, local business groups, business management consultants in area</td>
<td>Interviews, surveys of business assistance providers, including banks</td>
</tr>
</tbody>
</table>

One way businesses become more efficient is through investing in capital improvements. In areas experiencing economic stress, that early investment comes through the public sector. When private capital enters the local business market, it is an indicator of increased business soundness.

### Indicator 3. Increasing Business Diversity

<table>
<thead>
<tr>
<th>Measure</th>
<th>Sources</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.A Total number of employers in the community.</td>
<td>All potential employers</td>
<td>Survey</td>
</tr>
</tbody>
</table>

Number of employers is highly correlated with diversity of employment opportunities. This count can be made from a local census of employers.

### Indicator 4. Increasing Community Resident Assets

<table>
<thead>
<tr>
<th>Measure</th>
<th>Sources</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.A. Percentage of homes that are owner-occupied.</td>
<td>Census data, survey of homeowners, banks, and credit institutions, town clerk</td>
<td>Survey</td>
</tr>
</tbody>
</table>

Owner occupation varies radically across the country and is related to socioeconomic status. Home ownership increases commitment to community of place. It also provides an important asset that helps buffer economic change.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Sources</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.B. Number and percentage of homes with more than one phone line.</td>
<td>Local phone company</td>
<td>Written or phone request to the phone company</td>
</tr>
</tbody>
</table>

Home-based business can often be found in rural areas. When those businesses increase in volume, they often get a second phone line to provide for it. In addition, as households become more affluent, a second line may be acquired for a modem.
Outcome 5. Appropriately Diverse and Healthy Economies, continued

<table>
<thead>
<tr>
<th>Measure</th>
<th>Sources</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.C. Building permits for existing homes.</td>
<td>City or county records</td>
<td>Written or phone request to public official in charge of records</td>
</tr>
</tbody>
</table>

While environmental integrity may require limiting population growth, an indication that local citizens are increasing their assets is when they add on to their existing property, thus increasing its value.
OUTCOME 5: Appropriately Diverse and Healthy Economies

The Tennessee Overhill Heritage Association started in 1990 in a region including three counties and the three southern districts of the Cherokee National Forest. The program started as a pilot project initiated by the National Trust for Historic Preservation and the Tennessee Department of Tourist Development. Partnering with county chambers of commerce, county governments, U.S. Forest Service, and others has always been essential to the association. Important parts of the association’s work focus on expanding tourism in their region and, in so doing, developing the local economy. While many different groups have been eager to support their efforts to diversify and sustain the local economy, the Association has often found itself in disagreement with the indicators and measures identified by “experts” to evaluate their successes and failures.

Association members found that experts tended to measure progress using what they called “old established units of measurement,” focusing, for example, on the number of jobs created. They found that these measures often overlooked important elements of success. For example, when observing an increase from one bed and breakfast in 1990 to 15 five years later, an old-line economic development person might see 10 less-than-full-time jobs for people who might have been retired anyway. Association members recognized the major contribution to the regional infrastructure needed to sustain tourism represented by the B&Bs.

A general discomfort with conventional measures came into sharp focus when a state report on the impact of travel and tourism by county showed two of the association’s three counties moving right along and the third (incidentally, located in between the first two) experiencing the greatest decline in the state. As a partially county-funded organization that was supposedly developing tourism, the sharp decline called for immediate attention. After studying the report, association members wondered how the county in the middle could have done so much worse than its neighbors on either side and suspected that something must be incorrect. The county finance director reported that lodging and sales taxes had risen during the same period, adding to suspicion. After contacting the state offices, association members learned that the bad report was based on a 55 percent drop in one category—auto rentals. The person researching the report remembers thinking, “Well that is all well and good, but we don’t have auto rentals.” Then remembering, “Well, wait a minute, we do have a car lot that on rare occasions will rent a car.” It turned out that the car lot went from something like 20 cars rented to 10, yielding the decline and the label as the county with the “greatest decline in travel and tourism of any county in the state.”

This began the association’s deliberate search for better units of measurement. Often their efforts to find meaningful measures of economic progress were frustrating. Heritage Association staff noticed a huge increase in inquiries about cabin rentals. Although no big hotels or convention centers had been built, several dozen rental
cabins had been, and it seemed they were being used. A problem arose when they tried to count the cabins systematically. No county-level tracking system existed. They studied the building permit systems. One county did not require building permits. Another’s system was rather vague. The third county had a building permit system, but required a single permit no matter how many cabins are built. Additionally, many rental cabins in all three counties were classified officially as residents.

Service stations presented another challenge. When the association looked at service station sales over the preceding seven years, they found a precipitous decline, as they did across the state. Then they realized that convenience store/gas stations are self-defined and many do not report at all. Gasoline tax also proved a worthless indicator because it is taxed at the point of entry to the state. Simple data to track economic changes did not seem to exist.

Despite the frustration, the Association found ways to measure their success. In 1990 only three organizations even knew about the Tennessee Arts Commission in order to take advantage of their grants for hiring artists for local festivals. After years of promotion and encouragement, largely by the Tennessee Overhill Heritage Association, in 1995 10 associations applied for grants. Many small, local, community-based organizations that had not previously known about the opportunity were now involved. A different kind of initiative had appeared. The Association also monitored memberships in and composition of chambers of commerce throughout the region. In one chamber that membership doubled and more of the members began to focus on tourism.

The Association decided to try to use some of what it learned in a study. They hired Middle Tennessee State University’s Business Research and Economic Development Center to study the impact of travel and tourism on their region. One of the main goals for the study was to help identify indicators that the Association can monitor and to figure out how to include these indicators in a report that would be understood by people in state government and others inside and outside the region.
Measurement Plan for Outcome 5

1. **What is an important indicator of appropriately diverse and healthy economies?**
   
   Increase the diversity of business activity in the region related to tourism.

2. **What is a measure related to this indicator?**
   
   Size and composition of chambers of commerce in the region.

3. **What is the base line measure?**
   
   Size and composition of chambers of commerce in the region in 1990.

4. **What is the unit of measure?**
   
   ♦ Number of organizations belonging to chambers of commerce.
   ♦ Diversity of organizations belonging to chambers of commerce.

5. **Where will we get the information we need?**
   
   From minutes of the chambers of commerce meetings or conversations with the office of the chamber.

6. **How will we get the information we need?**
   
   We will develop a list of exactly what information we need about the composition of the chambers. This may include the size of the business, location, service provided, volume of business and other items. We then telephone or meet with the chambers of commerce to ask them the best way to get this information about the members. It might be necessary to attend some meetings to ask members themselves for information.

7. **Who will collect the information we need?**
   
   A staff member of the Tennessee Overhill Heritage Association will be asked to organize and collect this information.

8. **Will they be paid?**
   
   Yes, this will be part of her regular work responsibilities.
9. **How many hours will it take?**

   As there are only a few chambers of commerce in the region, collecting the baseline information will take 1 to 2 days and then updating the information should only take several hours annually.

10. **When will the information be collected?**

    Once a year.

11. **How will we measure progress from the base line?**

    Percentage increase in size and diversity.

12. **How else can we use this information to achieve our community’s goals?**

    It is in everyone’s interest to know about the businesses functioning in the area. Perhaps it would be helpful to prepare a short list annually with the names, locations and services of the businesses in the area. This could be distributed to tourists and residents and might promote business for local businesses.
Community Year-End Assessment
For Outcome 5

1. What was our indicator of progress toward Outcome 5?

2. What measure did we use to track progress toward Outcome 5?

3. What was our base line measure?

4. What was our unit of measure?

5. To what extent did communities have an appropriately diverse and healthy economy during the reporting period? (Circle One)
   
   DECLINED  ABOUT  INCREASED  INCREASED
   THE SAME  SOMEWHAT  SIGNIFICANTLY

6. What was our plan for collecting data on this measure?
   
   Frequency:
   
   Sources:
   
   Method:

7. What did we learn about progress toward our goal?

8. How will our community goal or actions change because of what we learned?

9. What did we discover—good or bad—about using this measure that may be helpful to our future efforts or to other rural communities?
Afterword

Congratulations!

Now that you have completed at least one round of measuring progress toward community goals, reflecting and refocusing, you have embarked on the process of continuous learning!

You should feel good about what you have accomplished. By continuing to use this process in your community, you will keep community actions focused on community goals, and know when progress is being made. That’s the time to celebrate! Get the word out. Congratulate everyone who has helped make it possible. Use the positive energy to engage people for the next action. And remember to keep measuring so you can keep learning and celebrating your successes into the future!

We would like to know how this process is working for you. Please contact:

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