Taking Action for Sustainability

The EarthCAT Guide to Community Development

Gwendolyn Hallsmith
Christian Layke
Melissa Everett
Taking Action for Sustainability:
The EarthCAT Guide to Community Development

by Gwendolyn Hallsmith, Christian Layke, and Melissa Everett

* Revised Test Edition *
© 2005 Global Community Initiatives

This workbook was made possible through grants from
The Philanthropic Collaborative.

Editing, design, and layout by Tom Daley

Unless otherwise noted, all the interpretations and findings set forth in this publication are those of the authors.
We are proud to release the second test edition of *Taking Action for Sustainability: The EarthCAT Guide to Community Development*. This workbook is based on our experiences working with communities around the world over many years. We believe it represents a unique approach that will help communities plan and implement successful sustainability programs to improve the quality of life for their citizens. Although this presentation is strongly rooted in real-world experience with community improvement initiatives, we are releasing it in a second test edition in recognition that there will be elements that can still be improved, and more examples provided to benefit the interested reader.

We continue to work with communities as they put this tool into practice, learning what works well and collecting experience as they implement the various elements. After issuing the first test edition we worked with the City of Newburgh, NY, using the workbook as a guide for an innovative process that integrates EarthCAT with traditional master planning. At the same time, the City of Calgary in Alberta, Canada has also stepped forward with interest in the EarthCAT approach, and they have engaged cities and towns across their province in a growing movement to implement EarthCAT on the local level. The Calgary Regional Partnership and the Alberta Urban Municipalities Association have offered their member communities workshops on EarthCAT. As this version of the workbook goes to print, we are preparing for a provincial President’s Summit on Sustainable Communities in Edmonton.

As we learn from communities and revise our approach, we will update this workbook and post it at the companion EarthCAT website. You can access EarthCAT online at: [http://www.earthcat.org](http://www.earthcat.org).

We hope you enjoy the EarthCAT workbook, and we welcome any feedback. Please write to us at the e-mail addresses below.

Gwendolyn Hallsmith  
Christian Layke  
Melissa Everett  

Gwendolyn Hallsmith  
Christian Layke  
Melissa Everett

ghs@global-community.org  
clayke@wri.org  
melissae@netstep.net

**Acknowledgements**
**Taking Action for Sustainability**

**EarthCAT at a Glance**

**UNIT 1**
- **Gather a Core Team**
- **Define Your Planning Parameters**
- **Integrate Existing Planning Processes**

**UNIT 2**
- **Convene a Stakeholder Group**
- **Develop Leadership Skills**

**UNIT 3**
- **Launch a Public Outreach and Media Campaign**

**UNIT 4**
- **Build a Common Vision for the Future of the Community**
- **Adopt a Vision Statement**

**UNIT 5**
- **Identify Community Needs**
- **Inventory Your Assets**
- **Assess the Capacity for Community Improvement**

**UNIT 6**
- **Establish Goals**

**UNIT 7**
- **Study Local Trends**
- **Identify Patterns of System Behavior**

**UNIT 8**
- **Set Specific Targets for Improvement**

**UNIT 9**
- **Find Leverage Points in the Community System**

**UNIT 10**
- **Design a Strategy for Community Change**
- **Select Indicators for Monitoring Performance**

**UNIT 11**
- **Draft an Action Plan**
- **Select Indicators for Monitoring Performance**

**UNIT 12**
- **Gather Baseline Data**

**UNIT 13**
- **Prioritize and Implement Strategies**
- **Gather Progress Data**

**UNIT 14**
- **Issue a Sustainability Progress Report**

**UNIT 15**
- **Refine, Revise, and Start Again**
Contents

Introduction

Unit 1 Laying the Foundation for Change
Gather a Core Team ................................................................. 20
Define Your Planning Parameters ........................................... 22
Integrate Existing Planning Processes .................................... 25
Convene a Stakeholder Group .................................................. 28
Launch a Public Outreach and Media Campaign .................... 32

Unit 2 Building a Common Vision
Engage the Whole Community in the Visioning Process .......... 43

Unit 3 Establishing Goals
Identify Community Needs .................................................... 53
Inventory Your Assets ............................................................. 55
Assess the Capacity for Community Improvement .................. 59
Establish Goals ....................................................................... 68

Unit 4 Understanding Trends and Setting Targets
Study Local Trends ................................................................. 73
Identify Patterns of System Behavior ...................................... 82
Set Specific Targets for Improvement ..................................... 87

Unit 5 Planning Strategies for Taking Action
Find the Leverage Points ......................................................... 90
Map the Community Systems ................................................ 91
Points of Intervention ........................................................... 99
Integrated Strategies for Maximum Impact ......................... 107
Harmonize Your Strategy with the Whole System ............... 111

Unit 6 Indicators of Community Performance
Select Indicators for Monitoring Performance ...................... 114
Gather Baseline Data ............................................................... 122

Unit 7 The Community Action Plan
Identify Implementation Requirements ................................. 125
Alignment with Existing Community Plans ......................... 138
Prioritize Strategies ............................................................... 140
Adopt and Implement the Action Plan ................................. 142

Unit 8 Tracking and Reporting Progress
Gather Progress Data .............................................................. 148
The Sustainability Progress Report ....................................... 153

Unit 9 Revise, Refine, and Start Again

Unit 10 Leadership for Change and Innovation
Exercise: Are you a servant leader? ........................................ 166
Exercise: Develop your listening skills .................................. 169
Exercise: Discover your team’s personality types .................. 175
A process for conflict resolution ............................................ 180
Public Meeting Facilitation .................................................... 182
Exercise: The community change game ............................... 192
Appendices

Appendix I  The Earth Charter ................................................................. 195
Appendix II  Systems indicators: Pressure, State, and Response
Appendix III Integration Opportunities with Traditional Planning
Appendix IV  Sustainable Procurement —
    sample documents from the City of Portland, Oregon
Appendix V  Resources
    Sample Press Release .................................................................. 212
    Resource list ............................................................................ 213
Preface

Over the wide sweep of history, human existence has been marked by relatively few cultural shifts significant enough to be experienced on a global scale. Whether it was Galileo and his clearer vision of the cosmos, Jesus and his message of inclusive divine love, or Nelson Mandela’s triumph over ancient racism and hatred, there is no question that real planetary change is as difficult as it is rare…particularly for the people on whom it falls to introduce these innovations to others.

As you read this, we are on the verge of a similar cultural shift — the moment when human culture grows out of a prolonged adolescence and recognizes our place in the global ecosystem and our responsibility for all other life on Earth. The people on the front lines of this transition are people working at the local level to improve the quality of life. Communities everywhere are increasingly aware of the connections between their local well-being and the global state of the economy, the social fabric, governance, and the environment. The wake-up call may take the form of an employer’s move offshore, a water crisis, immigration issues, or the closing of a landfill. Towns may fight over water rights, or law enforcement agencies struggle to coordinate their search for a missing person.

As we begin to recognize the interconnectedness of our homes, neighborhoods, towns and cities with their broader surroundings, we may be daunted by all the ways that natural, economic and social systems defy political boundaries. But this complexity and interdependence is as real as it is inescapable. Taken together, the interwoven local crises our communities are facing add up to a global challenge that demands response.
Recognizing this, people around the world have come together from different cultures, religions, and continents to participate in drafting the Earth Charter. This remarkable document communicates a fundamental unity of people from all walks of life, from every corner of the globe, on some of the most important issues facing our species. It holds up a set of shared ethics — 16 core principles — reflecting a vision for sustainable development rooted in “respect and care for the community of life.”

As a species, the ethical values we share shape our world — from the theories behind our legal system to the strategies we choose to achieve our goals. Because it is a truly global document — the first of its kind — the Earth Charter provides an ethical foundation that offers local communities everywhere a vision and a blueprint for change. Since it was launched in 2000, the Earth Charter has been embraced by thousands of municipalities around the world. From major cities like San Jose, Costa Rica and Toronto, Canada to rural communities in Vermont and Australia, they’ve used it in ways that fit their local political and cultural realities. They have endorsed the Charter, adopted it as part of their local regulations and plans, and integrated it into their educational programs. Endorsements have come from the U.S. Conference of Mayors, organizations like the Millennium NGO Forum and the International Council for Local Environmental Initiatives, and hundreds of individual cities and towns in places like Jordan, Spain, and Peru.

Out of this international enthusiasm for using the principles of the Earth Charter on the local level, EarthCAT was born. EarthCAT, the Earth Charter Community Action Tool, consists of the Guidebook you are now holding and the software on its companion website. These tools were created by a joint partnership of Global Community Initiatives (GCI) and the World Resources Institute (WRI), who also worked with Sustainable Hudson Valley and the communities in their region to develop and test the tools and techniques for this methodology. Their purpose is to provide communities everywhere with a step-by-step process for taking action locally, while using the principles of the Earth Charter in every facet of their work — from the planning process right through to the evaluation of project performance. Because communities
can use the EarthCAT software online as they proceed through the steps involved in this planning method, it also becomes a growing repository of experience for the benefit of other localities around the world as they embark on their own planning for the future.

Communities don’t have to have formally endorsed or adopted the Earth Charter to benefit from the approach that EarthCAT provides. The values prescribed by the Charter are present at every stage of this process, and communities that pursue these steps diligently will not only be helping themselves, they will be making a contribution to the sustainability of the planet. And they need not worry that following this process will involve a loss of local control. To the contrary, the Earth Charter’s democratic approach embraces and reinforces the principle of subsidiarity— that decisions should be made closest to the level of impact. This makes it imperative for local and regional communities to take responsibility for the decisions that affect their future.

Sustainability and justice have an impact beyond the environmental and economic arena, and one of the most important ethics that the Earth Charter recognizes is the inextricable connection between all the individual issues communities face. We can’t achieve a healthy environment without also achieving social and economic justice. We can’t achieve peace without good governance. Steven Rockefeller, a member of the original Earth Charter Commission, puts it this way: “Good sustainable governance includes the rule of law, the provision of security, respect for human rights, access to justice, access to education, an ethic of respect and care for Earth’s ecological systems, and sustainable development planning. Fundamental to a sustainable social system are widely shared ethical values, including mutual respect and respect for human rights, trust, good everyday working relations, and an awareness that society is part of the greater community of life.”

We need to work on all of it to achieve any of it. This workbook will show you how to do that in a logical, principled, way.
Introduction

Communities and Universal Human Needs

Communities are part of the human condition; most of our lives take place in a community context. We aren’t always aware of the role communities play — that people form communities for a reason. We also aren’t aware of all the ways communities provide for our needs. Communities are where we have our homes and care for our family and friends; communities provide employment so we can meet our needs for meaningful work and income; communities empower us to shape our own present and future; communities allow us to maintain a clean environment and a supportive infrastructure.

In short, we form communities to meet our common needs. But you know that few of our communities really meet all of our needs. They succeed in some ways, but leave us unfulfilled in others. Sometimes they meet the needs of a few people very well, and leave many others insecure. This workbook presents an approach that you and your community can follow to better meet everyone’s needs. It will help you find the way to make your community more sustainable — making sure that the way we’re meeting our needs today doesn’t jeopardize the ability of future generations to meet theirs.

What is a sustainable community? A sustainable city? If we form communities to satisfy our common needs, then both the community itself and the role it plays meeting our needs has to be sustainable — healthy, resilient, long-lasting. This is what we mean when we refer to “sustainable” communities: communities that satisfy people’s needs now and in the future. Sustainable community development is the process of working to meet and achieve balance between our economic, social, governance, and environmental needs, and a balance between the needs of current the generation and those of the future.

Many of us care deeply about the communities we live in. Whether one is a municipal official, organizational leader, educator, or a citizen activist, we want to help our communities be great places to live, to work, to play, to worship, and to be connected to our neighbors and the entire community of life. Our concern
can be reflected in local issues like school budgets and water supplies, in international issues like global warming, pollution and overpopulation, or in issues that know no boundaries of scale, such as violence and terrorism and the increasing gap between the rich and the poor. At whatever level we feel it, it is this concern for our collective welfare that drives us to participate in local government, school boards, and faith communities, to advocate for local endorsement of initiatives like the Earth Charter and Local Agenda 21, or to work toward global progress on the Millennium Development Goals.

Despite our best efforts, however, we often find that our communities are stuck in a short-term time-frame. There may be people in our communities who have good ideas for alternative strategies, but find they can’t implement them due to scarce resources, uncertain revenue streams, and the high turnover rates among local elected officials. As these issues persist, your community leaders — perhaps you among them — become increasingly stuck with short-term problem solving and crisis management. And all too often, we discover that yesterday’s band-aid solutions have become today’s problems.

The EarthCAT approach — as outlined in this workbook and the companion EarthCAT software — is designed with two primary goals in mind. One is to help people like you develop strategies for sustainability, building on your community’s strengths to ensure that future generations have the capacity to live healthy, meaningful, and productive lives. The other is to reduce the uncertainty associated with getting your community involved in developing and adopting sustainable policies and programs.

This workbook can help if any of these statements apply to your situation:

- You feel that most of the “solutions” being proposed are band-aids — they don’t address the roots of the problem, and sometimes make things worse.
- You know that your community should be doing something about global issues, but you don’t know where to begin.
- Several issues over the past few years have been divisive for your community, and you need a reliable way to bring people back to the table to discuss policies and programs in a pro-active way.
- You have some ideas for the betterment of your community, but don’t know how to make them a reality.
- A lot of people in your community are resistant to trying new things.
Most of the efforts already underway seem fragmented; you’d like a sense that people had a comprehensive and long-term view of where the community is going.

The community will never have the money to accomplish ______________ (fill in the blank).

**The Earth Charter and Sustainable Community Development**

The Earth Charter is a groundbreaking international document, but even more important it’s a participatory process that has captured the imaginations, hearts, and minds of the broadest possible cross-section of people all over the world.

Before the Earth Charter, international treaties were the purview of high level governmental officials, often acting without benefit of popular mandate. The Earth Charter Commission began work with the premise that it would produce a guiding document that truly came from the people. Over a span of many years — three of them spent in an intensive consultative process — the Earth Charter slowly evolved as a shared statement of fundamental ethical principles from voices around the world, representing the full spectrum of humanity. Hundreds of organizations and thousands of people were involved in its drafting. National Earth Charter Committees were formed in over 50 countries, and grassroots community leaders as well as experts in international law, science, religion, global ethics, and sustainable development participated. When the Earth Charter was completed in 2000 it was endorsed by the Millennium NGO Forum, which in turn recommended that the United Nations endorse it. Since then UNESCO has endorsed the Earth Charter as a valuable ethical framework for sustainable development, and it has been formally endorsed by hundreds of cities around the world.

This broad acceptance has raised some obvious questions, however. Questions about how a principled document like the Earth Charter can be used for practical application in cities and towns who struggle daily with the mechanics of life — water and sewer systems, police departments, housing construction, economic development. What added value can the Earth Charter offer to busy public officials? Why should they bother with a document that speaks in ideal terms? How does that help manage the city budget, build a new wastewater treatment plant, hire teachers for the schools and nurses for the hospitals, and deal with widespread drug abuse, alcoholism, and crime?

These are the questions that inspired us to create this workbook, and forced us to look carefully at the added value the Earth Charter brings to local commu-
nities. There are three main points that form the basis of most of the material presented in the pages that follow:

One of the core tenets of the Earth Charter is that its principles are interdependent. You cannot achieve environmental health without also working toward social and economic justice — and doing it democratically, without violence. This interdependence, when translated into practical applications for community leaders, means that we need to understand our communities as whole systems.

Shared ethics, a shared vision, and collective action all demand that we use democratic and inclusive leadership skills in forming groups that will work together to achieve common goals. It is almost impossible to teach group process and leadership skills in a simple workbook, but we have tried to convey some important lessons in the section on *Leadership for Innovation and Change*.

Underlying all of the Earth Charter principles is the need to foster respect and care for the whole community of life. Developing the caring capacity of the community is a key strategy for sustainability and peace, and bringing respectful practice to community processes is a practical way that this ethic translates to local action.

We encourage you to go to Appendix I and read the Earth Charter (if you haven’t already), and to use its principles as a foundation for your thinking, as criteria for evaluating difficult decisions, and as inspiration and a vision for a better world. There is a direct relationship between the core principles of the Charter and the objectives of sustainable community development. We will return to these fundamental concepts again and again throughout this workbook, as we undertake the integrated approach the Earth Charter calls for.

While we won’t spend a lot of time talking about the Earth Charter itself in this workbook, you will find that we have placed enumerated principles from the Earth Charter into the margins at various points. This will help to illustrate the way our methodology incorporates the Charter in its execution. Our effort here is to apply these principles in ways that are meaningful and useful to community leaders. We will also bring insights from different disciplines — such as systems theory — that can help communities operationalize the core principles of the Earth Charter in their planning processes right from the beginning.
EarthCAT: A New Approach to Community Development

This workbook presents the EarthCAT approach for sustainable community development. EarthCAT stands for Earth Charter Community Action Tool, consisting of both this workbook and its companion software. They are designed to give community leaders real tools to enable you to make sustainable development and peace a reality where you live and work. As you work your way through this book to develop a sustainability plan for your own community, you may also wish to avail yourself of the EarthCAT online software system. This web-based program is a management tool that into which communities can enter the information, ideas, data, and strategies they develop. It then helps them organize it, track results, and report to the community. EarthCAT online also allows communities to share their strategies and results with each other. You can find the EarthCAT website at www.earthcat.org.

Traditionally, community management focuses on fixing problems as they arise. City managers fix potholes, allocate resources to improve test scores, or clean up degraded waterfronts. A narrow focus on attacking individual problems — on the specific negative aspects of what happens in a community — is not an effective long-term strategy. Problems persist, and new ones arise, because strategies born from a narrow focus will more often than not miss the true causes of the problem, and ignore the possible unintended consequences of the solution.

EarthCAT uses a different approach — a “whole systems” approach. It is focused on achieving positive outcomes, rather than overcoming negative problems. EarthCAT outlines specific tasks that a community will perform to identify its needs, to identify the assets it has in place to meet those needs, and to develop strategies to strengthen those assets to better meet the needs of the future.

The Whole Systems Approach

Your community is a complex entity. It may be a huge metropolitan area formed by the incorporation of what were previously separate municipalities, or a more rural town with villages, farmland, and stream corridor settlements, or a sprawl-
ing collection of suburban neighborhoods divided by highways and laced by parklands.

Different people in your community will undoubtedly see the community differently. Our sense of our community is influenced by culture, by function, by political identity, by habits of association, and much more. Ultimately, it is the sum of all these elements — the people, buildings, commerce, roads, businesses, skills, government structures, incomes, flora and fauna, history, sense of the future, social and service clubs, the air and water, religious organization, schools, and countless other tangibles and intangibles — that make your community what it is.

It is the whole community that determines how any one part of it functions. The quality of schooling, the level of pollution in your air, the connectedness between neighbors and the town to the larger world, how much you pay in taxes, whether the roads are smooth or potholed, all of these specific aspects derive from your “system”. And because the community is a whole system, all of these aspects feed back into the system to either change or maintain it. A system is defined as something that maintains its identity through the interaction of its parts. A community is truly a system insofar as the whole is greater than the sum of its parts.

It is common to assume that the community system is dominated by formal structures established by your local government. However, these formal structures are only a part — sometimes a small part — of the overall system. The informal relationships, the natural resources, history, cultural mindsets, and commerce often have far greater influence than formal institutions.

We are attracted to thinking about the formal structures because they feel more accessible and easier to influence. The EarthCAT approach, however, cautions against this attraction to the “obvious,” and to the solutions that these formal structures seem to invite. Make no mistake, your town government and other formal elements are an important part of your community system. But it would be a mistake to think that they alone define your community. Strategies to change your community must move beyond contemplating the role of government, and really try to understand the community system that has led to and maintains the status quo.
Community planning using a systems approach isn’t easy. One of the defining aspects of a whole system is that it is really somewhat like a bowl of spaghetti: all the parts are connected and inextricably intertwined. Now, recognizing your community in a bowl of spaghetti, while a bit unpleasant, should help clarify that it is impossible to achieve narrowly defined goals in a community without taking all of the other sectors into account. Grasping the systems approach to planning will allow you to replace the image of an inscrutable mass of noodles with an understanding of the linkages of each element of the community system, and how they relate to all the other elements of the system.

Understanding your community as a whole system will involve learning some new skills. But this thought process opens up new possibilities for making real change, and can help you create positive synergies among different components that may have been functioning in relative isolation.

**Human Needs and the Community System**

Earlier, we defined a sustainable community as one that meets its needs and realizes its aspirations without reducing the ability of future generations to do the same\(^1\). Community systems are formed and evolve to meet collective needs, and the crux of realizing a sustainable community is the development of a deep and effective understanding of the whole system and how it meets — and sometimes fails to meet — the needs of its members.

What are our needs? We often think of the basic material needs for food, clothing, and shelter. But we have other needs as well, all of which are satisfied through interaction with our communities. We need to feel like we belong, we need to be cared for, we need to have a voice in decisions that affect our lives. We need money, and work, and recreational opportunities. We have an individual and collective need for education. Furthermore, because we all take collective action to meet most of our needs, we have a need for effective collaboration, for a division of labor, and for group decision-making. Indeed, it is the premise of this book and this methodology that meeting this need is a prerequisite for addressing all others.

---

In keeping with the Whole Systems approach to sustainability, all of the essential needs of our community must be identified and taken into account in each of our planning efforts. It is all too easy, however, when taking on the heavy challenge of truly meeting our needs in a given area, to lose sight of other needs that, while perhaps not part of our immediate focus, are nonetheless equally important to any successfully functioning community.

We have found that, for planning purposes, all of the basic needs of a sustainable community can be categorized into five main areas:

1. **Social needs**, for culture, values, care, and education
2. **Governance needs**, for order, justice, security, and collective decision-making.
3. **Economic needs**, for monetary income and productive employment
4. **Services and infrastructure**, for material goods and services, and access to them
5. **Environmental needs**, for healthy ecosystems and natural spaces

We make it a priority, throughout the planning stages that follow, to address our efforts to each of these categories. This is to ensure that no essential area of community interest is being ignored in favor of another. A community that can meet its members’ needs in all of these areas, and can do so indefinitely for generations to come, is precisely what we mean by a Sustainable Community. Accordingly, the EarthCAT process, as outlined in this workbook, will seek to ensure the success of our communities by maintaining a focus on each of the following “sustainability areas”:

**Social Well-Being.** This results from the community’s caring capacity — its ability to care for its members, form and pass on values, educate its youth, support creative endeavors, offer recreational opportunities, and provide safe and friendly neighborhoods.

**Good Governance.** This refers to more than just the workings of the local government. It encompasses a community’s capacity to exercise self-determination, resolve conflict, and ensure that everyone has an equitable voice in decision-making, resulting in equitable access to facilities, services and resources.
A Vibrant Local Economy. This relates directly to a fundamental capacity of the community — to create meaningful work and provide income for its members. The wealth of a community is dependent on this capacity, and many of our economic development efforts are designed to enhance it.

Efficient Services and Infrastructure. The physical and material needs we have are met directly through the community infrastructure we develop, and the products and services it can deliver — the housing construction, transportation networks, waste disposal facilities, energy generators, utilities, etc.

A Healthy Natural Environment. The natural environment is the fundamental basis of any community’s ability to exist. If a human community — with all of its aspirations, institutions, organizations, systems, and subsystems, no matter how complex — is to be sustainable, it must be able to maintain the health and integrity of the environment on which it depends. This basic fact is often overlooked (or, which is just as unfortunate, taken for granted) in community planning efforts. We won’t be making that mistake. As our aim here is to work toward a truly sustainable community, the needs of our environment will be taken into account at every stage of the process.

Problems vs. Assets

The idea of using a whole systems approach is fundamentally different from an orientation that focuses only on attacking individual problems without regard to their larger context. As mentioned above, the latter directs attention to a narrowly defined problem — pot holes or a malfunctioning sewage treatment plant — and looks for a strategy that will have an impact on that specific issue. The whole system approach requires people to take a step back outside the narrow framework such a problem may appear to present. From this perspective they can draw on system dynamics to understand the root causes of the difficulty, and come up with strategies that not only combat the problem, but strengthen the resiliency of the community over time.

Starting with a focus on assets also draws on the wisdom that whole system thinking offers. If the purpose of community subsystems is to satisfy our needs, then the assets the community has developed over time are directly related to that goal. If we look at the key strengths we have, we are tapping into a powerful
leverage point for positive change. The more narrowly focused problem-solving model looks only at the weaknesses, and often throws money, energy, and resources down a bottomless hole. If the fundamental roots of the problem aren’t understood, it never goes away.

**Needs and Assets: The Building Blocks of Your Community System**

Communities can be challenging to change. When community systems have been in place for awhile, even if they are dysfunctional, they attain equilibrium. This means that the existing structures and the people who manage those structures are going to be very resistant to change, for a lot of complex reasons. If you are going to direct your community toward a more positive future, you will need to both understand the community system that needs to change, and develop a positive vision of what it can become.

The first task is to identify and understand the needs of your community. You will then identify the assets your community has developed in order to meet those needs. For example, children have needs for a sense of empowerment, fulfillment and fun, employers need skilled employees, and adults need the skills that enable them to get rewarding employment and to feel informed. Communities develop school systems to help meet these needs. People need physical and mental well-being; health care, fitness facilities, and educational programs meet these needs. People need transportation for work and pleasure, so communities develop road and bus networks. Each of these components is a community asset. Learning to recognize community assets affords you an understanding of the underlying subsystems. With this awareness, you are better able design ways to meet community needs without negatively affecting other parts of the whole system.
Taking Action Step by Step

For clarity, we have broken EarthCAT into ten Units. The first is a preparatory step that describes the process needed to help people accept change and innovation more readily. Following are eight separate implementation steps, and a supplementary Unit describing the leadership skills and group process you will need to manage what is certainly going to be a lively and even contentious process. The leadership skills may be the most important part of all — their placement at the end, as Unit 10, does not mean that you should wait until the end to read them. That preparation is a prerequisite for this and other types of community work you might like to do.

Each step is important, and this workbook takes the time to give you an in-depth look at how to achieve results at every stage. Here is a brief description of the objectives of each Unit:

**Laying the Foundation for Change** – This chapter discusses the first steps to take to get the community change and innovation process off on the right foot. How to get people involved, what kind of structure is needed for decision-making, and conducting public information and outreach campaigns are all included here.

**Building A Common Vision** – To set a course for community change, it is very important to establish a shared vision for the future. Thinking in the long term is key; often small strategic differences evaporate when people work together to think about what they want twenty years from now. Another key is to focus on the strengths you have as a community — the assets you have that meet your needs. This gives people a positive place to start.

**Establishing Goals** – Once you have a sense of shared vision and common values, then it is possible to set performance goals for the programs and policies you need to achieve the vision. Selecting goals that can be met by capitalizing on your community’s assets, with the whole community system in mind, is the positive, integrated way to approach the process of steering your community in a new direction.
Understanding Trends and Setting Targets – Within each goal are more specific targets — interim steps you can achieve that bring you closer to the goal. Before you establish specific targets, however, it helps to understand the trends behind the existing data. This enhances your ability to identify the key variables that will influence the way you develop your strategy.

Planning Strategies for Taking Action – To be effective, a strategy for action needs to take the whole community system into account. You will use the understanding you’ve developed of how your community works to design strategies that take advantage of the existing dynamics in the system.

Indicators of Community Performance – You have set targets to achieve your goals in realistic increments. Indicators are measurable data points that can be used to track the progress of your community action plan in reaching these targets. Identifying the right indicators for your purposes is an essential skill.

The Community Action Plan – When all the pieces are pulled together, you will have a plan that can serve to guide the other planning processes within your community. It will reflect some of the most important elements of the specific community plans — transportation, energy, housing, social services, education, etc. This Unit talks about how to create an action agenda.

Tracking and Reporting Progress – As you implement the provisions of your plan, it is vitally important to communicate the results to the public, to the stakeholders, and to anyone else who is involved in making it a success.

Revise, Refine, and Start Again – Planning for sustainable communities is not a linear process; every step of the way demands revisions, changes in direction, and new beginnings. Managing the iterative nature of any complex process is a challenge. This brief Unit gives some guidance for how to do that.

Leadership for Change and Innovation – The new paradigm of sustainability and peace demands a new type of leader, new approaches to partnership, and new skills for working with groups. This Unit, while it can’t substitute for face-to-face training, offers some suggestions for the types of training, and the orientation required, to succeed in your journey to a new world.
Using EarthCAT to plan the future

EarthCAT can be implemented in different ways in different circumstances and depending on what kind of community you are leading toward change. In a municipal community, which is EarthCAT’s primary target audience, it is most effective when employed by a coalition of community government, engaged citizens, and non-governmental groups that represent the business communities, faith groups, environmental or social advocates, educators, service groups like the Rotary Club, and others.

However, some local governments may prove to be disinterested. Maybe they are not inclined to consider a new approach, or are resistant to the transparency and accountability required by citizen engagement in community governance. Nevertheless, if citizen groups are able to engage enough of the community, EarthCAT is a meaningful approach even in the absence of formal governmental involvement. A community sustainability plan can be developed, strategies implemented, and progress measured. With luck, the local government will see the value of the approach when they see it in action.

Remember also that there are many communities other than legally incorporated cities and towns. A family is a community, as is a business, a church, an apartment complex, etc. These communities can develop vision statements, establish goals and targets, and track progress just like a municipality can. They can register in EarthCAT online just like a town can. Some of the exercises presented here may not be as relevant to families as they are for cities, but there is still something to be learned from all of them. As you read the workbook, it will be apparent which tools are useful and which are not.

What You Will Learn

This workbook is designed to give you a framework for moving forward with your community to make positive change. It is written so that people who have little experience working in communities can use it successfully, but it also contains skills, strategies, and ideas that will benefit people who have years of experience. We all know that community work does not always proceed in a logical, orderly fashion. Similarly, this book invites you to open up to a relevant topic and work from there.
If you can use this workbook, you will also have the information, skills, and planning discipline that you need to use the on-line management support software effectively. EarthCAT online helps you manage all the information you generate as part of the planning process, provides easy to use reporting and documentation, and helps you see what other communities are doing in situations like yours.

We know that the idea of proposing new ideas to any community can be intimidating, even if you are experienced in public life. This workbook is designed to take you through a strategic approach to community organizing, helping you identify and refine the skills you need to engage others. This combination of tools and skills can help minimize the feeling that it’s you against the world. You will learn to recruit supporters, develop a cohesive team, and communicate effectively with broad audiences. To accomplish these objectives, you will also find here some skill-building suggestions in the following areas:

<table>
<thead>
<tr>
<th>People Skills</th>
<th>Technical Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership Skills</td>
<td>Facilitating complex processes</td>
</tr>
<tr>
<td>Listening and effective communication</td>
<td>Systems thinking</td>
</tr>
<tr>
<td>Conflict Management</td>
<td>Strategy design</td>
</tr>
<tr>
<td></td>
<td>Evaluation and reporting</td>
</tr>
</tbody>
</table>

**Keep the Faith**

Making politically viable change in your community will take time. You can expect the process outlined in this workbook to take up to two years if it is done thoroughly and effectively. It may sometimes feel like the approach is painfully slow, and that EarthCAT really should be called EarthCan’t. We understand that people who join local governments or volunteer to be leaders in a process like this one are the kind of people who want to do something. We sympathize. However, that inclination to leap into action sometimes leads us to do what turns out to be the wrong thing.

Implementing EarthCAT will involve regular meetings, of varying length and intensity, on a weekly, monthly, and quarterly basis. While there are short-term projects and strategies that can be appropriate, recognize that real, meaningful, structural change takes commitment and perseverance.
Yet it needn’t be overwhelming, especially if there is an existing organization with some staff capacity to help keep the process moving. It would be very helpful to identify an organization — either the local government or a non-governmental organization — that can dedicate staff time to the process to ensure momentum over the long term. And even though the people you recruit to sit on the Stakeholder Group will need to make a commitment to attending meetings over a period of at least a year and a half, the meetings would take place once or twice a month, and should not be so much work as to interfere with their other responsibilities. There are also opportunities to break many of the processes up into subcommittees. It makes sense to have a subcommittee to develop the indicators, for example, and strategy development might be made more manageable if it is broken up into committees as well. In Burlington, Vermont, they had four key subcommittees, representing the fundamental areas of sustainable community development: social well-being, good governance, a vibrant local economy, and healthy environment and infrastructure.

Leading your community away from a problem-of-the-moment mindset toward a strategic, holistic approach will require building a deep understanding of where your community currently is, how it got there, and what makes it work. So — don’t lose heart. We hope that, by employing the strategies described herein, you will find ways to engage your community in an exciting and positive movement: communities that are trying to leave a positive legacy for the next generation, while respecting their own histories and unique qualities. Communities that are inventing new ways of seeing themselves that allow for adaptation and creative problem solving. Read on, and see how these visions are giving rise to powerful and effective action.
Unit One

Laying the Foundation for Change

Community change can be initiated in many ways. But any sustainable, long-lasting change will depend on the people themselves. To achieve the goal of a democratically-created local vision in the global context, you will need to inspire and motivate your fellow citizens — not only to support the vision, but to take an active role in defining it. This section outlines some effective ways to reach out to a wide community, generate excitement, and build committed participation for the campaign you are about to begin.

To get the project off the ground, you need a solid community organizing effort. Developing a sustainability planning project with broad public involvement is not a strict, linear process. It will involve a lot of improvisation and changing course, but each step can still be anticipated and planned for. Here is the basic sequence of actions:

✓ Gather a Core Team
✓ Define your planning parameters
✓ Recruit and train a Stakeholder Committee for representative leadership
✓ Conduct a Public Outreach Campaign to broaden participation and build buy-in

Start With Spirit!

What do people get excited about? A day at the races, with its extremes of stimulation and risk … a festival, with its spirit of shared celebration… a sumptuous meal that pleases the senses… a scientific breakthrough reflecting intelligence for the common good… the Olympics and their tribute to peak performance… an act of political courage that restores trust… All these things tap into people’s sense of meaning and potential, while also providing an emotional and aesthetic experience. The right blend of the festive and the serious is most compelling — and bold, inspiring actions will draw out people who can help to achieve it. In every stage of your activities — from initial surveying, the work of the leaders...
you recruit to carry the process forward, the planning and strategy development, and the final adoption of the plan — you can draw on the creative and spiritual resources of your community through the arts, celebrations, challenge, friendly competition, and even humor.

The basic premise of this approach is that effective public processes are built on vision, imagination, courage and other human qualities that unite us across our differences. People do not get excited about a meeting on zoning changes, but they do get excited about preserving what is special about their home towns and having their own ideas heard in the process. Historically, meaningful change has often followed a fundamental cultural shift led by people who captured the hearts of a broad group of followers. This idea can bring in faith communities, but goes much broader. Inspiration is a spiritual asset, as is courage, and wisdom, and compassion — all critical elements of creating a new sense of community. Engage people on the basis of their faith in the future, their concern for their children and grandchildren, and their love for their neighbors, and you won’t be able to stop it.

**ACTION STEP Gather a Core Team**

Before you do much of anything, it’s important to find at least a few people who share your view and who are ready to work on a community improvement project. Even if you’re the mayor, if you’re going to initiate a new project, you need allies. And if you’re not the mayor, you will certainly need help from other people to build the base of support you need. The core team could be as small as three people, but shouldn’t be much larger than seven to ten. It should include people who have credibility within the community, and will ideally reflect experience in different sectors such as business, government, and civil society. The Core Team needs to agree on the general direction of the project, and should work to become a functional unit before reaching out to the rest of the community.

Find a few committed individuals with good leadership skills and ability to follow through, who can to do the start-up work and recruit a larger group. They should, at least, have thoughtful and optimistic personalities, good interpersonal skills, and a capacity to have fun together while getting hard work done. It will help in this effort to brush up on the skills detailed in Unit 10: *Leadership for Innovation and Change*. Even the most experienced organizers will benefit from a
quick review of this material, so please spend some time with it, even if it feels unnecessary.

In prospecting for participants, it helps to determine who has an interest in what you’re trying to do. Whose job will be easier, or whose life will be improved, if you can make your community work better?

**Task: Brainstorm and Convene a Core Team**

To have picked up this workbook means that there is at least one person who feels that your community needs to implement a structured sustainability planning process. To have gotten this far in the book indicates that one or more of you believe that the EarthCAT approach has promise for your community. This task will help you build a functional core team to drive the EarthCAT process.

As you set out to enlist your Core Team, consider the following sources of potential candidates (but don’t let this list restrict your thinking!):

- Local activists within or outside local government
- Leaders of organizations dedicated to community improvement
- Local youth leaders
- Business that benefits from a healthy community
- Local Service Clubs: Rotary, Lions, etc.
- Planning or Conservation Commission Members
- Leaders of Faith Communities

In addition, think of some character traits that you will want in your core team: people who are energetic, intelligent, upbeat — in short, people who are driven to see a vision implemented despite any barriers. Think of people you always seem to see at local events, who make you wonder where they find the time to always be involved. These traits are more important for your Core Team than membership in any particular categories. (Later, you will be identifying a stakeholder group which will provide the balance essential to the eventual success of the project.)

Once you have identified between ten and twenty candidates, you should approach the 10 who you think would be the most engaged. Invite them, separately or as a group, to someone’s house for coffee, or think of some other pleasant place. Discuss with them the idea of working together for one to two years to change your community. Make sure you have a clear presentation of the EarthCAT
approach and why you believe it will be useful in your community. Review the 
resources available on the EarthCAT website, and strengthen your presentation 
by showing what other communities have already developed and stored in Earth-
CAT online. Don’t gloss over the commitment that will be required of every-
one — it does not help if you induce specific people to sign up, only to have 
them drop out soon afterwards. At best, you should already anticipate a 20% to 
30% dropout rate. It may be wise to be prepared to offer people an easy “out” 
if they appear uncertain. Remember, you can always have people participate in 
the Stakeholder group. The Core Team needs to be certain that they can rely on 
having each other to lean on moving forward.

**ACTION STEP** Define Your Planning Parameters

As you gather a Core Team, you begin to establish the parameters of your plan-
ing effort. This will include, at the outset, the information about your com-
munity that will form the basis of the Community Sustainability Plan, giving you 
something concrete to get the ball rolling.

**Getting Started: Record Basic Project Information**

Fill in the following information. As the core team solidifies, fill in the team members’ names and decide what meetings you will have to get the process started. Then establish a schedule of meetings, and determine the budget necessary to hold them.

**Define your community** (name, type, boundaries, etc): ________________

**Political classification** (city, town, school, church, etc.): ________________

**Project name** (e.g. Sustainable East Podunk!): ________________
Core Team leadership and members

Name (specify leadership roles):  

______________________________  ________________________________

______________________________  ________________________________

______________________________  ________________________________

______________________________  ________________________________

Initial Core Team meeting schedule:

Initial Projected Budget:

<table>
<thead>
<tr>
<th>Line Item</th>
<th>Assumptions</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff Time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program Staff</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support Staff</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equipment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Materials</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Travel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Printing and Copying</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Available Resources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potential Resources</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This initial project budget can help you identify what resources you will need to do the public outreach and engagement to get people involved. It is not designed to be a full-blown planning budget, although you will need to think about that very soon. To carry this plan out, staff support is very important.
Parameters of the Sustainability Plan

Planning Schedule

Below you will find the broad tasks required to develop a community sustainability plan. Each of these steps is covered in detail in one or more Units of this workbook. As you read the workbook and review EarthCAT Online, it is useful to roughly outline a schedule you plan to follow. Remember, implementing the process described in this workbook will almost surely take between one and two years. Try to be realistic. The schedule is bound to require revision more than once — it is enough for now to set some basic goals for which you can aim.

<table>
<thead>
<tr>
<th>Planning Step</th>
<th>Target Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation Work</td>
<td></td>
</tr>
<tr>
<td>Issue a Vision Statement</td>
<td></td>
</tr>
<tr>
<td>Set Goals</td>
<td></td>
</tr>
<tr>
<td>Analyze Current Trends and Set Targets</td>
<td></td>
</tr>
<tr>
<td>Establish Progress Indicators</td>
<td></td>
</tr>
<tr>
<td>Complete Sustainability Action Plan</td>
<td></td>
</tr>
<tr>
<td>Submit to Community for Adoption/Approval</td>
<td></td>
</tr>
<tr>
<td>Issue our First Sustainability Report</td>
<td></td>
</tr>
<tr>
<td>First Sustainability Plan Revision</td>
<td></td>
</tr>
</tbody>
</table>

Identify the Community

It is important to determine the defining boundaries of the community for which you will be designing your sustainability plan. Most of the time this will be the political boundary of your town, city, or region. Other times, however, it may characterized more by its demographic makeup. Your target community might be defined by natural features, such as a watershed, viewshed, or mountain range. Or it could be an economic network encompassing, for instance, a wide commuting area or a metropolitan planning boundary. It might be a town–village cluster, or a wider intermunicipal compact if you live in a region where these exist. If you intend to develop and implement a plan for a regional community that doesn’t have a political boundary, be sure to take into account that you will need to seek buy-in from multiple political entities, and to allocate extra time and resources accordingly.
The EarthCAT Guide to Community Development

What political boundary will your sustainability planning include? _______________________________________________________________________

What natural boundary? ___________________________________________________________________________

What economic boundary? _________________________________________________________________________

What demographic area? _________________________________________________________________________

Time Horizon for Trend Analysis and Planning

Your plan will create a vision for the future and strategies to achieve that vision. How far forward do you want your community’s Sustainable Development Plan to look? Burlington, Vermont looked out to 2030. Calgary, Alberta is developing a 100-year plan. On the other hand, when assessing the trends your community is currently experiencing, how far back do you want to look?

**Historic Timespan:** focus on data since _______ (year)

**Planning Timespan:** create a vision from now until _______ (year)

ACTIONS STEP

Integrate Existing Planning Processes

Many communities have engaged in some forms of planning, and will at any point in time be in the middle of some planning process. Plans may be developed by government agencies, industry councils and other private sector groups, or utility companies. Categories of such local planning includes:

- Land use
- Growth management
- Economic development
- Open space protection
- Recreation and tourism
- Water supply and wastewater
- Air quality management
- Solid waste
- Transportation
- Affordable housing
- Arts and culture
- Historic preservation
- Energy
- Workforce Development
In fact, if these processes have demanded a lot of time and energy, your community may be suffering from “planning burnout,” especially if the level of effort made has not resulted in concrete results.

The approach presented here helps to build on the work of existing agencies, integrate it into your sustainability planning, and — above all — translate their vision and principles into action. By incorporating the other planning documents, where possible, into this process, you can avoid fragmentation or duplication of effort. If done right, this process is certain to make the champions of the other community improvement plans happy, as the community systems begin working together better.

Planning integration should take place at each stage in the process:

1. At the beginning, note the planning commitments that the community has already made. Review existing plans that have been prepared and adopted, whether or not they are in effect. A transportation plan that was released three years ago but hasn’t been fully funded is not obviated by the new sustainability plan; it is to be reviewed for whatever visions, goals, strategies, policies and programs it incorporates. The historic preservation working group created a few months ago by artists, developers and the tourism office should not be replaced by the present approach, but invited in and brought into dialogue with all the other stakeholders.

2. As your deliberations progress through the next few stages — identifying assets, setting goals and targets, and devising strategies — the individual plans that the community is committed to implementing should be an ongoing point of reference. Somebody — an intern, the stakeholder committee secretary, or a small group of stakeholders — should cull these plans for ideas that can be brought into the deliberations for the sustainability plan. Ideas listed in these plans may be subject to debate and may need further refining, but they are raw material for this planning process at every stage. The work you will be doing with systems analysis and strategy development may give the community a way to implement an idea from an existing plan that has heretofore seemed too complex, expensive, or politically difficult.
3. At the end of the sustainability planning process, when you are creating your Action Plan, the work will include integrating the relevant action steps into each existing plan, and making sure that your overall implementation plan continues the coordination of all these efforts.

One important benefit of bringing the variety of different planning efforts together is that the community will be better able to see the links between the various concerns, and the interdependence of their proposed solutions. Priorities may then be set for the proposals taken as a whole, rather than dealing with each separate compartmentalized issue on its own. This is, again, the essence of EarthCAT’s whole systems approach.

One technique to get the process of alignment off on the right foot is to convene a community meeting dedicated to hearing from all the groups who have community improvement plans pending or already underway. Make a celebration out of it, and structure the process so that each group can describe their highest priorities to the gathering. As you become more familiar with the techniques outlined in this workbook, you will probably find that there is a lot that this process can offer to help revive these other plans and put some of their most important recommendations into action.

The following chart illustrates how you might account for the various planning processes and organizations you will need to consult to ensure that your own efforts properly consider the goals and objectives that have been developed elsewhere.

**Plan Alignment Chart**

<table>
<thead>
<tr>
<th>Planning Process Underway</th>
<th>Timeframe</th>
<th>Responsible Agency &amp; Contact Person w/ contact info</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation Plan</td>
<td>Ten years, updated every five years</td>
<td>Metropolitan Planning Organization (MPO) Jane Buck, Planning Director 333-4444 <a href="mailto:jbuck@planning.edu">jbuck@planning.edu</a></td>
</tr>
<tr>
<td>Open Space Plan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land Use Plan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recreation Plan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic Development Plan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solid Waste Plan</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ACTION STEP Convene a Stakeholder Group

Once the Core Team is established, and you’ve begun work to start the planning process, it becomes a priority to pull together a Stakeholder Group. Stakeholders are people who have an interest in the community you are engaging in the planning process. A Stakeholder group gathers a representative number of these interested parties together — usually no more than 30-40 people — to serve in a leadership position during the planning process.

In addition to including a broad cross-section of the community, the Stakeholder Group can include all the various town leaders — department heads, for example, and the heads of significant local institutions. They all will gain by allowing others to see links between what they do and the value they add to the community as a whole. Once these linkages are clear, so is the importance of each individual role to community development. For example, a new recycling operation and efficient solid waste management systems might be a good way to attract businesses and markets. The different leaders can also offer a lot of valuable information on the contents of the various planning documents that have been produced in the past.

Define and Recruit Your Community’s Stakeholders

The Stakeholder Group will be responsible for a large part of the planning process. They should have the skills and commitment to engage in a wide variety of public outreach activities... everything from hosting focus groups to discussing key community issues to engaging local organizations in short term projects designed to keep people excited about the process.

Your Core Team will need to do a lot of preparation for the first meeting, including the drafting of basic documents. From there, you will need to let the Stakeholder Group shape the final version of the documents, and the group processes the planning effort will produce.

✓ Task One: Brainstorm Stakeholder Group Candidates

The Core Team can brainstorm a list of people suitable for the stakeholder group, and determine who will contact each person identified. Consider representatives of the following as a starting point:
Laying the Foundation for Change

- Local government officials and staff — e.g. mayor’s office and municipal council
- Civic and community organizations (NGOs)
- Businesses and industries
- Professional organizations — e.g. natural scientists, physicians, land-use planners
- Utility companies
- Regional and national governmental institutions — e.g. social welfare offices, environmental inspectorates, health inspectorates
- Social service recipients
- People with special needs
- Youth and elders
- Local schools and universities
- Private landowners
- Religious and ethnic groups
- Labor unions
- Community residents
- Media

✓ Task Two: Schedule a Meeting to Accommodate the Most Prominent Candidates

Identify a few of the busiest people who are critical to your effort’s success (a mayor or supervisor, planning department head, a prominent business leader), and set a first meeting for the Stakeholder Group, several weeks in advance, that fits into their schedules. Do your best to get their commitment to attend and participate.

✓ Task Three: Invite other Candidates

Contact people and ask them to participate. In-person contact is best. Call them up, make an appointment, and go visit them with some materials describing the project and what their responsibilities would be. Let them sleep on it, then follow up in a few days. It doesn’t hurt to mention some of the other people who have expressed a willingness to participate.

An alternate way to recruit people is to conduct a simple community survey that will begin to generate a buzz about the project and let you see who is enthusiastic.
**Task Four: The First Meeting of the Stakeholder Group**

For effective functioning, the first meeting agenda should include the following:

- Clear definition of the role and responsibilities of the Group
- Choosing a chairperson and a deputy chairperson
- Determining the logistics of the Group — how often and where it will meet, etc.
- Discussion and agreement on how information will be shared
- Discussion and agreement on a process for making decisions (e.g., by consensus or majority vote)
- Discussion and agreement on a process for resolving conflicts
- Setting a date for a stakeholder committee retreat (see next Action Step)

Meeting Materials Checklist:

- List of member contact information
- Community Map
- Selected background readings
- Relevant municipal mandates
- Draft mission statement for the campaign

*A note on selecting a Chairperson:* It can be a challenge to select one person to lead, when the group is new and made up of people who don’t know each other very well. One effective technique is to go around the group and ask everyone to name someone (including themselves) who they think would make a good chairperson. Treat it as a brainstorming session, so that everyone gets a chance to make a recommendation, and try to encourage everyone to participate. Then go around again and ask people to say why they chose who they did. Now go around the group again to see if there is consensus. Often, by the third time around, you’ll have identified someone who everyone can support.

An alternative to this is to recruit a good leader at the outset — someone who can serve as an interim chair, at least, until the group has met a few times. Talk to them in advance, and recommend them to the group at your first meeting.
ACTION STEP *Hold a Stakeholder Retreat*

When a diverse group of strangers get together for the first time to discuss something as important as the future of their community, a cordial, relaxed social time will help them to get to know each other and speak freely about their concerns. The retreat is thus the ideal time to discuss some guiding principles and ground rules for the group process. It is particularly advisable to set aside time for the Group to focus on designing the groundwork for the community sustainability project.

Ideally, it is good to get people away from their normal setting for two or three days together to get acquainted, share meals, and have some fun. But even if the retreat can only be a day long, it is well worth the time it will take to do it. All the work that follows will be easier as the people begin to build trust and camaraderie.

Make it a priority during the retreat to describe in detail the scope of the project, and give people an opportunity to comment on the sustainability planning process itself. In group activities participants can learn about, and determine, how the process will work. Each phase should be discussed — the endorsement process, the asset inventory, vision, strategy development, implementation, and evaluation.

Realistically, a full discussion of these steps will require more time than that allotted for the retreat, but it’s a good start, and people can continue to work together in teams. You should strive to determine a real action plan, with goals, timelines, and a schedule for regular meetings. Subcommittees or teams can be established, and all individuals ought to determine what roles they will play in the process. Guidelines for interaction can be determined and agreed upon. It is important for everyone to have a role, and to be perceived by themselves and others as important to the group process.

You will find there are many issues to be decided regarding the functioning of the Stakeholders group. Where will meetings be held? How will they be run? How will disagreements be handled? How will conflict be resolved? How will final decisions be made, and by whom? How will subcommittees give their input to the whole group? Who are the leaders? There is a lot to discuss organizationally, especially for people who have never worked together.
If there is a municipal mandate for the group to follow, such as laws that require meetings be open to the public, or a special charge to the committee, or limits set on the scope of its work, then all these should also be discussed at the outset. For many questions that will arise, there are no right answers, only the answers that the group itself determines. Leaders can suggest certain methods to use, but the group must decide to use them or not.

It can be helpful to organize group activities during the retreat that provide a structured way to develop a good team, to improve people’s skills, and to allow the participants to shape the process. We have provided some exercises in Unit 10 that can be of value during the retreat. They should be integrated into an agenda that includes a balance of work time, social time, and team-building activities.

**ACTION STEP**

*Launch a Public Outreach and Media Campaign*

For your community sustainability planning project to gain real political support, you will want the broader public to understand and support it. One key outreach mechanism is for each Stakeholder to develop mechanisms to inform the community group they represent. The Stakeholder Group should identify messages they want every member to convey to their own constituency, from business to labor to youth to neighborhood interests.

Beyond this targeted approach, broad community excitement is also essential. To create this, you need to make creative use of a variety of resources, including mainstream and community media, publicity efforts, events, and visuals. This campaign will establish the spirit of genuine two-way communication, if you can create a buzz and find new ways to listen to people at the same time. Some examples:

**Invite ideas** – Put up a big suggestion box in front of town hall, and ask a popular radio commentator to read a suggestion each week. Have an essay contest on a topic ranging from the serious — say, biodiversity protection in your watershed — to the most outrageous idea about how your community could be the “_____ [Fill in the blank] Capitol of the World”.

---

*test edition*
Create an online buzz – Start a community-wide internet listserv. Develop a web page on which anyone can contribute their thoughts, events, and community building ideas. Do training with local high school students on using EarthCAT or other interactive software, and ask them to help their parents get involved.

Good news – Start sending press releases to local papers, telling them about good things that have happened and people who have made a difference — from the students mapping their stream resources to the elders teaching literacy downtown. As your sustainability initiative generates ideas and makes people aware of the good work already going on, this itself can become a steady source of good news. Follow up with reporters and editors, and keep your eyes open for advertising sponsors to underwrite their coverage.

Potlatches & Potlucks – Community get-togethers don’t have to be costly, time-consuming, or bland. Creating signature events that reflect the spirit of your campaign will draw people in. Potluck dinners, musical performances, talent shows, and kids nights, held periodically throughout the campaign, can keep the civic glue strong. Organize a Potlatch, an adaptation of an old Northwest American Indian tradition. People come together to exchange household items they don’t need anymore: children’s toys and clothes, small furniture, kitchen equipment, books.

The Imaginary MacArthur Grant Program – The MacArthur Foundation’s “genius” grants are given out annually to people who have demonstrated unusual commitment, intelligence, innovation, or other admirable attributes. The grants are large and unrestricted — something most communities cannot duplicate. But your community can still honor its native geniuses and its everyday good ideas. With this exercise, the Stakeholder Group will nominate and decide on ten to twenty individuals and organizations that have made a substantial contribution to the sustainability of your community. If prizes can be donated, excellent! If not, the winners can be honored with a press release, award ceremony, or even donated services such as massages and free meals in local restaurants.
Art – Pull together a group of artists in your community for a public art event to create the future. Find a big canvas that everyone can draw on. Make musical instruments available for improvisation. Bring recycled materials for people to make sculptures. Have lots of food and activities for young children.

Celebration of Assets – Every single community has something it can celebrate. Find an excuse for a party, line up some local sponsors, and celebrate what the community will look like in 5, 10, or 20 years. A futuristic birthday party. Have a parade. Invite politicians to dress like they’ll look in 15 years. Invite young people to be the politicians for a day. Make a huge paper mache statue in the middle of town to commemorate the celebration.

Challenge – People like a challenge. They like friendly competition, and demonstrating what they do well. Sponsor a prize for the local business with the highest score on social responsibility. Give awards to people who have made the world safe for our grandchildren.

Humor – From street theatre to standup comedy. The tough issues facing communities may not be funny, but our foibles in dealing with them usually are.

Plan a Public Outreach Campaign

As you begin the community planning process, you want to make the public aware of the planning process, and the importance of the plan to the community’s future. It can help to highlight all the strengths the community has, and the challenges it faces.

First, you will need to convene a subcommittee of the Stakeholder Group to be responsible for ongoing public outreach and media relations. These people should be selected for effectiveness as spokespeople. They should be knowledgeable, engaging, and representative of the community’s diversity and values. They should also be reliable and accessible. Recognizing people who possess all these qualities is usually pretty obvious, although it wouldn’t hurt to ask some prominent members of the community for their recommendations as well.
✓ **Task One: Develop Goals for Communication Strategy**

Define the goals of your public outreach campaign. Some suggestions include:

- Making people aware of community assets
- Building a sense of community spirit
- Raising public awareness of the sustainability project
- Soliciting public opinion
- Changing people’s behavior
- Involving citizens in improving the community
- Making people aware of important issues and challenges

✓ **Task Two: Identify Target Audience**

The target audience flows directly from the purpose and the goals. Consider:

- What groups are already actively involved in community improvement efforts?
- Who is directly affected by particular issues facing the community?
- Who would be affected by some of the things that might be proposed to address these issues?
- How do community members group themselves, and what are their interests?

✓ **Task Three: Identify Information Sources**

Where do your target audiences look for reliable information? For example:

<table>
<thead>
<tr>
<th>Target Audience</th>
<th>Information Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area Residents</td>
<td>Neighborhood groups</td>
</tr>
<tr>
<td></td>
<td>Newspapers</td>
</tr>
<tr>
<td></td>
<td>Television</td>
</tr>
<tr>
<td>Local Businesses</td>
<td>Chamber of Commerce</td>
</tr>
<tr>
<td></td>
<td>Rotary Club</td>
</tr>
<tr>
<td></td>
<td>Business Association</td>
</tr>
<tr>
<td>Young people and students</td>
<td>Schools and Colleges</td>
</tr>
<tr>
<td></td>
<td>Pop radio stations</td>
</tr>
<tr>
<td></td>
<td>Celebrities</td>
</tr>
</tbody>
</table>
✓ **Task Four: Create An Effective Message**

The message of your outreach campaign must be:

- Clear, user-friendly, and consistent.
- In furtherance of the goals you’ve set.
- Based upon careful research.
- Developed in collaboration with credible information sources listed above.
- Seen as relevant to the lives of your audience.
- Written in non-technical language, easy for the average citizen to understand.

✓ **Task Five: Evaluate and Select Outreach Methods**

How will you get your message to the target audience? Having identified the information sources in Task Three, choose your outreach methods and pull them into a strategy. What are the criteria by which your media strategy should be evaluated? They might include:

- Affordability and cost-effectiveness
- Ease of implementation
- Potential to utilize existing resources
- Number of people that can be reached
- Personnel requirements
- Time frame required
- Flexibility
- Lifetime of usefulness (how long before it becomes dated)

There are many vehicles for getting content into circulation, including the press, online and broadcast media, and community “media” such as bulletin boards and newsletters. They include ways to get yourselves covered by the press, and ways to get materials you generate into circulation directly. Your toolkit includes:

- Press releases
- Press conferences
- Media events
- Editorial briefings for senior staff of publications and stations
- Letters to the editor and op-ed pieces
- Independently produced videos, websites, audiotapes and the like
- Direct mail and/or email
✓ Task Six: Identify Resource Needs and Opportunities

Once you have selected the outreach methods, you can identify your resource needs and opportunities. How much money will it cost to get your message out? Who do you need to help implement the campaign? What resources are available to help you? Many individuals may be willing to contribute their time in a campaign that benefits the entire community, and your information sources can often provide low-cost opportunities for reaching target audiences.

Make a table like that shown below to help prepare a list of resource needs and opportunities for implementing each outreach method.

<table>
<thead>
<tr>
<th>Outreach Method</th>
<th>Resource Needs</th>
<th>Resource Opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information brochure</td>
<td>Printing, paper, distribution</td>
<td>Copy machine at municipality, paper from local business</td>
</tr>
</tbody>
</table>

✓ Task Seven: Implement Outreach Activities and Assess Effectiveness

To develop a workplan for this step, you need to decide what specific tasks need to be completed, when they need to be done, who’s going to do them, and how much it’s going to cost. You might use a format like this:

<table>
<thead>
<tr>
<th>Steps</th>
<th>Timeline</th>
<th>Responsible Individual or Group</th>
<th>Associated Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

When you’ve completed each task, carefully evaluate the effectiveness of each outreach method you employed. Effectiveness is measured in how many people responded to the requests, the quality of their response, and other factors that will depend on the specific situation.
Hold a Kick-Off Event

In addition to the ongoing public relations and media strategies, it is a good idea at the beginning of the project to have a kick-off event. Such events can be a lot more successful if they can piggyback on top of another event that’s already guaranteed to draw a crowd. Plan a side show for the annual 4th of July Parade. Hold the kick-off in the middle of the downtown pedestrian mall on a sunny Saturday afternoon. Get the Mayor to speak about the sustainability project at a community event that attracts crowds. The important thing is to get in the news, and to get the word out to people who might not otherwise be aware of the project.

Kick-Off Event Checklist:

<table>
<thead>
<tr>
<th>Timeline</th>
<th>Task</th>
<th>Person Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 months ahead</td>
<td>Identify and secure site for event</td>
<td></td>
</tr>
<tr>
<td>1.5 months ahead</td>
<td>Design brochure describing project</td>
<td></td>
</tr>
<tr>
<td>1.5 months ahead</td>
<td>Arrange for sound equipment on site</td>
<td></td>
</tr>
<tr>
<td>1 month ahead</td>
<td>Send brochure to the printer</td>
<td></td>
</tr>
<tr>
<td>1 month ahead</td>
<td>Design posters advertising event</td>
<td></td>
</tr>
<tr>
<td>2 weeks ahead</td>
<td>Distribute posters to organizations, bulletin boards, and around town</td>
<td></td>
</tr>
<tr>
<td>2 weeks ahead</td>
<td>Identify members of the Stakeholder Group who will attend, and who will speak</td>
<td></td>
</tr>
<tr>
<td>1 week ahead</td>
<td>Draft and send press releases</td>
<td></td>
</tr>
<tr>
<td>1 week ahead</td>
<td>Check list of materials and equipment needed on site</td>
<td></td>
</tr>
<tr>
<td>4 days ahead</td>
<td>Invite members of the press</td>
<td></td>
</tr>
<tr>
<td>3 days ahead</td>
<td>Contact people you know to invite them to attend – make a team phone tree</td>
<td></td>
</tr>
<tr>
<td>3 days ahead</td>
<td>Arrange for refreshments</td>
<td></td>
</tr>
<tr>
<td>2 days ahead</td>
<td>Gather all the printed materials, chairs, etc. for easy transportation</td>
<td></td>
</tr>
<tr>
<td>Day of Event</td>
<td>Have fun!</td>
<td></td>
</tr>
</tbody>
</table>
A kick-off event is equal parts pep rally and photo opportunity. Plan to have a lot of both. (The photos may be used for newspaper articles about what’s happening, and will be available later for the reports and documents you create about the planning process.) Invite the mayor, the Chamber of Commerce president, and any other local celebrities to speak. Ask the local high school band to play some music.

The event is also an opportunity to ask people about their vision for the community. Prepare cards for them to fill out, and recruit volunteers to walk around and collect them. Create a big mural with newsprint on a roll, and ask people to write their dreams for the community on it. Bring lots of magic markers. Have fun.

Holding Public Meetings

If you are a seasoned public servant, you may forget that there are people out there who have a much more limited commitment to attending meetings. While the “regulars” who are already engaged will probably come to any meetings you convene, many more folks will participate in this important public conversation if you find ways to reach out to them. This might be accomplished by asking for time on the agenda of meetings they already attend, tabling at public places they already visit, or even knocking on their doors.

Successful neighborhood meetings can be launched across the community, and can reach many people through simple neighbor-to-neighbor outreach. Your Core Team will need to prepare brochures, brainstorm to find effective spokespeople in the neighborhoods, and schedule the meetings — with refreshments — in the homes of willing folks.

Local service clubs such as the Rotary, Chamber of Commerce, and Knights of Columbus often invite speakers to give them information about current events. Bringing materials that will relate to their issues and concerns, and establishing the expertise of your group, are the key door-openers here.

Senior Living and Meeting Centers are another great place to meet and talk to people. They love having speakers, and elderly people have a lot of political power because they are a large demographic group with time to be civically active.

Local places of worship are another source of interested people with a regular need for speakers. In addition to contacting the minister or rabbi, find out whether there is a social action committee, or something like it, to provide a source of ongoing advocacy after you have come and gone.
All of these groups have newsletters that can cover your talk, literature racks where your materials can be left, and groups of volunteers who can be given Letters to the Editor kits, background information, and ideas for action. And these visits will build both your mailing list and your polish in discussing the issues.
Unit Two

Building a Common Vision

A vision is a positive forecast of the way we want the world to be, an affirmation of our values and hopes. By articulating a vision statement and making it into a formal document to refer back to, you create an image of your destination to guide your journey. The language of the vision must be simple, so anybody can understand and get excited about it. It must reflect shared values, preserve and enhance the things people care about, and convincingly depict a community changed for the better. The visioning process should be future oriented and allow people to bring their imagination, creativity, and hearts to the process.

Real change means new ways of thinking and acting. When visioning processes work, they motivate people to conceive new ventures and new activities — to create unexpected opportunities that would not have arisen if it weren’t for the collective creativity put to work, and the new connections made. Visions that reflect the community’s aspirations can generate goals that people will want to work for, and make it easier to develop practical strategies and targets.

How is it possible to articulate a shared vision for an entire community? This is a huge task, and one that can easily fail if you don’t take the time to engage the whole community in the process. To be truly effective, a vision needs to reflect the core values of the people. Moreover, it must come from the people. A vision statement drafted by a few people in leadership — even with the best intentions — will never engender the sense of unity and common purpose that comes from the broad, community-wide participation.

Even after a good vision is developed, truly reflecting the hopes and aspirations of the community as a whole, it can still fail in its purpose if the leaders don’t get it — if they see it only as words on paper. A leadership that gets it will react to the vision with excitement and a sense of possibility. Among citizens, likewise, an inspiring vision statement can create a wellspring of energy and commitment. In Marbletown, New York, the community visioning process gave rise to a Community Development Committee, with over a dozen subcommittees of active volunteers, working on everything from youth programs to trails to arts to farm viability.
In the City of Balaclava, Crimea, city leaders have also used the visioning process to create a radically new direction for their community. Balaclava is famous as the locus for Tennyson’s poem “Charge of the Light Brigade,” which describes an ill-fated attack by British troops on Russian forces. They were told to charge up the wrong hill, which resulted in a massive defeat for the British. Well, the city has been charging up the wrong hill ever since, depending on the defense industry as its primary source of income. The changes that have recently taken place in Ukraine, however, have encouraged the city to become more forward-looking. A newfound sense of local pride is captured by this quote from a member of the city administration: “They say Balaclava is not a city, rather it is a state of the soul.” A local NGO described it this way: “People just love their city so much. If we were able to unite this love, it would be a great thing.” The city is now well on the way to doing this — the District Council has decided that it wants to remove military forces and the naval shipyard from the bay and make the city an ecotourism destination.

Although it may seem obvious, the stated vision of a community should be visible — on the walls of city hall, on letterhead and envelopes, on community-sponsored TV, maybe even on milk cartons. The whole community needs to embrace it, celebrate it, and work for it. The vision and the values it reflects should become operating principles of the community, embedded in its culture and policies. This will eventually be put into practice by the setting of goals and targets. But if the vision isn’t prominent, if it isn’t recognized by the community as their ethical and governance foundation, it will not serve its real purpose: to guide the details of program design and strategy implementation that ultimately take the community where it is going.

All of the public outreach techniques described in Unit 1 apply equally to the visioning process. Think about how to reach out to the community for their opinions about their collective future. Go to where people are, rather than asking them to come to you. Make a detailed plan for community outreach, and a communications plan for sharing your findings with the public. It would help to have local news media representatives at your focus groups, so the dialogue with the larger community can be an ongoing feature of the local news. Whatever way you can, place the visioning process in the public eye, and keep it there.
ACTION STEP  Engage the Whole Community in the Visioning Process

The objective of this Step is to develop a Vision for the community that is forward looking, yet realistic. A Vision helps unite people by identifying what people truly care about, creating shared meaning and purpose. In developing a community vision, citizens will have many opportunities to consider what is important to them personally and collectively. When the public has successfully understood these points, they will usually support the activity. During the media strategy, the public meetings, and the kick-off events described in Unit One, the visioning process can be highlighted and momentum built for public participation.

Establishing a campaign theme can help to galvanize public interest in the visioning process. Seattle Washington, for example, named their initiative “Sustainable Seattle”. Many communities pick a year on the horizon — maybe 20 or 30 years in the future — and incorporate that. Hamilton, Ontario calls their effort “VISION 2020”. All your efforts at this stage will emphasize the future of the community.

Visioning Questions

Develop a set of questions to elicit meaningful feedback from the community. The questions should be broad in nature, but can also touch on specific conditions of concern. The following visioning questions were used with success by Burlington, Vermont’s Legacy Project:

- If you are walking down the streets of your city 20 years from now, what do you see?
- What things do we value about the community that we don’t want to change?
- What things do need to change?
- What ideas do we have for ways that the community could improve?

“Flagler Beach, Florida, is a diverse coastal community committed to enhancing our quality of life by: Preserving our environment as a community asset. Maintaining our old Florida heritage and small town charm. Providing a safe, healthy, and clean environment. Supporting the development of local business to provide services to residents. Promoting and supporting ecotourism through our natural resources. Providing opportunities for education, culture, and recreation.”
Community Focus Groups

Focus groups give citizens the chance to brainstorm and develop more insightful ideas by working together. This can be a very effective way to get the broad input you seek for the Vision. You may want to schedule your focus groups as a series of three events, and have the participants build on the brainstorming at each session. Consider offering snacks for participants — food is always a good way to attract people to participate in events like these.

When you have convened the focus groups, there are a number of techniques you can use to generate meaningful results are presented below. Only one such exercise should be used with each focus group you convene. If large numbers of people show up, you can split them into smaller groups and have each explore a different exercise. Groups of 4 to 8 people are ideal for the free exchange of ideas.

To get a wide range of input, your focus group events should be broadly advertised and take place at a variety of locations and times. For example, you will want to have meetings at your town’s central meeting spot, but also at a senior citizen’s home, a sports center, a religious meeting spot, an apartment building, etc. To engage as many people as possible, it is critical that you go to where they are — don’t expect them to come to you.

Task: Get Broad Community Input

The community’s vision must reflect its needs and aspirations. It is essential, therefore, that you effectively solicit the ideas of community members. There are a number of ways to do so, and you will need to implement more than one. You can conduct a survey, plan some special events where people give their ideas, request that people mail or e-mail ideas, etc. Try innovative ideas like getting schools involved, or maybe even organize a sports event where one team is the team of the future — there are lots of ways to get people excited. Engaging the arts community can also be inspiring — artists’ renditions of what the community might look like in 30 years can help people set aside their preconceptions and think outside the box. The most important thing is to try and reach as many people as possible, and to give them a meaningful opportunity to contribute.
Reach out to a cross section of community members

During this phase, you want to find out what is important to citizens, determine what their values are, and encourage them to describe their vision for the community and the major issues it will face in the next 5, 10, 20 or more years. To do this on a large scale, you can try a variety of strategies. In some communities, they have asked people to answer a few simple questions, such as “What do you care about in your community that you want to hand down to your grandchildren?” or “What changes do you want to make; what ideas do you have for the future?”

People can answer the questions on small postcards, on utility bill inserts, through ads in the paper, at community meetings. The idea is to solicit rapid feedback from a wide variety of people, and to make a lot of community members feel involved in the process. For more in depth information, it helps to organize focus groups, or to engage students in surveys.

Exercise: Hold a Focus Group Visioning Session

In preparing to solicit community input in the Visioning process, you will have prepared a list of survey-style questions for the public. In this exercise, you will guide a focus group in applying this list to the five general areas of community sustainability. Because these are broad and complex concepts, it may be helpful to provide some copies of the Earth Charter principles in order to clarify what they encompass.

Step 1: Brainstorming

Each person should take five minutes to individually record his or her answers to the Visioning Questions for each of the five community sustainability categories. Invite them to imagine scenarios of the near and distant future, or write a letter to an imaginary child in the year 2050. You can ask them for simple images of a positive future they would like to create, and invite 2 or 3 minutes of silence to let the group settle and access their imagination. Give them opportunities to create visual or artistic depictions of what the future would look like. If your group is having difficulty getting started, have them look at the Earth Charter principles and consider the following questions under each of the areas. These questions should help stimulate some ideas of how participants would like to see their community:

10 Ways to Get Your Questions Before the Public:
- table tents in restaurants
- inserts in utility bills
- ads in the newspaper
- attendance at regular community meetings
- phone surveys
- booths at community festivals and events
- school activities for young people
- Send surveys home with school children for their parents to fill out
- sidewalk surveys
- television and radio call-in shows
- …and many others – be creative!
✓ **Vibrant Local Economy** (Economic and Social Justice): Who are the employers? What products and services does your community export? Import? Are they renewable? How is wealth distributed in your community; is there a big gap between the rich and the poor? Do people have equal access to education and job opportunities?

✓ **Efficient Services and Infrastructure** (Sustainable Production and Consumption): What structures and systems has your community built to provide for people’s material needs? How efficient are they? How many non-renewable resources are used? Are buildings built with resource efficiency as a required design standard? How would your community look in the future — in terms of the urban form it takes — if you imagine it at its best?

✓ **Healthy Natural Environment** (Ecological Integrity): How is the land used? Where have people settled? How clean are your air, water, and soils? Describe the biodiversity in your community. What recreation areas are available? How much open space do you have? What natural resources do your employers depend on? Can the regenerative capacity of the local environment keep up with the consumption of local resources?

✓ **Good Governance** (Democracy, Non-Violence, and Peace): How do people express their opinions to the governing structures in the community and its organizations? How is conflict resolved? Is there a lot of crime? How is it handled? Are there ways in which the decision-making structure could be improved?

✓ **Social Well-Being** (Care for the Community of Life): What does the educational and social system look like in your future dreams? How do people treat each other? How do they treat the natural environment? What are the elements of your community’s heritage that people care the most about?

**Step 2: Use Common Themes to Identify Vision Elements**

Have each person share one idea at a time, and place the ideas on a flip chart or a board of post-it notes. After this is done, the facilitator of the group can help guide them to identifying common themes. For example, if vision elements cluster around health — like “having a world class health care facility,” or “improving access to medical care” — then people would recognize health care as a common theme. A consolidated Vision Statement about high quality health care might then emerge as this is explored.

**Consolidate Your Results**

When all of the thoughts and ideas have been gathered from the community outreach process, the focus groups, and any other activities that have been undertaken to collect input on the community Vision, the Stakeholder Group should
schedule a meeting where they can be considered, prioritized, and put together into a concise list of possibilities. This list should be mailed out to everyone who helped with the input process, and published in the media in advance of the final visioning session.

The Final Visioning Session

To maintain the sense that your work is the product of a shared vision, invite the community to a final visioning session. This may attract twenty people or a hundred. If the group becomes unwieldy, you can ask them to form smaller working groups around tables or in circles.

Sample Agenda Ideas

➢ You might offer a slide show or guided visualization — an imaginary tour through the community as it now exists. Ask people to notice what they experience and how they see the community as they stop and observe it from various perspectives. Invite participants to suggest places the facilitator may have missed in the visualization. In this step ask people to think about specific things, such as how the community meets all the different kinds of human needs, or the ways in which the Earth Charter principles might apply locally.

➢ In small groups, ask for one person per group to be a scribe for a dialogue process. Begin by inviting each person to share at least one or two things about their community. Ask them to balance the things they care about and the things they would like to change or improve. Transcribe key phrases onto pieces of paper, which can be displayed on an easel or wall space. You might ask them to group the papers into categories; the basic sustainability areas of social well-being, good governance, economic security and environmental health are good places to start.

➢ Using the things people have written, you can ask community members to provide feedback by attaching stickers (dots) to the items on the wall that are important to them. You can get a sense of the group’s priorities by asking everyone to vote on each component of the statement.

➢ If you’re working in small groups, each group can report its results to the entire gathering. It is often inspiring to hear what other people in your community
think. You might consider videotaping the presentations for future reference. After the presentations, the feedback will be collected so that the drafters can go through another editing process. The results of the editing process will be a final Vision Statement to be shared with the community.

**Task: Identify the Elements of Your Community’s Vision**

Pull together the essential messages from the focus group sessions and your other outreach efforts. Assemble a table to illustrate how the community vision now taking shape addresses each of the sustainability areas.

**Vision Elements - EXAMPLES**

<table>
<thead>
<tr>
<th>Sustainability Area</th>
<th>Vision Elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vibrant Local Economy</td>
<td>People on Main Street at dusk, browsing and talking Shopkeepers making business referrals for each other</td>
</tr>
<tr>
<td>Efficient Services and Infrastructure</td>
<td>Traffic flows smoothly at all times of day</td>
</tr>
<tr>
<td>Healthy Natural Environment</td>
<td>Not having to ask whether it’s okay to drink the water</td>
</tr>
<tr>
<td>Social Well-Being</td>
<td>Young people in leadership all over the community College grads wanting to stick around</td>
</tr>
<tr>
<td>Good Governance</td>
<td>Citizens know the law and exercise their rights skillfully Voter turnout increases every year</td>
</tr>
</tbody>
</table>
ACTION STEP

Draft and Adopt a Vision Statement

Rendering the volumes of scattered ideas that will have come in from the public feedback sessions into concise but broadly inclusive statements can be a Herculean task. It will undoubtedly feel like you are leaving volumes of information out, but it is necessary to winnow the information down to a clear and intentional statement. This will help your community orient itself as it moves to the future. The follow tasks will help you to navigate this task in a way that remains inclusive of the public while allowing you to bring the process to a conclusion.

Task: Draft a Vision Statement

Select one or two people, or a subcommittee of the Stakeholder Group, to take all the ideas from the visioning sessions and pull them together in a coherent vision statement. Keep the following tips in mind:

✓ Write the vision in clear, active language.
✓ Reference a reasonable point in the future.
✓ Speak about what the community will look and feel like when you achieve your goals.
✓ Make it accessible to everyone; avoid jargon.
✓ Be sure to address all five main areas of sustainability: social well-being, good governance, vibrant local economy, efficient services and infrastructure, and healthy natural environment.
✓ Build on existing strengths in your community — a vision is most powerful when it has a credible foundation. If you create a vision based on the strengths of the community — on successes that have already occurred, on community events and parks and places you love and are proud of — you give people reason to think the vision can become a reality.

It can be helpful to ask some prominent writers in your community to assist with the drafting of the Vision Statement. While it doesn’t need to qualify as literature, it is desirable to keep the wording lively, avoiding dry, bureaucratic language. Plus, having a celebrity involved is always good for credibility and visibility.

Above all, keep the final version as simple as possible. A simple Vision Statement will can be remembered, and is thus more likely to become a continuing influence on your community’s actions and attitudes.
**Task: Get the Vision Statement Approved**

When the draft has been completed and approved by the Stakeholder Group, it is time to solicit feedback from the community to be sure that everybody feels their ideas have been reflected. If you live in a multi-cultural community, be sure to have your Vision Statement translated into the community’s different languages.

Publish the Vision in the newspaper, e-mail it to community listservs, and use the other outreach mechanisms you have developed to ask people for their comments. Bring it to a series of meetings with community groups, and ask them for their opinion. After you have gathered as much review and comment as you can, host a large public hearing where people can work together to say what parts of the statement are most important to them.

After receiving public feedback about the draft Vision Statement, write up all the comments you received and discuss with the drafting committee how the comments should be taken into account. The reasoning behind each decision should be recorded. With these decisions in hand, the drafting committee should produce the final Vision Statement. At this point, any comments you receive will probably repeat what you’ve already heard, but if some new compelling information is provided, you will still be able to incorporate it.

**Task: Publish and Disseminate the Vision Statement**

Find ways to distribute the Vision Statement throughout the community. If you have the resources, think of places where it can be published, or displayed, that will keep it in the front of people’s minds. Is there a newspaper that could include it in their banner? An area in front of City Hall where it can be permanently displayed? Some type of annual report from the City that could include the vision statement on the front cover?

Visions are effective when they are shared by a broad cross-section of the people. With a shared commitment to the future, leaders can be held responsible for results, and citizens can identify their own ways to participate. A shared vision builds enthusiasm for the continuation of the process.
Unit Three

Establishing Goals

Congratulations! The community has a Vision, and it is broadly understood and accepted. You are on your way! But it is also time to capitalize on your momentum; to start to make the Vision a reality. The best way to do this is by setting goals that will demonstrate that your sustainability planning is focused on action and results.

A Vision gives you an idea of the direction you’re going in as a community. It should be concise, inspirational, and something that people can remember. The Goals describe the envisioned system in more detail — what it will look like, how it will feel — to give people a sense of clear, achievable outcomes.

The goals you will develop as part of the whole system process have two key characteristics: they are based on the assets your community uses to meet its needs, and they are written in a way that describes an “end state” — a way of being — rather than the process required to get there. Your goals will focus on enhancing the community’s strengths. This will entail making the most of its resources, building more effective and efficient systems for meeting your needs in the future, and maintaining the ecological well-being of the natural systems.

This process involves the following steps:

✓ **Identify the needs in your community.**
  To do this, you will consider a list of universal human needs, and then try to identify any additional needs of people in your particular community.

✓ **Inventory community assets.**
  You will list all of the ways in which your community attempts to satisfy those needs, through its resources, systems, institutions, and other community strategies. This will be an inventory of your strengths as a community.

✓ **Assess the capacity of the assets to meet community needs.**
  It may be that your assets are inadequate to continue to satisfy all the needs in your community. This section will help you make that assessment.

✓ **Draft goals that build on existing assets.**
  Rather than making it your goal to eliminate specific problems, you will set goals that build on the strengths you have. This will allow you to take advantage of the positive momentum of the systems you already have in place, while incorporating new ideas for enhancing them.
Sample Goal Statements
from Actual Municipal Sustainability Planning Projects

From: Burlington Vermont

➤ Social Development: In 2030, parents send their children to schools that are models of educational excellence where students develop skills for a lifelong commitment to learning. Schools promote tolerance and respect for all people and are safe from violence and harassment.

➤ Participatory Governance: In 2030, youth participation in civic activities is significant, and young voters turn out at the polls ahead of national averages. Youth are empowered to participate in decisions that affect their city and their neighborhoods.

➤ Economic Security: In 2030, all city residents have access to livable wage jobs, full employment, and the necessary education and training to meet their families’ basic needs for food, clothing, shelter, health care, child care, education, and transportation.

➤ Environmental Health: In 2030, the city’s air quality is above national standards, the river and lake waters are accessible to all residents for swimming, drinking, fishing, and travel, and the city is a leader in renewable energy technology and resource conservation.

From: Vancouver British Columbia

➤ Food Self-Reliance: Local producers provide a critical measure of self-reliance in food production in a variety of key food products, including fruits, vegetables, fish, fowl, dairy, nuts, seeds, and oils.

➤ Direct Democracy: Information and Communications Technology enriches governance processes by providing residents with opportunities for engagement, creative thinking, and exchange of information.

➤ A Community of Communities: Each neighborhood incorporates cultural elements that create a unique sense of place for residents and a rich tapestry of cultural expression for the region as a whole.
ACTION STEP  Identify Community Needs

The first step in articulating goals is an understanding of the needs of your community — of both the people that comprise it, and the natural environment that supports it. The exercise below will guide your community through the process of brainstorming its needs.

Task: Brainstorm Community Needs

Human needs are universal. The way we satisfy them, however, is based upon the culture of our communities. Universal human needs include things like food, shelter, income, love, empowerment, and a sense of community. Satisfying these needs requires strategies that are more specific to a culture, a geography, a family, or an individual.

When attempting to identify the needs in your own community, try to avoid listing concepts that are actually a means to meet basic needs, rather than being true needs in and of themselves. In general, your emphasis will be on the needs of individuals, because it is ultimately the collective actions we take to satisfy these needs that constitute the fundamental driving forces of our community systems.

For example, a small business owner may state that he or she “needs” highly qualified employees or a more welcoming business climate. While the business owner may indeed require those things to be successful, ask yourself if they constitute a real human need, or if they may be instead the prerequisites for a means of meeting the real needs. If qualified employees are needed by business, it might indicate an overall need for better education. If a more welcoming business climate is the issue, maybe there are needs for a sense of community that are going unmet, or for conflict resolution in permitting processes — ask a few more questions to get to what the real human needs are. In this example, the business in question is an important community asset that helps employees and the owner to meet their fundamental needs for income and meaningful work. The community’s strategy for sustainability would therefore work to enhance the ability of its businesses to provide for these needs, through such means as ensuring a welcoming business climate and a well-educated work force.
In the following table, we have listed many universal human needs. The right hand column provides space to add any additional human needs that you wish to address in your community planning. Remember that needs can be perceived in more than one way, and may be split and lumped together depending on peoples’ priorities.

<table>
<thead>
<tr>
<th>Sustainability Area</th>
<th>Universal Needs</th>
<th>Additional Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Well-Being</td>
<td>Sense of Community</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lifelong Education</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Spirituality/Peace</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Aesthetic Enjoyment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Relationships</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Safety</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Caring for Others</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Health Care</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Recreation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Self-Expression</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Provides care and promotes social well-being</td>
<td></td>
</tr>
<tr>
<td>Good Governance</td>
<td>Human Rights</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Equity</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Self-Determination</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Access</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Conflict Resolution</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Provides empowerment and information</td>
<td></td>
</tr>
<tr>
<td>Vibrant Local Economy</td>
<td>Meaningful Work</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Income</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Economic Security</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Provides income, work, and economic opportunities</td>
<td></td>
</tr>
<tr>
<td>Efficient Services and Infrastructure</td>
<td>Housing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Energy Generation &amp; Distribution</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Local Goods and Services</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Waste Management</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Water Delivery</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Transportation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Communication</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Provides our material necessities, and defines the man-made environment</td>
<td></td>
</tr>
<tr>
<td>Healthy Natural Environment</td>
<td>Clean Air, Water, and Soil</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Renewable Energy Sources</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Waste Assimilation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Biodiversity</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Natural Beauty</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Provides the life support systems, beauty, and nurturance for the whole community of life.</td>
<td></td>
</tr>
</tbody>
</table>
As with all the steps involved in developing and implementing a community sustainability plan, it is important here to seek public input. To take this to a public format, you can divide a flip-chart pad into five sections — one for each sustainability area. As people come by, ask them to give immediate reactions to the question: “What needs do you have in the area of …?” This is a great exercise for large community forums and public venues like festivals, parades and concerts. It is an easy question that doesn’t require anyone to stop for more than 2 or 3 minutes, and can give people a sense of being part of the process even if they aren’t motivated to attend a community focus session.

After receiving feedback, compile the full list of needs you have identified. You will use this information in the ongoing communication with your community about how the sustainability plan is progressing. Listen to your Stakeholder Group — if a group of stakeholders in the community expresses a strongly felt need, you can be sure the whole community will benefit from taking it seriously.

**ACTION STEP  Inventory Your Assets**

Communities form to satisfy the collective needs of individuals. The means to meet those needs are what we call community assets. Assets can be organizations, practices, infrastructure, loose networks of individuals, and other resources and support systems. Communities develop road and public transport systems to meet our need to be mobile; we establish churches, synagogues, mosques, temples and other religious meeting places to fill some of our spiritual needs; we build hospitals to help meet our health needs; we establish businesses to provide us with income and myriad material and social needs; we maintain formal and informal local governments to meet some of our governance needs, schools to meet our education needs, and so on.

A community’s assets include not only the means it employs to meet current needs, but also the foundation it can build upon to meet needs that are currently going unmet. Creating a thorough inventory of the assets in your community plays a big role in helping achieve its vision for the future.
### Social Well-Being

<table>
<thead>
<tr>
<th>Identified Needs</th>
<th>Community Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety</td>
<td>Community policing program</td>
</tr>
<tr>
<td></td>
<td>Rapid response training for domestic violence</td>
</tr>
<tr>
<td>Health care</td>
<td>Good network of traditional and complementary health care providers</td>
</tr>
<tr>
<td>Education</td>
<td></td>
</tr>
<tr>
<td>Spirituality</td>
<td></td>
</tr>
<tr>
<td>Arts, Culture, Aesthetic enjoyment</td>
<td>Monthly Arts Walk</td>
</tr>
<tr>
<td></td>
<td>Galleries</td>
</tr>
<tr>
<td></td>
<td>Downtown mural program</td>
</tr>
<tr>
<td>Recreation</td>
<td></td>
</tr>
<tr>
<td>Self-expression</td>
<td></td>
</tr>
<tr>
<td>Sense of Community</td>
<td></td>
</tr>
</tbody>
</table>

### Good Governance

<table>
<thead>
<tr>
<th>Identified Needs</th>
<th>Community Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity</td>
<td>Equal Opportunity laws</td>
</tr>
<tr>
<td>Access</td>
<td>Open meetings law</td>
</tr>
<tr>
<td></td>
<td>City Ombudsman</td>
</tr>
<tr>
<td></td>
<td>ADA regulations</td>
</tr>
<tr>
<td>Self-determination</td>
<td>Home rule legislation</td>
</tr>
<tr>
<td></td>
<td>Regular town meetings</td>
</tr>
<tr>
<td>Conflict resolution</td>
<td>Dispute resolution training through schools and at community center</td>
</tr>
</tbody>
</table>

### Vibrant Economy

<table>
<thead>
<tr>
<th>Identified Needs</th>
<th>Community Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meaningful Work</td>
<td>Small business development center</td>
</tr>
<tr>
<td></td>
<td>Chamber of Commerce</td>
</tr>
<tr>
<td></td>
<td>Microloan fund</td>
</tr>
<tr>
<td></td>
<td>Employers – business and government jobs</td>
</tr>
<tr>
<td>Income and Economic Security</td>
<td>“Livable Wage” law</td>
</tr>
<tr>
<td></td>
<td>Local currency</td>
</tr>
<tr>
<td></td>
<td>Social Security</td>
</tr>
<tr>
<td></td>
<td>Welfare</td>
</tr>
</tbody>
</table>
### Identifying Needs and Community Assets

#### Efficient Services and Infrastructure

<table>
<thead>
<tr>
<th>Identified Needs</th>
<th>Community Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Distribution</td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Example:</em></td>
</tr>
<tr>
<td></td>
<td>Local farms</td>
</tr>
<tr>
<td></td>
<td>Grocery stores</td>
</tr>
<tr>
<td></td>
<td>Community food banks</td>
</tr>
<tr>
<td></td>
<td>Soup Kitchens</td>
</tr>
<tr>
<td></td>
<td>Food Cooperatives</td>
</tr>
<tr>
<td></td>
<td>Farmer’s Market</td>
</tr>
<tr>
<td>Water Delivery</td>
<td></td>
</tr>
<tr>
<td>Local Goods and Services</td>
<td></td>
</tr>
<tr>
<td>Housing</td>
<td></td>
</tr>
<tr>
<td>Energy Generation &amp; Distribution</td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td></td>
</tr>
<tr>
<td>Waste Management</td>
<td></td>
</tr>
</tbody>
</table>

#### Healthy Environment

<table>
<thead>
<tr>
<th>Identified Needs</th>
<th>Community Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthy Food Sources</td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Productive soils</em> <em>(Sustainable irrigation systems)</em></td>
</tr>
<tr>
<td>Clean Air</td>
<td></td>
</tr>
<tr>
<td>Pure and Abundant Water Sources</td>
<td></td>
</tr>
<tr>
<td>Biological Diversity</td>
<td></td>
</tr>
<tr>
<td>Waste Assimilation</td>
<td></td>
</tr>
</tbody>
</table>

Establishing Goals
Having now assessed your community’s needs, it is time to get to work to identify its assets. Because this step requires more conceptualization and longer contemplation, it does not lend itself to being done in festival-like settings. However, like almost all the activities in this workbook, it does lend itself very well to public meeting formats. While including as many members of the public as possible will help identify assets you may otherwise overlook, this task can also be accomplished by the Stakeholder Group or a subcommittee.

Depending on the size and complexity of the community, this inventory will take anywhere from one week to a couple of months. Be clear about your expectations. The important thing is to have a general sense of your principal assets, not an overly detailed inventory. Don’t let this step overwhelm the process.

**How to Compile an Inventory of Community Assets**

Use tables like those on the preceding pages to facilitate the process of identifying the assets of your community related to each specific need. As you will see from the examples provided in the tables, the way a particular individual meets a need will often be distinctly different from the way other people in your community meet the same need. It is therefore very important to make sure that the group you convene for this purpose has a diverse make-up, and that each member tries to consider each need from the perspective of other community members.

While your stakeholder group should include people who are broadly familiar with the community’s infrastructure and operations, there will always be assets they are unaware of, especially in a larger community. For example, if the community is rich in historic buildings, even a long-time resident with a love of history may overlook some quirky ones with high potential for re-use. So it helps to prepare by gathering some rough inventories of such assets from existing data sources. Municipal directories, Yellow Pages and community listings — from museums to places of worship — can be copied and placed on the walls to jog people’s memories, or consulted afterwards to fill in any gaps. The brainstorming of assets can also be done one small geographic region at a time, to make sure people don’t focus solely on the examples that come most readily to mind.

For each of the five primary sustainability areas, review the needs your community has identified (see previous Action Step), as well as the universal needs we have listed in the tables.
Depending on the size of the group, you can work as one or split into several groups. Have everybody spend five to fifteen minutes privately identifying community assets related to each of the categorized needs, and then have the groups consolidate the assets into a master sheet for each sustainability area. This can be done using a flipchart or on pads of paper. Once the ideas are consolidated, the group should brainstorm together and push each other to think more broadly than they did alone. At the end of the exercise, the group can combine all the needs and record them online.

Completing this task will almost surely take more than one meeting. In fact, your group may wish to explore only one sustainability area per meeting. Or, you may want to divide the Stakeholder Group up into smaller sub-committees, and have each of them consider one area at a time.

**ACTION STEP**

*Assess the Capacity for Community Improvement*

Having identified your community assets, it is important to understand how well they are working. Are these assets effective at meeting the community’s needs? This Step will help you judge the effectiveness of your community assets, pinpoint areas where gaps and barriers exist, and then consider what opportunities exist to fill those gaps and overcome the barriers. There are two parts to the exercise: an analysis within each sustainability area, and then an analysis of the potential synergies among the five areas.

**Effectiveness, Gaps, Barriers, and Opportunities**

First, for each of the five sustainability areas, you will assess the capacity of your community’s assets to meet human needs. This assessment can be informal, based on the intimate knowledge that you have of your community. If nobody in the group feels high confidence about their knowledge in a particular arena, or if new stresses have recently arisen in a particular area, then it is advisable to find concrete performance data if you can.

In each of the five community sustainability areas, go down the list of identified needs and associated assets, reviewing for each:
✓ How effectively each need is currently being met. Be sure that all the various stakeholders participate in this exercise, and try to consider each need from a variety of perspectives.

✓ Why this level of effectiveness is the case. Specifically:
  • Where are there gaps in assets, and
  • What barriers might be keeping the assets from meeting needs more effectively?

✓ Where there are opportunities for improving the effectiveness of assets, bringing other assets to bear on this identified need, or, where necessary, creating new assets.

Note that truly understanding the state of a given sustainability area in a community means more than simply identifying the condition of its resources: it also takes into account the consequences — intended and otherwise — of regulatory policies and incentives. Aquifer protection policies surely have their impact on viability of the natural environment, but so does transportation planning. When you are brainstorming community assets, be sure to contemplate the relevant policies and incentives that are in place.

As you brainstorm, record the ideas in the five tables you have already created. It may be easier to create flip-charts for each element as you progress through the effectiveness-gaps and barriers/opportunities thought process.

Use the following sections to focus your inquiry on each of the five sustainability areas. For each, we provide some definition and scope, a table to organize your ideas, and a set of questions to guide brainstorming.
Healthy Natural Environment

The natural environment includes our community’s natural features, working landscapes, water resources, and biodiversity. It is at once the source of some of our most basic individual needs (food, air, water) and some of our most intangible (peace of mind, spirituality, scope for self-fulfillment). Start by developing a complete picture of the local environment, its features and condition. Then consider how well it is meeting your community’s environmental needs, whether it can continue to do so, and how it might be enhanced. For example, do we have even a rough inventory of our groundwater resources as they compare to the population expansion in some of your suburbs? This is an aspect of ecological carrying capacity.

<table>
<thead>
<tr>
<th>Natural Environment Needs</th>
<th>Community Assets</th>
<th>Effectiveness</th>
<th>Gaps and Barriers</th>
<th>Opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthy Food Sources</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clean Air</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pure and Abundant Water Sources</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biological Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waste Assimilation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Questions for assessing the capacity of your community’s Natural Environment:

1) How clean is our air, water and — where appropriate — agricultural soil?

2) Do we have sufficient open space? How quickly might we be losing it?

3) What federal and state regulations currently protect the watersheds, water supply, airsheds, wetland habitats, and endangered species habitats in our community? How well are they enforced?

4) Are there limits within these regulations relating to the local and regional carrying capacities? If so, what are these limits?

5) What local, regional, state, or federal regulations, plans, or programs deal with soil health, forest resources, wildlife populations, renewable energy sources and access, and other potential sources of wealth generation based on natural resources?

Earth Charter Principle #5. Protect and restore the integrity of Earth’s ecological systems, with special concern for biological diversity and the natural processes that sustain life.
Efficient Services And Infrastructure

“Services and infrastructure” encompasses many things: buildings, streetscapes, transportation systems, water and sewer systems, and communications infrastructure, to name several. In contrast to the natural environment, we might think of this as the “built” environment. Ask what your built environment consists of, and how its capacities relate to the community’s needs. Is it sufficient to meet the material needs of everyone, and does it do so without being wasteful of limited resources?

<table>
<thead>
<tr>
<th>Service and Infrastructure Needs</th>
<th>Community Assets</th>
<th>Effectiveness</th>
<th>Gaps and Barriers</th>
<th>Opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Distribution</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water Delivery</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local Goods and Services</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Energy Generation &amp; Distribution</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waste Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Questions for assessing the capacity of your community’s Services and Infrastructure:

1) What is the state of the community’s physical infrastructure? This includes, but is not limited to, water and sewer systems, roads, trails, bike paths, public transportation systems, power lines and utilities, and recycling systems. Are there any trends over time that are worth noting?

2) What is the state of the community’s housing stock — age, repair, and match with demand? Has this changed in recent years? What does the market for housing tell you about its affordability for working people?

3) What is the state of the community’s commercial and industrial building stock? Is investment in the system keeping up with depreciation?

4) What is the state of the community’s telecommunications infrastructure?

5) How are resources that are used in production procured? Are they harvested sustainably? Are they now, or can they be, obtained locally?

Earth Charter Principle 
#7b. Act with restraint and efficiency when using energy, and rely increasingly on renewable energy sources such as solar and wind.
**Vibrant Local Economy**

The two main individual human needs are met by the local economy: our need for work and our need for income. This assessment separates the human elements of the economy from the services and infrastructure included in the previous section. This is because our need for work, and the ways in which money, wealth, and income function in the economy, have different systemic dynamics than the actual delivery of material goods and services.

In assessing the employment and income-generating capacity of a community, key variables include the stocks of financial capital available, the volume of transactions through the local system, the degree to which the local economic activities add — or at least retain — value and wealth within the community, and the degree to which benefits are distributed equitably. The productive capacity of a community also depends on natural and human resources, including workforce skills and the availability of raw materials.

In the process, we need to ask whether our productive activities are making full use of our assets and resources. How much value are we adding with our local industries? Are we shipping out raw lumber or finished furniture?

Economic development activities that are designed to bring in, or generate, additional financial resources will strengthen financial and productive capacity over time. Enterprises that earn money from outside the community — farms, manufacturing firms, tourist facilities, non-profit organizations that bring in grants, educational institutions that accept tuition from elsewhere — all tend to enhance the local financial capacity more than those that only circulate money within the local economy. The local economic capacity can also be enhanced by replacing current imports of goods and services with local production. The idea here is to create an optimal trade balance between your community and the wider economy, and to address key community needs with enough local control to achieve the community’s desired level of economic security.

<table>
<thead>
<tr>
<th>Economic Needs</th>
<th>Community Assets</th>
<th>Effectiveness</th>
<th>Gaps and Barriers</th>
<th>Opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meaningful Work</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income and</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic Security</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Questions for assessing the state of your community’s Economic capacity:

1) What financial capital is available for regional investment, such as the deposits in locally owned banks and the resources of development agencies?

2) What are the financial institutions in your region? Are they locally owned?

3) What is the volume of transactions flowing through the local economy?

4) What are the major exports and imports in your community and your region? What is their value, and do you have a trade deficit or surplus?

5) Where do the profits from economic activities in your region go? Are they retained locally, or do they leave the community?

6) What are the skill levels of local residents? Are there a lot of people who are unemployed or underemployed?

7) Do you have a complementary (local) currency that is working in your community? How much does it generate in local economic activity?

9) What are the opportunities for increasing the financial and productive capacity of the local community? For example, are there currently under-processed resources? Can higher-value products be introduced? Are there ways to improve people’s skills or their involvement in economic innovation?

Good Governance

The governance capacity of a community encompasses a lot more than just the workings of the local government. The capacity of the governance area is reflected in citizens’ ability to exercise self-determination in their own lives, resolve disputes, access information in the public domain, and rely on equitable treatment. This depends in turn on the local culture, the training and education available to promote civic skills, the libraries and archives in the community, and the nongovernmental organizations available to step in on behalf of citizens when government might be falling short or misusing its role.

<table>
<thead>
<tr>
<th>Governance Needs</th>
<th>Community Assets</th>
<th>Effectiveness</th>
<th>Gaps and Barriers</th>
<th>Opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-determination</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conflict resolution</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Questions for assessing your community’s Governance capacity:

1) Who makes decisions about local infrastructure, local taxes, and local operations? Are there ways (like by creating committees, or expanding current decision-making bodies) to empower people locally so that more participate in decision-making?

2) How proactively does government operate, and to what extent is it in “crisis mode”?

3) What facilities and programs are available for conflict resolution and conflict management — both within the government and between government and citizens?

4) How do people get information about what the government is doing?

5) Are the public facilities in the community accessible to people with disabilities, or who speak other languages, or who are young, old, or otherwise different from the mainstream adult world?

6) Do people in the community feel as if they have power over their own lives?

7) Are there large inequities — a big gap between the rich and the poor, different treatment for ethnic groups, etc.?

8) How have governmental policies integrated the precautionary principle into their decision-making process about resource management? Who carries the burden of proof when new initiatives are introduced that could cause harm?

Social Well-Being

The social development and caring capacity of a local community describes how well it fosters a caring attitude toward the world and how this is expressed in the level of human development that takes place. All of our social systems — the educational system, the health care system, the recreational, cultural, spiritual, and communal systems, fall under this category.

Of all the capacities in a community, the caring capacity might be the most difficult to benchmark and quantify. Still, there are ways to get a handle on it. A good place to start is by directly asking people who most depend on this capacity for their survival. Making this effort will send a strong signal that these systems are valued. Getting a good sense of the local capacity for social well-being, and how to strengthen it, is every bit as important as the other three areas when planning for community sustainability.
### Questions for assessing your community’s capacity for Social Well-being:

1. **To what extent do people in the community feel safe, supported, and encouraged to develop to their full potential?**

2. **What opportunities are there for people to express their creativity, their spirituality, and their concern for others?**

3. **How is respect fostered in the local schools, social services, courts, hospitals, and other major institutions? Are there programs that address diversity and tolerance?**

4. **Are there indicators — crime statistics, harassment complaints, suicide rates, drug abuse — that would suggest additional needs in this area?**

5. **What are the local organizations, programs, and facilities that could help to make your community feel like a caring place to live, and that support people in all stages of life? How well are they working?**

---

**Earth Charter Principle #12a. Eliminate discrimination in all its forms, such as that based on race, color, sex, sexual orientation, religion, language, and national, ethnic or social origin.**
Now that you have examined the effectiveness, gaps, barriers, and opportunities of your community’s assets in each sustainability area, think further about how the needs are being met, and where there are possible connections within your community.

Make a large diagram, on which you will list the assets identified for each of the five primary sustainability areas. Arranging these areas in a rough circle or star pattern on your diagram will be ideal, so you can see each list in conjunction with all of the others.

Now take a look, section by section, at gaps in the satisfaction of needs that might be addressed through access to assets in other areas. For example, a community is lagging in job creation (Economic Needs), but does not recognize its home town university (Social Well-Being Asset) as a source of jobs. How can each area draw on the surplus assets of the others in order to prosper?
ACTION STEP  Establish Goals

Setting goals moves your community ever closer to realizing its vision. Goals should be focused on the community's strengths, and reflect the end state that the community wants to arrive at after the action plan has been implemented.

Task: Determine the Goal Elements

As stated in the introduction, one defining aspect of the EarthCAT approach is that the goals you set for community improvement are asset-based rather than problem-based. The criteria for choosing your goals, therefore, should be focused on enhancing your community assets.

Identify Priority Areas for Action

Review and characterize the work you have done so far in assessing your community's assets: their effectiveness at meeting community needs, the existing gaps and barriers that prevent them from meeting those needs better, and any opportunities that exist to put them to better use. Do this for each of the five sustainability areas.

On the following page is an illustration of how part of your work might be shaping up at this stage of the process. In this example, the elements that the community will focus on for their economic goals are:

1) to find ways to increase employment, with jobs that provide living wages.

2) to capitalize on certain local assets: a motivated workforce with technical experience and know-how, idle industrial capacity, and a community college.

3) to explore the possibility of using the city waterfront as a way to bring people into the city.
<table>
<thead>
<tr>
<th>Economic Needs</th>
<th>Community Assets</th>
<th>Effectiveness</th>
<th>Gaps and Barriers</th>
<th>Opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meaningful work</td>
<td>• Restaurants&lt;br&gt;• Computer manufacturing plant&lt;br&gt;• Food cooperative and grocery stores&lt;br&gt;• Local government service jobs&lt;br&gt;• Waterfront (even though currently not very beautiful)&lt;br&gt;• Hospital</td>
<td>Poor. We have many people unemployed and many others not earning a living wage.</td>
<td>Gaps: Most of our manufacturing base has gone offshore; leaving mostly lower-paying service jobs.</td>
<td>• Harness entrepreneurial spirit;&lt;br&gt;• Use extensive industrial human experience and capacity;&lt;br&gt;• Use mothballed industrial buildings, maybe as business incubators;&lt;br&gt;• Involve community college to teach business skills;&lt;br&gt;• Spruce up waterfront in ways other small cities have;</td>
</tr>
<tr>
<td></td>
<td>Characterization: Approximately equal numbers of jobs from large and small businesses; the proportion of jobs from large businesses is decreasing; many small-business jobs are lower-paying service jobs.</td>
<td>Characterization: This needs to be a very high priority for our community. An alarming number of people have no jobs, and too many live on the economic margin.</td>
<td>Barriers: Heavy dependence on large-scale employers; perceived and/or real lack of credit and assistance for starting new businesses; highway that takes traffic around instead of through our community</td>
<td>Characterization: Gaps and barriers are significant, especially given national trends in manufacturing jobs moving abroad. We will probably increasingly need to capitalize on local initiative and know-how.</td>
</tr>
<tr>
<td>Income and economic security</td>
<td>• Employers&lt;br&gt;• Small Businesses&lt;br&gt;• Social Security&lt;br&gt;• Welfare</td>
<td>Poor. The safety net is not enough – people without jobs or with substandard jobs cannot meet their basic material needs.</td>
<td>Gaps: The income gap is significant between the wealthy and poor members of the community.</td>
<td>Create a local currency that keeps local dollars circulating among locally owned businesses, and allows more local investment in labor. Find ways to supplement income locally with non-cash services – food banks, clothing thrift shops, transportation support networks, medical clinics.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Characterization: The local economy is tied in with national and international trends. It is hard to raise wages locally without losing businesses.</td>
<td>Barriers: The local economy is tied in with national and international trends. It is hard to raise wages locally without losing businesses.</td>
<td></td>
</tr>
</tbody>
</table>
Task: Articulate Concrete Goals

Use the elements you have identified above to draft a goal statement for each asset, or general category of assets. Avoid focusing on the gaps and barriers at this point, as these are formulations of problems. The goal is meant to be aspiration: something the community is working toward, not away from. To avoid confusing goals with strategies, goals should be worded to reflect an end state, at a point in the future. You can reinforce this in your own goal statements by placing the end point right up front, and then picturing what the state of a given asset would be on that date. Continuing with our previous example, some goal statements might look like this:

1. In the year 2040, all local employers provide living-wage jobs.
2. In the year 2040, our city’s natural beauty attracts tourists to engage in activities that enhance health and well-being.
3. In the year 2040, the riverfront area is a vibrant urban center, where people come to work, shop, and engage in recreational activities.

You will note that many of the details you have identified through this process are not reflected in the draft goals statement. Don’t become frustrated by the sense that you have explored these issues deeply, only to condense what you have discovered to the point that the results seem overly broad. The purpose of the goals process is to identify your community’s highest priorities for action, and to present them in a condensed and easy-to-communicate form. In addition, the information and insights you gain and record through this exercise will prepare you for setting targets, and — from these — creating strategies for action.

The final goals you select will be one or more statements for each sustainability area, as determined by your committee and the feedback you have received from the community. Some communities have six or more statements for each sustainability area, while others pack a lot of ideas into a single statement. Remember, though, that the statements are meant to convey the highest priority areas for action in your community, not to be a laundry list of everything you plan to address. The next Workbook Unit is to identify individual targets for each goal, which will present the opportunity to itemize more specific, detailed objectives.
Review the Goals and Check Principles

In a follow-up meeting, when minds are fresh, it is useful to review the series of goals from several perspectives:

- Which ones address time-sensitive issues and stresses?
- Which are most visibly aligned with the community’s vision and therefore essential to put significant resources into?
- How do the goals look in terms of the resources that are likely to be needed to achieve them? (Keep this tentative until you have further explored strategies, but it is not a bad idea to identify “low-hanging fruit” at this point).
- Which of the goals are most connected and mutually supporting? Are any of the goals potentially at odds with each other?
- How do the goals identified by stakeholders, so far, hold up in terms of the principles of sustainability?

A review of your goals with reference to a foundation document like the Earth Charter is highly recommended at this point, to help you see if the benefits you are pursuing may carry unintended costs. Here are some questions to consider with respect to the Earth Charter:

- How do the goals relate to the principles elaborated in the Earth Charter?
- Which goals reflect the need to promote respect and care for the community of life?

  Have you considered the Precautionary Principle in setting your goals for the future? (The Precautionary Principle, as incorporated into the Earth Charter, places the burden of proof about the risk presented by a proposed activity on the person proposing it — it shouldn’t be up to the community to prove that it will be harmful, but rather up to the proponent to demonstrate that it will be safe.)

  Are there goals that relate to the need to preserve community assets for future generations?

- How will the community go about achieving social and economic justice?

  What goals have you set for eradicating poverty?

  Are there goals to include young people in the plan?

  Have you set goals for trade that enhances environmental protection, sustainable resource use, progressive labor standards, and businesses that practice socially responsible practices?
• Do the goals for governance incorporate democratic practices and non-violence, and do they promote peace?

  Do you have a goal to provide timely information about your plans, policies, and activities to the public?

  Have you considered goals that would change the way conflict is managed in the community, to reduce the potential for violence?

• What are the goals that help maintain environmental integrity?

  Is safeguarding important natural resources and biodiversity included as a goal?

  Are there goals that reflect the need to use natural resources efficiently, and to minimize pollution and other externalities?
Unit Four

Understanding Trends and Setting Targets

To take the vision and the goals you have set and translate them into measurable, achievable terms, it is necessary to set targets for progress. Targets are the first step toward group accountability. It’s one thing to wish for everything worthy and good; it’s another to state your objectives in clear terms that challenge people to make those wishes a reality. The targets you set will be used to establish the indicators and evaluation tools you put in place to track your progress toward your vision.

Before you chart the path for where you’re going, it is useful to know where you’ve been. In this section, you will learn how to track and understand trends, so that you’ll have a solid basis for setting targets, and for identifying strategies that will be effective in reaching them.

**ACTION STEP Study Local Trends**

By this point, you have created a Vision Statement for the future of your community, and set goals for the most beneficial use of its assets. In doing this, you have begun to understand how well your community meets peoples’ various needs, why some needs are met effectively while others aren’t, and where opportunities exist to increase the capacity of your assets.

To further develop your goals, so that you can set even more specific, measurable targets to achieve, you need to try and understand the forces that have been at work to shape the existing situation. If there are system dynamics that play a role in keeping things the way they are, resisting positive change, you need to identify them. Conversely, if there are systems at work that are already moving your community in a more sustainable direction, you want to recognize and nurture them.

The procedure we have developed to help you understand community trends involves some important concepts for sustainable systems. To fully grasp these concepts, you need to understand some basic systems language, and some common patterns of systems behavior.
Preparatory Step: Finding Data and Trends that relate to your Goals

Regional planners, government officials, and local commissions all compile data of interest to the functioning of your community, and they should have it readily available. Some members of the Stakeholder Group probably have access to some basic trend data, or know who to call to get it. At this point, to make the process efficient, it might be a good idea to break up into smaller subcommittees to work on each sustainability area, and then report back to the whole group when the work is done.

Each subcommittee should review each of your community goals. They should make an effort to determine the variables that have an impact on the underlying needs addressed by the goal, and that could affect your ability to achieve it. Then, determine where they can find data on each variable. It might help to assign the task of gathering the data to individuals who have the time to pursue it during business hours, and who can be counted on to follow through.

Sometimes, however, data associated with certain community needs will simply not be available. In this case, use what you have, which will sometimes be nothing other than the perceptions of the stakeholders. This is OK. The goal, after all, is to explore a topic rather than conduct a scientific analysis.

This table gives you an example of how this might be done:

<table>
<thead>
<tr>
<th>Goals</th>
<th>Assets</th>
<th>Variables</th>
<th>Data Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>In 2040, all local employers provide living-wage jobs.</td>
<td>Employers</td>
<td>Changes in income</td>
<td>U.S. Census</td>
</tr>
<tr>
<td></td>
<td>Healthy Businesses</td>
<td>Growth in tourism</td>
<td>Chamber of Commerce</td>
</tr>
<tr>
<td></td>
<td>Tourism Opportunities</td>
<td></td>
<td>Tourism Bureau</td>
</tr>
<tr>
<td>In 2040, our city's natural beauty attracts tourists to engage in activities that enhance health and well-being.</td>
<td>Natural Areas</td>
<td>Growth in tourism</td>
<td>Recreation Departments</td>
</tr>
<tr>
<td></td>
<td>Tourism Opportunities</td>
<td>Park and recreation-</td>
<td>Tourism Bureau</td>
</tr>
<tr>
<td></td>
<td></td>
<td>al development</td>
<td></td>
</tr>
</tbody>
</table>
Once you have identified the variables that might relate to each goal, and the sources of available data, you can attempt to collect the information that will assist you in identifying the current trends. Sometimes the organizations responsible for the data will have done a trend analysis already, and will have relevant graphs and trend lines. Other times, you’ll have to take raw data, even data that comes from several sources, and try to determine the trends yourselves.

The goal of this activity is to try and start to understand the forces behind the trends. To do this, you’ll need a way to illustrate those trends, so you can have a clear picture of the variables at work and their behavior over time. Compare your illustrations with the explanations we will provide of how a system’s behavior over time corresponds with various types of feedback loops (see next section). See if you can match what is happening to the variables you have identified with a particular type of system archetype. Then try to identify what other variables might be at work behind the scenes to cause that trend to fluctuate, or grow at an increasing rate, or crash downward periodically.

This trend analysis might seem too difficult a task for the staff and Stakeholder Group that you have managed to assemble. It is true that this is one area where having some professional or expert assistance would be worthwhile. The EarthCAT on-line system can help you locate this assistance, if necessary, and can give you some solid examples of how other communities have been able to uncover the dynamics underlying their own trends.

Analyzing trends can help you to think intuitively as well as logically, ask questions that don’t come up otherwise, and see buried linkages. For these reasons, when engaging in this exercise you will want to feel free to let the conversation wander “off topic”. This flexibility may lead to insight into why your community’s needs are recently being met more effectively, or how a particular community goal might help people satisfy needs that are going unmet.
Task: Chart Community Trends Over Time
For each goal, illustrate the trends that you’ve been able to identify for each variable. If we use the example from the chart above, we might draw a ‘growth in tourism’ trend that increases over time, with downturns that have been documented during years when transportation costs were up, or when the economy was in recession. As you plot the variables associated with each goal, begin asking the group the following questions:

- What are the trends you are seeing?
- Are all the variables associated with a goal changing in the same direction?
- Are things changing at an increasing rate?
- Is there a roller coaster, boom and bust pattern at work?
- What might these patterns mean?

Example:

![Chart of Annual Tourist Visits from 1960 to 2000](chart.png)

Looking at this trend, you can see that over time tourism visits are increasing steadily, despite occasional downward movements. What other variables might explain the steady growth illustrated here? Are people who visit going back home and telling their friends and neighbors that your community is a nice place to visit? Are increasing airfares encouraging people to take their vacation dollars closer to home? Have local marketing efforts increased in a way that is congruent with the trend data?
One of the objectives of analyzing trends is to discern patterns of behavior, their underlying causes, and the forces that are causing the community to change or, conversely, remain at equilibrium. Plotting trends data graphically can often reveal different components of a community working dynamically together as a system.

The study of system dynamics is a science unto itself. Because a basic understanding of some of its key concepts can help you better understand even simple systems, we provide here a brief introduction.

**Cause, Effect, and Feedback Loops**

The logic of cause and effect is one of the fundamental relationships described by the language of systems. When depicting one element in a system that influences another element, an arrow is drawn to link them in a cause-effect relationship. This arrow, or link, is known as *feedback*.

In maps or drawings of these relationships, intricate webs of causes and effects develop as the various elements in the system influence each other. The study of systems dynamics reveals that cause and effect do not necessarily form a linear process, but can often be cyclical.

This has led people involved in such analysis to rethink cause and effect completely, calling it, more accurately, *causeffect*. This illustration demonstrates the most basic type of system: a closed loop. The feedback in this system shows the original cause becoming the effect.
If I have a closed circle of dominos standing next to each other, and I push one of them over, the *cascades*, or feedback, of one element falling on another will eventually cycle around the loop to strike the original domino. The result is a feedback loop where every element is both the cause of effects *in* other elements and is affected *by* other elements. It is a loop because the feedback patterns bring it around full circle. We’ve all witnessed this kind of feedback loop heated conflict situations. If two people are arguing, and tempers are getting frayed, the hostility of one party angers the other, leading to a hostile response, which further raises the temperature of the first party. Anger is both the cause and the effect after awhile, even though each person involved would probably see it as being caused entirely by the other.

**Positive and Negative Feedback Effects**

Feedback in a system doesn’t always take the same form as the original influence. If an influence on a system causes another part of the system to change in the same direction, then this is illustrated with a + sign. For example, if an *increase* in A causes an *increase* in B, then this would be drawn as a + influence, as shown in the illustration below. If point A represented the first domino and B represented the second domino, then the push given to the first domino would cause the second domino to fall over in the same direction. If this action comes around full-circle, we have what is known as a *positive feedback loop*.

![Positive Feedback Loop](image)

If the change that is occurring in the system goes in the *opposite* direction as a result of a specific action, then this is shown with a 0 sign. For example, if I sit on one side of a teeter-totter, then the other side will rise *up* while my side goes *down*. When that side comes down again, raising me up, we have a *negative feedback loop*. Another example is a thermostat which switches on the heat as the temperature drops and switches it off again as the temperature rises.

![Negative Feedback Loop](image)
**Delay**

Systems are harder to understand as they get more complex because the effects of a given cause are not always immediate. In a community system, there can be a significant delay, for instance, between the time new building permits are issued and the resulting impact on the school population. A delay in a causal relationship can invite actions to be taken that are counterproductive or that overshoot the mark. Delays in a positive and negative feedback situations are represented by /+/ and /0/, respectively.

![Diagram of reinforcing feedback loops](image)

**Reinforcing Feedback Loops**

The most simple pattern in systems is the reinforcing feedback loop, where each action reinforces the movement of the system in the same direction. So, if the system is changing in a positive direction, reinforcing feedback will amplify its change in a positive direction. If it is changing in a negative direction, reinforcing feedback will amplify its change in a negative direction. Reinforcing feedback loops that occur in the world often behave as exponential functions over time. An example of this is a monetary account earning compound interest, or population growth. If a phenomenon is observed to be expanding at an increasing rate, you can be reasonably sure that there is a reinforcing feedback loop at work. Population growth for any species in an ecological setting is a good example of this:

![Graph of population growth](image)

There are many examples of reinforcing feedback loops leading to exponentially increasing results: global warming, suburban sprawl, and traffic congestion, to name a few. If you see a trend that demonstrates exponential acceleration, and you wish to intervene effectively in the system, you should strive to identify...
the variables that are reinforcing each other. (Population growth is easy to illustrate, because of the limited number of variables involved. But can you imagine what it might be like trying to determine the variables that account for suburban sprawl?)

Sometimes something can happen to make a positive reinforcing loop turn into its opposite, a negative reinforcing loop. For example, if an organization’s members perceive it to be doing well, then the goodwill and high morale that comes from that perception can make them perform even better. But if something happens that changes their perception to a negative one, then a resulting drop in morale can cause the members to perform worse. This decline in performance will further erode morale, and so on.

**Balancing Loops**

The second type of simple systems pattern is a balancing loop. A balancing loop seeks equilibrium. Once its “target” condition is reached, the functioning of the system continually maintains it in — or returns it to — that state. If there is an increase in A that increases B, then the increase in B will cause A to decrease. Such a loop would be diagrammed like this:

One example of a simple balancing loop is the way our bodies regulate internal temperature. If we get too hot, we perspire to cool off. If we get too cold, we shiver to warm up.

**Community Trends and Feedback Loops**

When you understand the system dynamics described above, it is possible to start to identify what might be at work behind the trends in your community.

Here is example of a current trend from an urban area with respect to new road construction:
This is interesting — the rate of growth appears exponential rather than linear. This might suggest that there is a reinforcing system at work. What variables might be contributing to this trend toward increased spending on road construction?

- Economic growth?
- New business and home construction?
- Traffic congestion?
- Capital budgets in cities and states?
- Federal road programs?

**Task: Identify Relationships Between Variables**

Once you’ve identified some of the variables at work in the trend, try to draw them in ways that are connected to each other.
ACTION STEP

Identify Patterns of System Behavior

To begin, take several large sheets of paper and tape them up on the wall. On each sheet of paper, tape a smaller piece of paper with a trend line that is significant for your community. The point of this task is to try to identify the variables that are behind the trend, and how they react to each other. While the group suggests variables that might influence the trend, have a group facilitator write them on the large sheets of paper, and try as a group to identify ways that they influence each other.

As community planners, the more you can educate yourselves about common system patterns, the more you will recognize the roots of some of the trends you have observed and the inevitability of these results under certain circumstances. You will also be better able to recognize opportunities to correct and reverse some of these patterns.

In this example, planners figured out that the new road construction process in their town was driving suburban sprawl. Rather than build new roads to manage traffic congestion, they needed to think harder about how to manage residential growth.

As it turns out, this pattern of behavior matches a system archetype known as *Shifting the Burden*. In this situation, attacking a problem without dealing with its real cause actually makes the problem worse.
Common Archetypes for Communities

System archetypes are common patterns of behavior that develop when feedback loops combine to form more complex interactions. Below are several examples of these behavioral archetypes as found in community systems. (This workbook is not intended to be a comprehensive systems training resource. Please refer to our list of resources in order to find more information to help community leaders better understand these patterns.)

The Basic Reinforcing Loop

In this system, the variables are all moving in the same direction, causing the situation to get worse and worse. Low quality education leads to fewer skilled workers, who earn low wages, who have less money to pay taxes to improve the educational system — it’s a vicious cycle.
Limits to Growth

In this pattern, the variables are in a dynamic equilibrium, modeling the boom and bust cycles of many natural resource-based economies. More natural resource extraction means more goods and services produced, which means more wages and profits, more savings and investment, a larger number of businesses, and more goods and services. As the production of goods and services depletes the natural resource base, however, the cycle can spin in the opposite direction.

Fixes that Fail

This is a very common pattern of behavior in community systems, and is possibly the clearest example of where the problem-based approach goes wrong. Here, the immediate problem is the number of deteriorated roads. By focusing all the resources (highway improvement funds, in this case) on this narrowly defined problem — rather than the whole system — the maintenance of good roads is shortchanged. As a result, over time, the good roads become deteriorated as well, leading to another vicious cycle.
Equilibrium

Another common pattern is a system in equilibrium. Here, there are variables at work that maintain it in its current state, and thus resistant to change. To effect change, then, you must identify what the variables are that are keeping things in balance. Over time, equilibrium can take a number of forms:

To complete this step, answer the following questions:

1. Are there any common patterns that you’ve been able to find with the variables you’ve identified?
2. Were you able to close the feedback loops you started to draw?
3. Did any of the patterns of feedback offer ideas for things that might be changed?
4. Did you find any examples where a strategy that was proposed to solve a problem actually exhibited unanticipated feedback that ended up making the problem worse?
Careful attention to underlying trends helps you to understand the systems you will be working to improve. As we said at the beginning of this Unit, achieving your stated goals requires that you set realistic targets toward achieving them. Knowing the variables at work in your system, and the influence they exert, makes this possible.

If job growth has inched upward at .02% per year for the past 30 years, and your analysis indicates that the critical variables aren’t likely to change dramatically, it will only invite failure to project that the number of jobs will grow at, say, 10% per year over the next five years. Your own study of the system shows that this will not happen without dramatic systemic change.

This is not to say that we are trapped by history. But to grasp the kind of strategies and interventions we need to make, we do need to understand what has led us to the current juncture. Trying to make dramatic improvements in community systems, without careful consideration of past trends and thoughtful projections of reasonable objectives, is often a recipe for failure.

To make use of the trend data you have collected and analyzed, answer the following questions:

➢ What trends do you want to enhance?
➢ Which trends do you want to reverse or moderate?
➢ What systemic forces are behind the trends you want to change?
➢ Is it likely that the system dynamics will either help or hinder you in the achievement of your goals?

As part of the next step — setting targets — it helps to pull together a summary of the information you’ve discovered in your trend analysis, along with a sense of the possibilities for new directions.
**ACTION STEP**

*Set Specific Targets for Improvement*

Setting targets, or objectives, is a way to formalize some specifics about the goals you are pursuing and the level of progress being sought. While goal statements are broad and general in nature, targets are specific. Target selection will be shaped by the starting point, the capacity for changing the system the goal fits within, and the resources available for working toward it.

Targets should usually be quantitative, fit within a definite time frame, and be stated in clearly defined terms. For instance, if the goal is full employment for your local population, you would set a target of a certain number of jobs created by a certain year, and define what full employment means to you. Many economists in the United States consider about 5% unemployment to be full employment, and count only those individuals actively seeking work as unemployed. You will need to consider how you treat these questions and others within the context of your own community. Clear targets will allow your community to concretely assess progress toward the goal, and to make adjustments where necessary.

This step identifies goals and targets that the next Unit — Planning Strategies for Taking Action — will design approaches to achieve. Brainstorming and then prioritizing ideas, fill out the following chart, making sure to add numerical or qualitative elements to the target, along with a date by which it will be achieved. For each goal, look at the trend data and the vision statement, and project a target that, when reached, will move the community toward the goal. Notice if the target you’ve set is consistent with the trend data, or if it marks a departure from the historical benchmarks. The extent to which you will be battling history will determine the degree to which you need to concentrate resources and efforts in that area.
<table>
<thead>
<tr>
<th>Needs &amp; Assets</th>
<th>Goals</th>
<th>Trends</th>
<th>Targets</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Examples:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meaningful Work</td>
<td>Every citizen has access to a job that uses his or her talents and skills</td>
<td>1% annual rise in unemployment since 1998</td>
<td>Reduce unemployment to 4.5% by 2010</td>
</tr>
<tr>
<td>Businesses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Profits</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clean Water</td>
<td>Enough safe drinking water for all citizens</td>
<td>Bacterial count in drinking water supply increasing for past 3 years after being stable for long time</td>
<td>Achieve bacterial counts that fall within regulatory mandates by 2007</td>
</tr>
<tr>
<td>Public Water Supply</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wells</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Unit Five
Planning Strategies for Taking Action

This workbook asks you to move beyond a narrow problem solving approach and develop strategies that take the whole system into account. It is asking a lot, because it is inherently more difficult to perceive and understand the complex interplay of parts than it is to deal with them one at a time. In this chapter, we’ll give you some techniques to help you understand your community at the whole-system level. Due to the complexity of the topic, these exercises will only be able to provide part of the picture. Nevertheless, it is a skill you should continue to develop, because whole system strategies allow you to:

✓ Shift resources and focus from problem-solving to asset-building, increasing a community’s capacity to meet its needs over time;
✓ Stabilize the system by meeting current needs without detracting from the ability of future generations to do the same;
✓ Understand sources of leverage — points for intervention that can create systemic change;
✓ Understand sources of synergy — ways of bringing elements of the system into harmony and mutual benefit;
✓ Understand and overcome resistance to change.

Whole system strategies build on the targets you developed in the previous chapter. In fact, you will be putting together the puzzle pieces of all the work you have done to date. This will allow you to apply interventions that are designed to take advantage of dynamics in your community system, rather than relying on the band-aid solutions the problem-solving orientation requires.

One very effective way to identify general strategy ideas is to use resource bases of best practices. You can find some examples in the resource list for sustainable communities strategies (see Appendix V), and additional examples online at EarthCAT [http://www.earthcat.org]. Two other sources of excellent information about community action strategies are the City of Burlington Legacy Project [http://www.cedo.ci.burlington.vt.us/legacy/index.html], and the best practices website of the United Nations Habitat program: [http://www.bestpractices.org/].
ACTION STEP  Find the Leverage Points

The exploratory techniques that follow will help the group understand how all the community systems work in our lives. Once you have identified the broad characteristics of the community system — its boundaries, characteristics, and dynamic interactions — you can begin to identify places where interventions could be most effective in bringing about the changes you would like to see.

The idea of leverage, that there are places in a system where small levels of effort can achieve large results, is one of the promises of whole systems thinking. It allows for more creative solutions, leading to interventions that address the root causes of challenging situations, create synergies and ripple effects, free up resources, and escape from limiting assumptions. Yet system leverage is one of the more elusive concepts to actually put into practice.

The first step is to identify points in a system where intervention is possible. For this we are forever indebted to Donella Meadows, who wrote an excellent essay called *Leverage Points: Places to Intervene in a System* (Sustainability Institute, 1999). In this essay, Meadows identifies twelve points that all systems share in common — each a potential avenue to effective change. Eleven of these are pertinent for community sustainability projects, and we will employ them in our detailed look at this process.

The second step is to match community action methods with intervention points. If you are the hunter, and effective community change is your quarry, then the intervention points are your arrows. They are the places in the system where intervention will have the greatest impact. Community action methods are your bow — providing the momentum for the arrows to hit their mark.

In the following sections, we use a visual mapping process to help you see and understand the whole system in which you will be pursuing your goals. A visual approach is very useful in revealing areas of activity and possible points of intervention. Be as creative as you want, and try and find connections between all the elements that you are putting on the map. Picture the transactions between the different actors, and think about whether the net effect of the transaction cycles is eroding or enhancing the system’s ability to meet needs in the future.
Map Your Community Systems

For this exercise, you will start to map the assets, sub-systems and connections that influence your community goals and targets. Each “map” you create will relate to one of the specific goals you have set for your project. By illustrating the current forces at work in your community in relation to your objective, it will help reveal obstacles and opportunities you must take into account as you design your strategy to reach it.

As with all the work you do in planning for sustainability, be certain as you proceed to develop your map that you are taking into account each of the five Sustainability Areas, which satisfy our basic needs for:

1.) material goods, services, and infrastructure
2.) income and jobs,
3.) power and information,
4.) care and values, and
5.) a safe and healthy natural environment

Community systems work to satisfy our needs through different transactions among a variety of “actors”. Actors fall under three broad categories: government, organizations and businesses, and individuals/households. Each of these actors has their own interests and needs that drive their decisions and their actions. As we noted earlier, our individual and collective human needs are the ultimate drivers within any community — they impel all the transactions in the system. However, the interests of the institutional actors also drive the system, and can sometimes predominate, so they should be identified and their influence recognized.

To begin the exercise, select one of the goals you have for your community. Draw a large circle on a big piece of paper or a blackboard, and divide it roughly in thirds. Label these sections for the three categories of actors listed above. In the center, show the ultimate need or needs that your goal addresses. As you begin to answer the questions in each step below, drawing in the various components on your map, remember that all of the activity and processes you are recording revolve around the community’s responsibility for meeting this need. As your map develops you will begin to get a much clearer idea of the reasons for its success — or lack thereof — in doing so.
**Step One:** What assets does the system have relevant to your goal?

List on your diagram each asset present in your community that may be used to satisfy your identified need, whether or not it is currently being utilized for that purpose.

To show how this mapping exercise might proceed, let's take as a sample goal: “To ensure a supply of healthy food that is affordable and available to everyone.” Our identified need here is quite simple and basic — we place “food” in the center. Now we identify community assets that may be relevant to our goal. As we list them on our map, we try to place each one in the sector that best describes the type of actor — Government, Organization/Business, or Individual/Household — that most directly utilizes it. Here is how the map might look:
In our example, tax revenue is one obvious asset that might be tapped to work toward our goal, and as it is the government (at some level) that controls this asset, that’s where we show it. Filling in your own map accordingly will help you see the full spectrum of assets, at every level, that can be brought to bear on your goal.

**Step Two:** *Who are the Actors that have an impact in this area?*

Who are the specific actors that utilize our identified assets, or whose actions come to bear on our goal? Here we have placed the actors in ovals to distinguish them from our listed assets. Of course, there will be times when an element fits more than one category. For example, our food processors and distributors are both actors *and* assets as they relate to our goal in this case. The important thing is not to overlook any elements that have a bearing on your area of concern.
**Step Three:** What strategies are being employed currently?

The next step is to identify the strategies that are being used now which, because they involve the elements you have identified for your system, have an impact on the goal for which you are developing your map. For example, if one of the assets associated with your goal is the day care centers in your community, are there strategies that have been used which make their jobs harder or easier? What is working well? What kinds of events or activities bring people together? As noted in the previous Unit, you may be able to make use of existing plans and other documents to identify current strategies and programs.

Add the current strategies to your map, grouped again by the actors who employ them.
Step Four: How do all these elements directly influence each other?

You know what assets your community has available to address your needs; how are they being used now? You know who is at work to affect, directly or indirectly, the community’s success in meeting this need; what effect are they having now? You know what strategies are being employed; are they effective? How do they reinforce each other? How might they be working at cross purposes?

Looking at your map, try to identify how the various components are interacting, and how they are driving each other in turn. Your community is a complex system, and every action has a reaction. For instance:
As shown on the preceding page, individuals in our sample community (our food “consumers”) have begun advocating for access to better quality food, at prices they can afford. They have organized a citizens’ lobby, which is bringing pressure on the government for action. In response, the government is using financial assets at its disposal — tax revenue — to provide Food Stamps and other subsidies to enable its citizens to receive the food they need.

Here’s another dynamic underway in the same community, that also bears on our goal:

![Diagram of relationships between government, organizations/business, and individuals/households involving food systems.]
Our government’s Department of Agriculture has a program to provide technical support to help small farms get started. Farms are a valuable collective asset in the community, and this asset is enhanced as more individuals are able to start farms of their own. This increases the power and influence of the agricultural lobby, which pressures (“drives”) the government to continue and improve its services to farmers.

As even this simple example shows, these chains of influence very often form a complete cycle. The result of one effort becomes the cause of the next; each output in the system becomes a new input. This is how systems sustain themselves.

**Assessing the Current System**

Having identified the major strategies that your community relies on, the chains of cause and effect and the cycles of influence that are already underway, you are now in a position to “unpack” them and explore how they work from a systems perspective. You should look for opportunities to put to use some of your new skills, including:

* Strategy assessment: Look at each strategy now underway. What type of strategy is it? Does it try to achieve its goals through incentives or punishments? What are the incentives? How effective are the deterrents? Does it add to the assets of the community, or take action on a narrowly defined problem? How does it affect the specific needs that have been identified?

* Behavior-over-time graphs: What measurable impacts are current strategies seeking to achieve? What is actually changing? Graph the behavior of the system over time in terms of trends you are aware of. Can any feedback loops be identified, that either cause the system to spiral out of control or, conversely, cause it to stay the same despite your best efforts?

* System dynamics understanding: Look carefully at the performance of the various actors. What are the actions and the responses to their actions? How, if at all, does this actually change the course of events in the community?
For any given goal you examine, you may identify dozens of assets, actors, and active strategies, so this effort can generate a potentially daunting amount of work. We do not expect you to take it all on, but rather to survey these activities thoughtfully and then do a more thorough analysis on a manageable number of the ones that seem most important. You may select a dozen of the most visible, or most highly funded, or most controversial strategies, and devote an hour to each over a month. You may choose to create breakout groups to conduct this kind of analysis on the most significant influences you have been able to identify for your system.

**Tying it Together**

In most cases, your sustainability planning efforts will have established a number of specific goals. When you have mapped each of them as described in the preceding exercise, and analyzed the dynamics at work on each map you create, you now have an additional opportunity that can prove most valuable as you develop your own strategies.

Compare the maps you have created with each other. Some of the actors in your community will undoubtedly appear on more than one of them. It’s entirely possible that certain assets are employed in multiple ways as well. Look carefully at these charts, and consider what they may be saying about each other. Are strategies from one goal area working against those from another? Are there assets being used ineffectively, that may be put to better use toward another objective? Are certain elements in the community carrying more weight than they can sustain over the long term?

The results of your deliberation will give you a starting point for the next tasks you have before you: to identify specific points of intervention and strategies that will help you exploit them successfully.
Find the Most Promising Points of Intervention

By this point, your analysis of the dynamics at work in your community will begin to reveal certain points where intervention can have the most beneficial effect on the system. Such intervention points can actually be categorized into different types, as described in the next few pages. For example, in the sample maps we developed earlier, the Food Stamps and subsidies provided by the government would be an example of a strategy that employs the first type of intervention point: Controlling the Numbers. If reading through this list reminds you of further strategies you hadn’t previously recalled, you should add these to your maps as well. Becoming familiar with all of these types will help ensure that you have the broadest possible range of ideas to follow up on.

This list of intervention points has been distilled from the list created by Donella Meadows in her article *Leverage Points: Places to Intervene in a System*. They are listed in increasing order of effectiveness; keep this in mind when you are matching them to current strategies.

**Intervention Points that Change System Structure**

The first set of intervention points are those that target for change a *structural element* of the system. These are, in increasing order of effectiveness:

*Controlling the numbers.* These are the points that can change behavior by controlling the rate of flow through a system, or the parameters the system uses for guidance, or other controls that can be expressed and implemented by changing the quantitative factors that influence the system. Some examples are:

- Quotas
- Subsidies
- Price supports
- Limited Entry
Optimizing stored assets, stocks, and buffers. It is often possible to stabilize the system by adding resources to a stock, to create a buffer against erratic or intermittent flows. The other effect of adding to a stock is to increase the overall assets so that current and future needs can be satisfied. This is why we prefer to have bank accounts, rather than living day to day on what we earn. Some examples of these strategies are:

- Conservation land set-asides
- Grain Reserves
- Sand and gravel piles
- Maintaining Reservoir levels
- Strategic Oil Reserve (and City Fuel Stores)
- Streambank buffers

Designing smart infrastructure. Features of the community infrastructure can and should be designed so that they meet our needs effectively and efficiently. Some examples of infrastructure design strategies are:

- Separating storm water from sanitary sewage
- Flood control dams and channelization
- Traffic calming measures
- Changing monetary systems of exchange

Changing time lags in feedback systems. These interventions stabilize a system where problems are caused by oscillations or delays. While lag times within a system often can’t be adjusted, they need to be taken into account when designing strategies to improve the function of that system. Some examples where this consideration comes into play include:

- Red light timing in transportation corridors (reducing traffic congestion by optimizing the flow of traffic through signals at particular speed limits)
- Efforts to control nutrient loading in streams and lakes (reducing the load takes time because there already are pollutants ‘in the pipeline’)
- Controlling carbon dioxide emissions that cause climate change (like nutrient loading, reductions take time to have an impact, and the lag needs to be considered with respect to the required level of reductions)
Strategies to Change System Controls

The second set of system interventions are those that target for change the controls of the system. Listed, as before, in increasing order of effectiveness, strategies employing this set of intervention points are typically more effective than the structural changes discussed above.

Adding or changing self-correcting mechanisms (negative feedback loops). These strategies are designed to keep the system in a state of equilibrium within certain parameters. They exert a corrective force on a system when other factors drive it outside the boundaries where it can operate safely. Some examples:

- Float valves in check dams
- Legal protection of whistle blowers
- Pressure relief valves in furnaces
- Reducing cars allowed on roads when there is high air pollution
- Impact fees, pollution taxes, and performance bonds to offset the public costs of private gain.

Changing self-reinforcing mechanisms (positive feedback loop). Often, the driving forces in a positive feedback loop can lead to problems — cancer cells recreating themselves, population growth leading to more population growth — so reducing the driving force can be a strong leverage point. Examples of reducing the gain in self-reinforcing mechanisms include:

- Increasing inheritance taxes to slow the consolidation of wealth
- Early detection programs that stop cancer before it becomes too widespread
- Family planning measures to control population growth
- Conflict management training for inner city gang members to reduce violence

There are a few examples where increasing the positive feedback can be a good strategy, too, such as strengthening people–to–people grassroots campaigns, and introducing Time Dollars to encourage more community service.
Improving the flow, accessibility, and timing of information. These strategies add feedback loops and increase information to decision-making points in the system, so that it can respond more effectively, or change its behavior altogether. Some examples are:

- Installing electric meters where people can see the dials turning
- Showing policy-makers ongoing rates of recharge in aquifers so they can make better decisions about pricing
- The Doomsday Clock, which, by publicly illustrating the increase in global tensions among nuclear powers, increased the pressure for weapons control and peacemaking
- The Freedom of Information Act, to reduce government secrecy
- Prohibition of insider trading

Rules and Regulation. We know how effective these strategies are. Change the rules that a system uses to operate, and you change the system. The possible examples are endless. It is important to note that if a rule change is combined with another system control feature — like increasing information flows or changing feedback dynamics — it can be more powerful still.

- Fines and penalties
- Incorporating the Precautionary Principle into regulations
- Compulsory Life cycle accounting, internalizing externalities, etc.
- Protective laws: Endangered Species protection, human rights, health regulations

System Drivers and Motivators

The most effective interventions of all are those that target the drivers and motivators of the system dynamics. Here again, they are listed in increasing order of effectiveness:

Democratic Practices and Civil Society. On the community level, this addresses the ability of systems to adapt, change, evolve, and self-organize. This is the intervention point we employ when we use democratic mechanisms and the work of civil society to achieve our goals. The self-organizing property of community systems is directly related to the freedom and ability the members have to work together to create new structures and try new ideas. Some examples are:
• Community members developing zoning regulations
• Community development corporations
• Civil Society organizations of all kinds
• Referenda campaigns

Setting Conscious Goals. Unsustainable patterns of behavior are frequently the result of the unconscious goals of our community systems. If the community is not intentionally pursuing collective objectives, the unstated priorities of narrower interests (such as maximizing corporate profits, keeping taxes as low as possible, or marginalizing minority populations) may wield a disproportionate influence. Engaging a broad cross-section of the community in a goal-setting process — like the one we propose in this Workbook — is an attempt to redirect critical energy and resources toward intentional (“conscious”) goals. As stated throughout, human needs are the ultimate drivers of community systems, so looking at how to meet needs more sustainably is the necessary locus of our conscious efforts. Conscious goals for community improvement result from:

• Creating a community vision through inclusive and democratic process
• Needs assessment and asset-based strategy development
• Strategic planning and total quality management practices

Shifting Paradigms and Mindsets. The deepest root of any human system is the paradigm or mindset that has shaped its creation and use. Changing attitudes, beliefs, and operating principles is one of the most effective ways to achieve meaningful and lasting system transformation. Without it, many of the other strategies will fade away over time. Changing paradigms sounds momentous, and it can be; when the former Soviet Union introduced glasnost and perestroika, it changed their political and economic system forever. But smaller scale strategies along these lines have also been very effective:

• Changing attitudes toward smoking in the United States
• Changing attitudes toward littering in the United States
• Improving civil rights and the place of women in US society
• Ending formal racism in South African society

#7a. Reduce, reuse, and recycle the materials used in production and consumption systems, and ensure that residual waste can be assimilated by ecological systems.
Interventions for Farmland Preservation

*a Systems Change Story*

The region of Franklin County, Massachusetts, was very concerned with the decline of farmland. Development pressures were pushing residential development into areas where it had never been, farms were being cut up into subdivisions, and the entire agricultural economy was threatened.

The county convened a Farmland Stakeholder Committee with representatives from each of the towns in the County, a number of farmers, and key political figures who would be able to introduce changes to state law or policy if necessary. The goal of the Stakeholder Committee was to develop a farmland preservation plan.

One of the early findings of the Stakeholder Committee was that the preservation of farmland was not simply a land use issue — it was directly linked to the preservation of the farmers. Farm income had collapsed in New England, which couldn’t compete with the large corporate factory farms in the Midwest. The committee felt they needed a new approach to land conservation that focused on the people working the land, and changed some regulations that made it harder for farmers to make a living.

A key goal they set for the process was to increase farm income as a farmland preservation strategy.

There were alternatives. One of the strategies that had been used in the past was the property tax relief program the state had for productive farmland and forestland. If people put their land into the program, then sold it to a developer or took it out of farming, they would owe back the taxes they had avoided when the land was eligible for relief.

Another strategy they considered was to adopt Vermont’s program, which charged speculation taxes on real estate transactions where land was turned over quickly — within a year or two of purchase — or where large lots were cut up into smaller lots for development.

There were other strategies available, like rewarding landowners in certain targeted areas for selling their land development rights to the state.

The Stakeholder Committee finally decided that price supports on milk would be a way to increase farm income, and keep the farmers in business longer. They devised a system where there would be a surcharge on every gallon of milk sold in New England, regardless of where it was produced, and the revenues from the surcharge would go to increasing the price the dairy farmers in the region received for their milk.
The preceding page tells the story of Franklin County, Massachusetts, and their effort to find a way to prevent farmland from disappearing. In this particular case, for all the high-effectiveness intervention points that they were using — either consciously or otherwise — the one they settled on in the end was at the least effective end of the spectrum. This is not uncommon. As you look at the policies and strategies which have been used in your community in the past, you may find that they are all at the lower end of the scale of effectiveness. This is because the strategies that change the system structure are often the easiest to implement, and they correspond more closely with a problem-solving approach.

The challenge is to find new approaches that move up the scale. The next task, then, is to determine how the existing strategies work, how effective they are, and how to develop new strategies that take better advantage of the dynamics in the system.

**Task:** Evaluate the Available Strategies

As part of your Mapping exercise, you identified strategies that were currently being used that had an impact on the goals you have set in your planning process. You have then begun to assess the existing efforts from a whole system approach. As a result of this analysis, you now have a clearer idea of how to proceed in designing new strategies that will be most effective in achieving your goals.

For example, in the Farmland Preservation case above, if the Stakeholder Group had gone through an assessment of all the different strategies they were using to achieve their goal, and they noticed that establishing price supports was one that fell at the lower end of the effectiveness scale, they might have come up with some additional strategies. They might come to suspect, for example, that limiting their ideas to dairy farming was part of the problem. Perhaps they needed to change the way farmers thought about their products. Maybe a switch to more organic practices would increase their income, or diversifying the products they offer by growing other crops or by adding value to the milk they were producing. Changing values and mindsets in this case might have paid off.

To complete the following worksheet, start with a goal you have used for the mapping exercise, and list the existing strategies you identified. Then try to think
of which types of intervention points, as listed above, the various strategies take advantage of. List them for each strategy.

In the “Comments on Effectiveness” section, indicate whether the intervention is a change in the system’s structure, a change in the system’s controls, or a change in its drivers and motivators, based on the descriptions given above. If you have any information about how effective the strategy has been relative to the real human needs it is trying to satisfy, make comments on that. Many strategies go astray when the interests of the institutional actors in the system trump the needs of the people. For example, back during the Depression, when lots of people were going hungry, the U.S. government was throwing away massive volumes of food in an attempt to keep prices high enough for the farmers.

Finally, try and imagine interventions that might have a higher level of effectiveness, and make note of these — you’ll be using them for the next Task.

**Strategy Assessment Worksheet**

List the current strategies your community uses to meet community needs and any specific goals. Identify which (if any) of the intervention points are used, and try and get a sense of how effective the strategy has been so far. If there are any factors you can identify that contribute to its effectiveness, or its lack thereof, write them down. If there are intervention points that haven’t previously been considered that would make the particular strategy more effective, make a note.

<table>
<thead>
<tr>
<th>Current Strategy</th>
<th>Intervention Points Used</th>
<th>Comments on Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ACTION STEP

Design Integrated Strategies for Maximum Impact

Having identified the intervention points for the current strategies, you can start to develop new strategies using higher impact intervention points.

In designing your strategies, avail yourself of community action methods like those listed here.

➢ Mass communication channels

The importance of our collective communication systems cannot be overstated. Media messages create a force field that guides and directs mass consciousness. Develop a media strategy, stage media events, create a cable TV show, start a syndicated column, get interviews on local radio stations — there are lots of ways to do this. Take advantage of call-in radio talk shows and televised public meetings.

➢ Building civic spirit

One type of community strategy that can have an almost magical effect on the ability of people to get things done is to build community spirit — that ineffable quality of identification with a place that makes people care about its future. The ‘community’ might be a particular neighborhood in a large city, or a section of town, or even a large apartment block. If you can give people a better sense of place, and connection to that place, you build trust among people and improve the odds of getting their support for future community enhancement efforts.

➢ Early Intervention

A good example is the Vermont Success by Six program, which targets children born into low income households for intensive early education training. The aim is to ensure that they have properly developed skills by the time they begin school. Early intervention, when a problem is still small and easier to manage, is a very effective community action method for change.

Earth Charter Principles

#14c. Enhance the role of the mass media in raising awareness of ecological and social challenges.

#16a. Encourage and support mutual understanding, solidarity, and cooperation among all peoples and within and among nations.

#14a. Provide all, especially children and youth, with educational opportunities that empower them to contribute actively to sustainable development.
Public Education

Beyond mass communication channels, there are a variety of ways to educate different audiences about issues, areas where behavior needs to change, policy proposals, and other important objectives. The formal education system is a very effective partner, and increasingly there are informal education networks in communities that can serve the same purpose.

Conflict management and consensus building

Effective practices for conflict management are critical for every effort that involves collective action. This means learning new communication skills, to help turn conflict into constructive action. It means learning to actively practice forgiveness and compassion for other people on your team. Recognizing that a wide variety of approaches, styles, and behavior are vital to the success of a team effort makes the planning process more resilient and a lot more likely to succeed.

Prevention and precaution

Preventive approaches reduce risks and stresses so there is less to clean up. Using less packaging, for example, instead of building more incinerators. Look at the life cycle of the new systems or programs you introduce to address community issues, and you will find many opportunities to use a preventive approach.

Focus on pressure points

These are places where a variety of people, activities, and public processes converge. For example, the educational system touches an entire community. Students can survey their families to get a sense of the issues within the community. Schools can serve as demonstration sites to show the community new ways to save energy, reduce toxins, compost organic waste and restore habitat.

The democratic process

Understand how the decision-making system is supposed to work, and how it works in practice. Petition campaigns, voter drives, and extensive public outreach are proven techniques. Other policy options may be available as well. For example, the Dudley Street Neighborhood Initiative in Boston was struggling with abandoned buildings and trash-filled lots that neither the city nor the absentee
landlords would clean up. The community group realized that a powerful policy instrument was available: eminent domain, which is used when significant public health and safety issues are at stake. They succeeded in claiming acres of land and established a legal precedent.

Non-violent direct action

There are some occasions where direct action may be appropriate to address a problem or inequity, even if it violates conventional practice or an obsolete law or policy. This is illustrated by the decision of the village trustees of New Paltz, New York, and their colleagues in the clergy, to preside over the weddings of dozens of homosexual couples, even though their village clerk was unwilling to grant them marriage licenses. While facing short-term legal consequences (which had mostly vaporized by the time of this writing), the administration broke new ground in civil practice and set a precedent that strengthened the civil rights of millions. Sometimes, when systems have grown old and moribund, introducing a disturbance is the only way to initiate change.

Task: Complete Strategy Design

The appropriate mix of strategic intervention points and community action methods will help ensure that the strategies you develop achieve the most ‘bang for the buck.’ Having explored the strategies now in use, and thought about ways to improve upon them, you must now choose those intervention points that — when coupled with high-leverage community action methods — will help you achieve the goals and targets you’ve set.

Start by asking yourselves a few basic questions. What would the transformed system look and feel like? Begin with your vision for the future, and flesh it out with more details. Imagine what specific things might be different. Close your eyes and try and see the new system you’ve created, with all the component parts in view. Now consider what could lead to the desired transformation. What might avoid or reduce the negative impacts of the current way of operating? Consider means used by the current actors, or find new ones.
**Strategy Design Worksheet**

Fill in the goals and targets you are trying to achieve with the strategies you propose. Identify critical intervention points you can use, either by finding higher leverage points for the current strategies, or by inventing new strategies. Couple each of these intervention points with community action methods. Finally, pull all of the parts together into a concise description of the strategy, including the goal and target you’ve identified, so you have a clear idea of what you’re trying to accomplish, and how it addresses the need you’ve identified. The worksheet below gives you an example using the agricultural case study.

<table>
<thead>
<tr>
<th>Asset, Goal, and Target</th>
<th>Intervention Points</th>
<th>Community Action Methods</th>
<th>Strategy Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Asset:</strong> Farms</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Goal:</strong> All farmers have healthy, diversified incomes that bring economic security to their families and the greater community.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Target:</strong> Increase farm income on 350 farms by 30% by 2006.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change mindsets about farm products to encourage diversification and develop value-added products.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engage farmers in a process to set conscious goals for expanding product lines and markets.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public Education: Awareness campaign about successful alternative products.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pressure Points: Linking small business loans and marketing assistance to new product development by farmers.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Early Intervention: Give start-up farmers incentives to try new crops and products.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To improve the economic vitality of the farms that provide our community with food and other agricultural products, we propose actions that will increase farm income on at least 350 farms by 30% over the next four years. These actions include:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1) a broad-based campaign to encourage diversification and introduce value-added farm products,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2) loans and technical assistance to help interested farmers with business plans for new products,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3) financial planning, innovation incentives, and marketing assistance for start-up operations.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Once you have a concise and clear description of the strategy you are proposing, hold it up to the following criteria to help ensure, one more time, that you are taking the whole system into account.

Use the first chart below to help you anticipate whether your strategy will truly lead to a more sustainable community. Describe how the strategy you have proposed meets the criterion in each of the boxes on the left hand side of the page. Every strategy you propose should be sufficiently developed to address the questions below — if it doesn’t, you may need to think it through more thoroughly.

### Proposed Strategy:

<table>
<thead>
<tr>
<th>Proposed Strategy:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>This strategy creates a community that respects and cares for people and the whole community of life by…</td>
<td></td>
</tr>
<tr>
<td>This strategy strengthens civic participation in decisions that affect the community by…</td>
<td></td>
</tr>
<tr>
<td>This strategy distributes benefits and burdens equitably by…</td>
<td></td>
</tr>
<tr>
<td>This strategy increases the value and vitality of human and natural systems by…</td>
<td></td>
</tr>
<tr>
<td>This strategy conserves and renews human, financial, and natural resources by…</td>
<td></td>
</tr>
</tbody>
</table>

---

**Earth Charter Principle #6c.** Ensure that decision making addresses the cumulative, long-term, indirect, long distance, and global consequences of human activities.
Now check the strategy you have developed against each of the following criteria, to make certain that, by enhancing one set of assets, you are not undermining others. If you do find problems, try to revise your strategy to minimize any possible negative impacts. Some of these criteria are expressed as ‘nots’ and some are expressed in the positive — the idea is to check to make sure that what is being proposed doesn’t undermine the ways in which community needs are satisfied.

<table>
<thead>
<tr>
<th>To meet the needs in this area…</th>
<th>The strategy must…</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Clean Air</td>
<td>not result in more harmful air emissions than can be assimilated</td>
</tr>
<tr>
<td>☐ Clean Water</td>
<td>not result in more polluted effluent than can be assimilated</td>
</tr>
<tr>
<td>☐ Open Space</td>
<td>use space efficiently</td>
</tr>
<tr>
<td>☐ Energy</td>
<td>use energy efficiently and use renewable energy whenever possible</td>
</tr>
<tr>
<td>☐ Water Supply</td>
<td>use water efficiently</td>
</tr>
<tr>
<td>☐ Housing</td>
<td>support affordable housing &amp; plan for housing to be developed</td>
</tr>
<tr>
<td>☐ Waste Disposal</td>
<td>minimize waste production, reuse and recycle waste</td>
</tr>
<tr>
<td>☐ Local goods and services</td>
<td>not encourage imports &amp; maximize sustainable local production</td>
</tr>
<tr>
<td>☐ Communication Infrastructure</td>
<td>support investment in communication infrastructure</td>
</tr>
<tr>
<td>☐ Transportation</td>
<td>minimize the need for transportation of people and goods</td>
</tr>
<tr>
<td>☐ Meaningful Work</td>
<td>ensure that jobs meet human needs &amp; pay livable wages</td>
</tr>
<tr>
<td>☐ Income and Wealth</td>
<td>be cost-effective and cost-efficient</td>
</tr>
<tr>
<td>☐ Equity</td>
<td>distribute benefits and burdens equitably</td>
</tr>
<tr>
<td>☐ Access</td>
<td>make benefits accessible to every sector of the community</td>
</tr>
<tr>
<td>☐ Self-Determination</td>
<td>involve stakeholders in planning and implementation</td>
</tr>
<tr>
<td>☐ Knowledge/Information</td>
<td>be transparent and provide public information</td>
</tr>
<tr>
<td>☐ Conflict Resolution / Peace</td>
<td>incorporate a process for conflict resolution</td>
</tr>
<tr>
<td>☐ Safety</td>
<td>not undermine community protection services or neighborhoods</td>
</tr>
<tr>
<td>☐ Self-Esteem</td>
<td>develop character and personal responsibility</td>
</tr>
<tr>
<td>☐ Sense of Community</td>
<td>build trust between people &amp; create and enhance networks</td>
</tr>
<tr>
<td>☐ Lifelong Education</td>
<td>incorporate educational components &amp; involve the youth</td>
</tr>
<tr>
<td>☐ Health Care</td>
<td>promote healthy activities and practices</td>
</tr>
<tr>
<td>☐ Spirituality/Peace</td>
<td>allow space for contemplative and spiritual practice</td>
</tr>
<tr>
<td>☐ Aesthetic Enjoyment</td>
<td>be designed and implemented with high-quality aesthetic input</td>
</tr>
<tr>
<td>☐ Relationships/Caring for Others</td>
<td>create opportunities for people to form connections</td>
</tr>
<tr>
<td>☐ Recreation</td>
<td>allow for time to relax and play</td>
</tr>
<tr>
<td>☐ Self-Expression</td>
<td>involve the arts, music, theater, and other forms of expression</td>
</tr>
</tbody>
</table>
Unit Six

Indicators of Community Performance

At this point, you have clarified a community vision, established goals and targets, and developed strategies to achieve them. You are ready to transform your community into a model of sustainability! But it is worth asking yourself now: how will you know if you are succeeding? What are the indicators that your community is making progress toward its goals?

Stated simply, the “indicators” you seek are those that provide measurable information about your community’s status and direction. Indicators often seem enigmatic, very technical, and data-heavy. In fact, the strength of good indicators lies in the ability they provide to avoid having to gather and mull through ream after ream of data. There is a plethora of data available today. Determining what information is relevant and expressing it in easy-to-use formats is what makes mere data a suitable indicator for community action plan. Good indicators are incisive, allowing you to get to the heart of the matter by looking at a relatively small number of variables.

Indicators are used at all levels of formal and informal decision-making. The gas gauge in your car, for example, indicates when it is time to fill up, and the gross domestic product (GDP) tells policy-makers whether policies to stimulate the economy are working. The right indicators are necessary to your sustainability planning, telling you whether your efforts to make move your community in the right direction are successful.

This chapter will help you identify the right indicators for your Action Plan. In so doing, you will learn how to answer two major questions about each of the specific targets you have set: where does your community stand in relation to where it wants to be, and how well are your efforts toward achieving your targets working?
ACTION STEP

Select Indicators for Monitoring Performance

By monitoring indicators for each target you have chosen (see Unit 4) you will allow the government, civil society, and the public at large to assess whether your community is making sufficient progress toward sustainability. You do not need formal experience in developing indicators — it is simply a logical process of determining what information tells you whether your community is meeting the targets you have set for it. You will quickly become comfortable with the concept once you have begun. You can also draw on the experience of many other communities by referring to examples in EarthCAT online, and the resources listed at the end of this book. A good way to introduce yourself to sustainability indicators are the reports available at http://santa-monica.org/epd/scp/goals_indicators.htm.

Indicators can be conceptually simple, like total population, or very complex, like GDP. They can be based on quantitative data like concentration of sulfur dioxide in the air, or qualitative information like the results of a survey of people’s attitudes toward their community. One thing is true of all good indicators, however: they are clear and easily understood by experts and non-experts alike. The EarthCAT approach will guide you in developing indicators that allow you to express essential information about your progress in numeric form.

The Action Steps you have worked through to this point have already compelled you to do what is usually the hardest part of choosing relevant indicators: prioritizing the topics your community cares about most. The targets you have set offer a level of specificity that you will find is very helpful in choosing indicators. If you have skipped to this section without first working through the Units on goals and targets, be sure you have identified the specific priorities in your community before proceeding.

As with goals and targets, there is no “correct” number of indicators. However, the experiences of other communities has shown that it is usually better to start with a small number and to increase over time. Santa Monica and Heidelberg, both cities that were very dedicated to their sustainability programs, each started with fewer than 10 indicators. Tracking and sharing indicator data will often require building new capacity for the task, either by local government or
community groups. This can represent a significant change in culture for some
government officials. Such changes require time and careful planning, and will
often be easier to pursue if you take them on a few at a time. The leaders of the
Santa Monica and Heidelberg projects felt that tracking a small number of in-
dicators initially was important to the long-term success of their programs. The
list of indicators being used in both of these communities is now in its second or
third iteration, and has increased to more than 50.

Task: Brainstorm Indicators

As for each previous step, the first thing to do is to
ensure that the team you employ for indicator selec-
tion represents the right skills. As stated above, estab-
lishing indicators isn’t hard, but it is a task that benefits from experience. Also,
tracking indicators requires data. If there is a choice between two indicators,
and only one of them has data available through administrative sources, that is
almost always the one you should choose. Therefore, if you don’t already have
people on your team from local or regional government administrative offices,
or who know how to find out what data are available from these sources, be sure
to try to recruit some. As for finding people who are practiced in thinking about
indicators, ask yourself if there are individuals — natural or social scientists, for
example — who are used to representing the world through numbers, and who
might volunteer to help.

You should treat the brainstorming steps as an iterative process. Go through
them quickly, recording as many ideas as you can quickly generate. Then use the
criteria to begin to eliminate and refine the ideas you recorded early on.

The steps to choosing the indicators for your project are deceptively simple.
The trick lies in determining what variables will incisively and meaningfully tell
you about your progress.

Choose one target as a starting point for brainstorming. The indicators you
develop for the first few targets should be considered a learning process...choos-
ing and clarifying indicators gets easier with practice. You will probably reconsid-
er and revise your list a number of times. So start by choosing the target you are
most interested in or knowledgeable about and begin. Once you have done this
for one target, choose the next and continue until you have developed indicators
for all your targets.
Research and/or brainstorm a list of the specific type of data that might reveal where you are and where you are going with respect to the target. Remember to seek out examples of indicators developed by other communities — these examples can often make the difference between a successful and unsuccessful brainstorming session. Look closely at the strategy you have developed for the target, and use the following three questions to brainstorm a list of indicator candidates:

1. What pressures act on the community system to hinder its ability to provide the needs in question (pressure indicators)?
2. What information will help you measure where things are in relation to the target you have set (state indicators)?
3. What leverage points and activities are you planning and how can you measure the success of their implementation (response indicators)?

(For a fuller description of the three basic types of indicators, see Appendix II.)

**Record Basic Indicator Information**

As you develop indicators, record the following elements for each one. It helps to use a simple table for this purpose during the brainstorming phase. While there is no need to develop the table completely while brainstorming, considering what you would enter into each field will help you to determine whether the indicator will be useful for the target.

- **Indicator name.**
- **Definition.** Define the indicator in detail. What metric will the indicator use to measure progress toward your community’s target?
- **Justification.** Why will data gathered for this indicator clearly tell you whether your strategy is being successfully implemented and that your community is making progress toward realizing the target?
- **Units.** What are the units associated with this indicator. For example: Percent, Parts per million (ppm), Incidence per 1000 people, etc.
- **Data Sources.** Where will the data be obtained? Will it be gathered by the community? Can it be accessed from local or regional administrative records? Do local NGOs or federal agencies gather data? See the last Action Step on planning data gathering for more on this topic.
- **Data Gathering Methodology.** What method will be used to gather the data?
**Consider Geographic Scale for each indicator**

Indicators that use average values for the overall community work well for many targets, but not for all. For example, many planning efforts are concerned with issues of equity within the community in the areas of health care, school achievement, life expectancy, and many others. Assessing the equity of distribution within a community obviously can’t be done with a value that represents the overall community average. Some indicators will therefore be tracked at smaller geographic units.

For example, in Washington DC, some parts of the city have extremely low infant mortality rates — among the lowest in the world. In other parts of the same city, fewer than 3 miles (5 km) away, the infant mortality rates are on par with countries such as Haiti. Clearly, an indicator or progress toward equity in Washington DC would need to be measured at smaller geographic units than the entire city.

Geographic sub-units are usually best established along political boundaries. People are used to thinking along these lines, and community governments and other entities are probably already gathering data using these boundaries. In general, we recommend choosing only one level of geography within the overall community. Tracking multiple levels can become burdensome and shouldn’t be necessary unless you are developing a sustainability plan for a very large city. Ideally, the level you choose will be detailed enough to allow clear understanding of the patterns within the community, without being too detailed and therefore too demanding of time and energy.

**Task:**

**Apply Selection Criteria**

Good indicators share a number of traits in addition to clarity. Following is a list of some criteria you should keep in mind as you develop the best indicators for your purpose. Gathering data is time-intensive and can be costly. It is better to spend the time up front developing indicators that will tell you clearly about your issue of concern than to realize later that your indicators aren’t providing the information you had hoped for.

Apply the following criteria for each indicator you brainstormed. Some indicators will quickly be eliminated. If possible, however, try to emerge from this exercise with a number of candidates for each category of indicator — pressure, state, and response — that can be described as:
✓ **Incisive:** the indicators you choose should tell you clearly and specifically about the problems you are addressing. Avoid choosing indicators that can fluctuate for reasons unrelated to efforts the community is making.

✓ **Measurable:** in order to be useful for assessing progress, indicators need to be quantifiably measurable. While most of the indicators you consider — the amount of dissolved oxygen in a stream, or the percentage of third grade girls who can read — will naturally lend themselves to being quantified, others may not. Methods have been developed to measure and quantify governance issues like free access to information. We will explore a method to index qualitative data below; you should explore this methodology if the indicator you have brainstormed is not inherently quantitative.

✓ **Results oriented:** because you are dedicated to producing change in your community, you will want to choose indicators that measure the effect of the actions you are taking. This will sometimes seem difficult for pressure indicators, since the pressures that lead to a situation like air or water pollution often take place far outside the community.

✓ **Reliable:** indicators must be based on variables that can be measured as accurately as possible. In addition, you must be able to gather the needed data at an appropriate scale and frequency.

✓ **Replicable:** if you can’t accurately repeat a measurement, you will not be able to assess progress over time.

✓ **Simple:** choose indicators that are easy to understand, while being as precise as possible.

✓ **Cost-effective:** relatively inexpensive to monitor without diminishing the effectiveness or quality of the data.

✓ **Relevant:** relevancy is a top priority when developing indicators. Do not spend your time with indicators that do not relate to the goals and targets you have developed.
Task: Finalize Your Selections

At this point, you will have enough information to select the final indicators for the target. Ideally, you will have sufficient indicators to choose from to give an accurate picture of the performance of each activity in your strategy (see Appendix II). Now you will develop additional information for each indicator to ensure you are ready to begin gathering data and using the indicator to track progress.

Indexing

It can be useful to index your indicators so the measurements can be communicated more easily. Indexing is the process of weighting the data so the results will fall within a pre-determined range that is easy to understand and compare. Percentages are one form of indexing that everyone understands. Comparing the exact number of children who graduated from secondary school from year to year, for example, doesn’t explain anything about educational performance if the number of children enrolled in school fluctuates. When the data are indexed as a percentage of all children enrolled, however, year-to-year comparisons become relevant and easy. As you implement your sustainability plan, the number of indicators you track to measure its progress will grow, perhaps numbering 50 or more. Effectively communicating progress for all of these indicators will be significantly easier if the results are presented within a common range. This can often be done by using a linear scale of 0 to 100, where 0 represents a completely unacceptable value and 100 represents an ideal value (see the sidebar for the equation to convert your indicator data to this uniform index scale).

To make use of an index scale like this, you will need to discuss what the outer limits — the unacceptable value and the ideal value — will be for each indicator. The unacceptable value will represent the lowest value in the range, and the ideal value will represent the highest possible value in the range. The indexing range is not meant to duplicate the target the community set in Unit 4, but rather to provide a mechanism for easily assessing and communicating progress toward the target over time. The ideal value mentioned above should therefore be higher, probably significantly higher, than the community target.
For example, if your community has adopted a goal to protect the climate (or to become climate-neutral), and a target of reducing net greenhouse gas emissions by 25% by 2015, that does not mean that 25% below current emissions should be pegged as 100 in your index. There are two main reasons to avoid doing so. The first reason is practical: what if your community succeeds beyond its dreams and reduces emissions by 50%? The index could not accommodate this level of success. The second reason is more philosophical. Our communities are aiming for sustainability, which is a long-term goal. Most of our communities have a lot of progress to make before we are close to true sustainability. Over time, however, we can make significant strides, and we want the indexing to fully allow for all the progress we, with concerted effort, can make.

There are situations, however where your target can serve as the high value in the index. Using the example above, a number of communities have made significant strides in reducing greenhouse gas emissions and are considering adopting climate neutrality (0 net emissions) as a target. This target really does strive toward true sustainability, and is a worthy high-end value in an index.

Indexing some indicators is relatively easy. For high school graduation rates, a 0% graduation rate can be assigned the “unacceptable” value and 100% the ideal. Others, however, can prove difficult due to the unavailability of initial data, or other practical reasons. You may also encounter areas where there will be strong disagreements about what constitutes unacceptable versus ideal rates, and what the high and low values should be. Try to avoid getting too bogged down by these arguments, bearing in mind that it is the targets that you are all striving toward.

Choosing Base and Target Years

To be a useful tool for evaluating progress, you will need to have base and target years for each indicator. You have already identified the target year when you set your target (see Unit 4). The base year provides the baseline value with which you will compare later results to assess the impact of strategies. Gathering data from a time before the strategies have begun to be implemented provides the snapshot of what it is you are trying to change. For indicators where data already exist and have been gathered periodically for municipal purposes, you can choose your
baseline to match the most current set of available data. Often times, communities choose a recent year that falls on the beginning of a decade or half-decade. On the other hand, if you will be gathering your own baseline data, you will probably choose the current year — or even next year — as your starting point.

**Record Detailed Indicator Information**

At this point, you will have generated all the information you need for your indicators. Make sure that each of the fields below can be completed for each indicator.

<table>
<thead>
<tr>
<th>Indicator name:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definition:</td>
</tr>
<tr>
<td>Justification:</td>
</tr>
<tr>
<td>Units:</td>
</tr>
<tr>
<td>Data Sources:</td>
</tr>
<tr>
<td>Methodology:</td>
</tr>
<tr>
<td>Indexing Metric:</td>
</tr>
<tr>
<td>Base and Target years:</td>
</tr>
<tr>
<td>Pressure, state, or response:</td>
</tr>
</tbody>
</table>

A detailed description of the indicator, including the metric it will use to measure progress.

The reason this indicator will clearly tell you whether your community is making progress toward the stated Target.

The units associated with this indicator. Percent, Parts per million (ppm), Incidence per 1000 people, etc.

Where the data will be gotten, who collects it, and how it can be accessed.

The methodology that will be followed to gather the data.

A scale ranging from 0 to 100, or some other convenient means of expressing and comparing its measurements.

The year for which data will be collected prior to implementing the plan, and the target date for the progress this indicator will measure.

Whether the indicator addresses: elements that drive the system (pressure), the status of the system (state), or your efforts to improve the system (response).
ACTION STEP  Gather Baseline Data

Gathering data for your indicators is not as conceptually challenging as identifying them in the first place. Over the long term, however, it will be much more time and resource-intensive. Sometimes you decide upon an indicator, only to discover that data for it cannot be found after all. This underlines the importance of determining how, or whether, you will find the data needed for an indicator you are planning to rely on. The next unit on tracking data will present more information on data sources and data gathering.

Local or regional governments are often an outstanding source of administrative facts and figures about school enrollment, crime, incomes, taxes, percentages of households with plumbing and electricity, health, etc. Determining which department and which individuals within that department are able to provide you with the data you need, however, can be a difficult process. Furthermore, you may encounter resistance in getting them to share what they have. There are, unfortunately, many prevalent attitudes that can make it difficult to obtain information, even when you know the data exist. When choosing between two strong indicator possibilities for the same target, you should take into account the probability of being able to get the data, before assuming it will be available to you.

Government sources responsible for managing environmental and health issues should have data on topics such as water quality, air pollution levels, trash hauling, etc. You may also be able to find data on these topics from non-governmental organizations that track these issues.

For other indicators, you will probably need to gather your own tracking data. This would be true for a wide variety of indicators, from chemical analysis of stream water quality, to public satisfaction with city services, to levels of vehicle traffic. Don’t be too surprised or disappointed if gathering data for a certain variable proves to be impossible, despite all your attempts to anticipate and avoid obstacles.
Unit Seven

The Community Action Plan

Having come this far in developing a vision, goals, strategies, targets, and indicators, you are now able to pull it all together into a Community Action Plan. Capitalizing on all the work you’ve done to this point, the plan will summarize the policy and program initiatives that the community has made a commitment to pursue. An important aspect of the Action Plan is the care you have taken to align your sustainability planning with other planning documents and processes that already guide the community. Provided the Stakeholder Group you recruited has been representative of the other planning entities in your area, you should already have been incorporating the current information, trends, and recommendations from the other plans into the material you’ve developed for this Action Plan. Conversely, the other plans underway in your community could themselves benefit from considering the needs and assets that you have identified in your work. This unit talks about how to draft the Community Action Plan, how to ensure that it serves as an overall integrating plan for other community improvement activities, and the benefits of making sustainability the guiding principal of all community development.

The Action Plan is a tangible outcome of the community’s efforts, and is the foundation for all that follows. Effective plans include a clear sense of what resources and actors are needed to make change. Community action plans that enjoy broad stakeholder involvement will include the various organizations they represent as contributors, and the resources and timeframes will include actions by all the different sectors of the community.

The Action Plan must be prioritized, with steps taken in an order that allows each to build on what went before. Planners should strive for maximum synergy among the strategies to be employed, anticipating where they either interfere with or complement each other. Feedback systems should be established to continuously monitor the way the plan is moving forward. Financial planning, management and decision support systems, life cycle design and accounting, and sustainable procurement policies all play important roles in effective implementation. And all this must take place with clear awareness of the whole system at work.
Elements of an Action Plan:

1. The needs and assets that were identified during the needs assessment, asset identification, and visioning stages of the planning process.
2. The goals and targets as you see them now.
3. The public participation process that was and will be undertaken.
4. The criteria that the community has developed for making decisions.
5. The participants, organizations, and institutions that have accepted responsibility for moving forward with the plan. (It is important here to identify participating organizations and their staff, and their responsibilities.)
6. The strategies that the participants will undertake to achieve the goals and meet the targets.
7. The specific community action methods that will be used.
8. The resources — money, staff, partnerships, etc. — that will be required to implement each strategy.
9. Efforts to be made to institutionalize the strategies (such as a sustainable procurement policy or the introduction of different accounting techniques).
10. The short- and long-term outcomes that are expected, in terms of increased knowledge and skills, or changed behavior, or improved environmental, economic, governance, or social conditions.
11. The indicators to be used to monitor progress.
12. The evaluation plan for the project, including the processes of reporting to decision-makers and to the public about the success (or failures) of the strategies.

The action plan should be easy to read, and written in a way that will inspire people to join in. While the Plan has benefited from your analysis of systems dynamics and project logic models and complex implementation strategies, these details are for the benefit of the people who are designing the project, not necessarily for the public.

The public must see that the Action Plan reflects their own priorities. They should resonate with the values that the document espouses. They need to feel ownership and a level of pride. If these things occur, the leverage gained by public participation in the plan’s implementation will be enormous.
ACTION STEP

Identify Implementation Requirements

Earlier in the planning process you identified specific strategies to help you achieve your goals (see Unit 5). The task before you now is to identify all the resources, participants, and other factors you need to take into consideration to effectively implement your strategies. Setting the stage for successful implementation is the heart of the Community Action Plan.

In this method of sustainability planning, the strategies you develop are based on the community Assets you have identified, the overall Goals of the community, and Targets you have set to achieve them. Next you will combine all of the different strategy elements into one plan, so you can see if there are opportunities for synergy among the different ideas you’ve had. Then you’ll add a few more items for consideration — the actors, opportunities and constraints, resources needed, and projected timeline. Finally, you will conclude with the results and outcomes you hope to achieve.

To begin, answer the following questions for each strategy you have proposed:

**Strategies:** What are the strategies you have developed for each target? What do they have in common? Can you cluster some of them together, to get more value for your efforts? For example, if a public education or media outreach campaign is envisioned for some of the strategies, are there ways you can combine them into one combined message, or an integrated media strategy?

**Actors:** Actors are individuals or institutions that have a role to play in the system in question. Who are the actors that need to be involved in improving the community system that has been mapped? What institutions, organizations, or other contributors are responsible for developing the assets you have identified? Are they involved in the planning project?

**Opportunities and/or Constraints:** Are there any critical timelines associated with the different strategies you have identified that would have an impact on the workplan?
### Sample Chart—gathering the elements of a Community Action Plan

<table>
<thead>
<tr>
<th>Need</th>
<th>Asset</th>
<th>Goal</th>
<th>Targets</th>
<th>Strategy</th>
<th>Actors</th>
<th>Opportunities/Constraints</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>Reservoirs</td>
<td>By 2040, the water supply will be pure and healthy</td>
<td>Reduce e-coli contamination by 50% by the year 2020</td>
<td>Install wetlands wastewater treatment systems for houses near the reservoir</td>
<td>Water and sewer districts, Property owners, Town Government</td>
<td>Federal program for wastewater plant construction</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Improve dissolved oxygen by 50% by 2020</td>
<td></td>
<td></td>
<td>A senator lives near the reservoir</td>
</tr>
<tr>
<td>Health Care</td>
<td>Health</td>
<td>By 2040, health care coverage will be available and affordable for all residents</td>
<td>90% of residents covered by the year 2010 100% coverage by 2020</td>
<td>Offer local health insurance at the community level, sharing the risk pool with other cities and towns</td>
<td>State Government, Hospital board of directors, Municipal associations, Uninsured community, the Faith community, Local health care providers</td>
<td>For-profit insurance providers and HMOs may try to compete</td>
</tr>
<tr>
<td></td>
<td>Insurance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Municipal associations obtaining group insurance for participating cities and towns</td>
</tr>
<tr>
<td>Action Steps/Outputs</td>
<td>Timeline</td>
<td>Resources</td>
<td>Indicators</td>
<td>Results and Impact</td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------------------------------------------</td>
<td>----------------</td>
<td>----------------------------</td>
<td>------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Pass bond vote</td>
<td>Nine months</td>
<td>$500,000</td>
<td>Measurements of E-coli colony forming units per 100 ml</td>
<td>A water supply that meets state and federal standards</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Secure federal funding</td>
<td>One year</td>
<td>Engineers</td>
<td>Disolved oxygen per mg/l</td>
<td>Healthier people</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Establish sewer rates</td>
<td>Six months</td>
<td>Rate structure for sewer fees</td>
<td></td>
<td>Healthier ecosystems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Select contractor</td>
<td>Two months</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Build wastewater treatment plant</td>
<td>One year</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Convene stakeholder group</td>
<td>Two months</td>
<td>Planning grant</td>
<td>Number of people without health insurance</td>
<td>Affordable health care for all</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Conduct feasibility study</td>
<td>Six months</td>
<td>State Government support</td>
<td></td>
<td>Fewer emergency room visits</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Draft plan for local insurance</td>
<td>Eighteen months</td>
<td>Insurance professionals</td>
<td></td>
<td>Diseases caught before developing into serious and expensive problems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Solicit commitments from providers and the public</td>
<td>Ongoing</td>
<td>Actuaries</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Establish a rate structure</td>
<td>Four months</td>
<td>Rate structure for health insurance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Issue insurance policies</td>
<td>Ongoing</td>
<td>Marketing materials</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Resources Needed:** What financial, institutional, public, governmental, private, or community commitments will be needed for the project to succeed? Is there sufficient capacity in existing organizations to achieve the goals, or will other institutional arrangements be needed?

**Timeline:** What is a realistic timeline for the activities you have envisioned? Try to identify particular milestones that will help to monitor progress as you proceed.

**Results/Outcomes:** How will you know you have succeeded? What will the strategy achieve? The outcome should reflect the state of the changed system.

---

### Creating Project Logic Models

One term for the work you are doing to draft a logical, practical implementation process is a Project Logic Model. The idea behind a Project Logic Model, and the technique we are describing here, is to help you outline the way all the elements of your action plan will work together to achieve the results you want. It is intended to be a rigorous process that looks at every step of implementation and continually checks it against the results and impact you want. (For more information on how to construct Project Logic Models, the Kellogg Foundation has drafted an excellent workbook which can be found at: [http://www.wkkf.org/Pubs/Tools/Evaluation/Pub3669.pdf](http://www.wkkf.org/Pubs/Tools/Evaluation/Pub3669.pdf))

The process we’ve outlined here, like project logic models generally, is designed to help you see the direct linkage between the ideas you have for strategies, the steps you need to take to implement the ideas, and the results and impacts of your initiatives. The process of consolidating and cross-referencing will also help you better integrate the various strategies with each other.

Constructing a chart like the one on the preceding two pages will help you pull all the material you have developed for the Community Action Plan into one place. This will give you a basis for the important step of prioritizing your activities, because the priorities for your community will be influenced by factors like the time required to implement the strategies. Bear in mind that the chart will not serve as a definitive statement of project budgets — use it rather to assign preliminary estimates, to give stakeholders and the greater community a sense of what is planned and what will be required.
So often, the activities we propose as part of a strategy are driven by existing constraints — current staff, activities that are already underway — and we can get sidetracked from the most important consideration of all: whether what we’re proposing will have the desired impact. Going through a step by step process to line up the goals, targets, budget items, activities, and results can be enormously helpful.

The following chart is a simple example of a Project Logic Model for some educational activities a community was planning.

| Need: Efficient use of local goods and services |
| Asset: Neighborhood groups |
| Goal: To educate local citizens — youth and adults — so that they develop living skills that are compatible with the goals of sustainable development. |
| Target: 150 people will have made measurable reductions in their consumption energy and non-renewable resources by 2006. |
| Strategy: To complete 15 neighborhood demonstration projects where groups of people come together to discuss sustainable lifestyles and then work to support common and individual efforts to live more sustainably. |

<table>
<thead>
<tr>
<th>INPUTS (partners, $, staff, resources)</th>
<th>ACTIVITIES (what does the program do with the inputs?)</th>
<th>RESULTS (Changes in knowledge, skills, behavior, social and environmental conditions, etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workshop Leader from the Earth Institute</td>
<td>Identify neighborhoods and participants. Convene discussion groups. Establish support networks. Hold regular follow-up visits</td>
<td>Increased knowledge about sustainable living practices</td>
</tr>
<tr>
<td>$30,000 printed materials</td>
<td></td>
<td>Improved social networks in neighborhoods, Improved neighborhood safety</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Money savings for participants</td>
</tr>
</tbody>
</table>

The EarthCAT Guide to Community Development
The inputs to be identified are the resources that will be used on the project. In most cases, this will require that you determine a budget (as described below).

The activities are the workplan items and tasks that will help achieve the strategy. The tasks and activity breakdown is critical to developing a budget that works, and making sure that the resources, timeline, and other factors are reasonable.

Often, the results of your activities are not immediate. Breaking down your expected results into short, medium, and long term will better help you prepare the materials you will need to track your success over time.

Preparation of a Budget Worksheet

There are two main parts to any budget: the revenue side, where the money is coming in, and the expense side, where the money is going out. The revenue might be from grants, contracts, income from sales, fees paid for services, in-kind contributions, donations, and special events. The expenses for community improvement strategies typically fall into several basic categories:

Personnel costs:
including fringe benefits (health insurance, vacation and sick pay, retirement), taxes, and liability insurance.

Office services:
rent, communication, utilities, insurance, trash removal, maintenance, etc.

Equipment:
permanent items (can be depreciated) — computers, machinery, vehicles.

Supplies:
expendable items — paper, pencils, flip charts, printer cartridges, light bulbs, etc.
Travel:
airfare, mileage, accommodations, per diem rates, and other incidental costs.

Publications.
printing, postage, copying, periodicals, books, etc.

Professional services:
legal, accounting, engineering, other services of people who are not on staff.

To complete a project budget, break the strategy down into the individual tasks (the “activities” in your project logic model), and estimate how much time, materials, and other resources each task will take. For the example given above, it might look like this:

<table>
<thead>
<tr>
<th>Activity / Task</th>
<th>Time and Effort</th>
<th>Materials</th>
<th>Other Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify neighborhoods and participants</td>
<td>Five weeks – 10 hours per week</td>
<td>1,000 flyers</td>
<td>Public Service Announcements</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Phone calls</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Internet ads</td>
</tr>
<tr>
<td>Convene discussion groups</td>
<td>15 introductory meetings with Workshop Leader – 3 hours/meeting</td>
<td>Discussion Course Materials from Earth Institute</td>
<td>Space rental fees</td>
</tr>
<tr>
<td>Establish Support Networks and hold regular follow-up visits</td>
<td>Ten weeks after each course – 2 hours per week</td>
<td>Letters to participants</td>
<td>Travel for Workshop Leader</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Refreshments for participants</td>
</tr>
</tbody>
</table>

Now you’re ready to build a project budget. Each item that is needed for the different tasks and activities has a cost, which you can organize by budget category. When you have calculated your expenses, you can do the same thing for the income you expect for the project.

The following shows how a budget might be prepared for our example. This is obviously a very simple example, for a project that would not last more than one year. Obviously, if several years are involved, this basic worksheet would need to be expanded.
## Projected Expenses

<table>
<thead>
<tr>
<th>Budget Line Item</th>
<th>Assumptions</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Personnel</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>salaries</td>
<td>Workshop Leader, part-time</td>
<td>$10,000</td>
</tr>
<tr>
<td>fringe benefits</td>
<td>pro-rated health insurance</td>
<td>2,000</td>
</tr>
<tr>
<td>taxes and insurance</td>
<td>payroll taxes @ 15%</td>
<td>1,500</td>
</tr>
<tr>
<td><strong>Office Services</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>rent</td>
<td>office space for one year</td>
<td>$7,200</td>
</tr>
<tr>
<td>communications</td>
<td>phone, internet, ads</td>
<td>980</td>
</tr>
<tr>
<td>utilities</td>
<td>electricity, heat, water</td>
<td>400</td>
</tr>
<tr>
<td>maintenance</td>
<td>trash removal, cleaning</td>
<td>400</td>
</tr>
<tr>
<td>insurance</td>
<td>liability</td>
<td>250</td>
</tr>
<tr>
<td><strong>Equipment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>computer</td>
<td>used or low cost</td>
<td>$750</td>
</tr>
<tr>
<td><strong>Supplies</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>flip charts</td>
<td>2 per workshop @ $20</td>
<td>$375</td>
</tr>
<tr>
<td>workshop refreshments</td>
<td>$15 per workshop</td>
<td>225</td>
</tr>
<tr>
<td><strong>Travel</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mileage</td>
<td>$.34 per mile for 350 miles</td>
<td>$119</td>
</tr>
<tr>
<td>incidentals</td>
<td>$10 per diem</td>
<td>150</td>
</tr>
<tr>
<td><strong>Publications</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>publicity flyers</td>
<td>1000 @ $2</td>
<td>$2,000</td>
</tr>
<tr>
<td>Discussion Course books</td>
<td>150 @ $20</td>
<td>3,000</td>
</tr>
<tr>
<td><strong>Professional Services</strong></td>
<td>none anticipated</td>
<td></td>
</tr>
<tr>
<td>Other Costs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>space rental for meetings</td>
<td>$25 per meeting</td>
<td>$375</td>
</tr>
<tr>
<td>contingency</td>
<td>unanticipated expenses</td>
<td>276</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td>$30,000</td>
</tr>
</tbody>
</table>

## Projected Income

<table>
<thead>
<tr>
<th>Budget Line Item</th>
<th>Assumptions</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Grants</strong></td>
<td>Community Foundation</td>
<td>$20,000</td>
</tr>
<tr>
<td><strong>Contributions</strong></td>
<td>100 memberships @ $25</td>
<td>$2,500</td>
</tr>
<tr>
<td><strong>Course Fees</strong></td>
<td>150 attendees @ $25</td>
<td>$3,750</td>
</tr>
<tr>
<td><strong>Special Events</strong></td>
<td>Fundraiser for Simple Living</td>
<td>$4,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td>$30,250</td>
</tr>
</tbody>
</table>
Your project may require material accounting beyond the budgeting of operational expenses described above. If long term purchases and investment are involved, you will want to calculate the life cycle cost of that equipment or infrastructure, in order minimize the impacts of your activities on the environment. This means looking at equipment or other supplies and investments in terms of their production, use, maintenance, and recycling cost — not simply their purchase price.

Most of us are numb to the real effect our consumption has on Earth. We tend to view separately each object being manufactured, and calculate its cost in terms of the individual product’s useful life. “Whole systems,” however, include the environment in which a project or product is manufactured, and the interactions that are likely to occur in the process. Design and accounting are just beginning to catch up to the idea of integrated wholeness, giving more careful consideration to how the objects are being designed and how they fit with the environment.

Life cycle design is a way of taking whole systems into account. This mental model begins by noticing how things, people, ideas, and organizations fit into the ecology. It looks at the whole system involved in the design and construction of infrastructure, buildings, and products — including all aspects of manufacture, construction, disposal or demolition, and reconstruction or remanufacture.

Along similar lines, new accounting practices are being introduced which consider the true cost of products and services. This includes the hidden costs of resource use associated with production, use of the product, the waste generated by the product’s life cycle, the costs of reprocessing, and the cost of any impact on the environment.

These accounting tools can make a significant contribution to the cause of sustainability. Among them are: Total Cost Accounting (TCA), which looks at liability, risks, hidden costs, and intangible costs like customer acceptance; Full Cost Accounting (FCA), which looks at the social costs like harm to the ozone layer and other effects that would not be automatically monetized in the course of a company’s analysis; and Environmental Life Cycle Accounting (ELCA), which looks at the costs of the environmental impacts of a particular product.
Of course, costs do not equal value. Financial valuing of natural and social benefits is not the whole solution to the sustainable management of natural and social resources. The introduction of the types of whole systems approaches to design and accounting described here, however, will help mitigate the dramatic and harmful effects of the distorted practices we currently have in place. While this new paradigm will never overcome the laws of thermodynamics (it is not possible to completely eliminate entropic processes through reuse and remanufacture), these new perspectives hold significant promise for moving public and corporate decision-making in sustainable directions.

**Sustainable Procurement Systems**

Just as you should take into account to the real costs of any products and services your plan will employ, meeting the objective of sustainability will require that you take a hard look at the procurement policies you use to obtain them. Municipalities are mega-consumers, and their consumption patterns inevitably impact the social, financial, and natural fabric of the community. It is estimated that in developed countries, governments alone consume 15 percent of Gross Domestic Product (GDP). Communities that make a conscious choice to base their purchase decisions on an analysis of their wider impact can have a dramatic effect on the actions of their suppliers as well, as product and service providers work to remain competitive in the municipal market. Over the long term, changing procurement practices can go a long way toward helping a community meet its sustainability goals.

Organizations that are working toward compliance with the International Standards Organization guidelines for environmental management (ISO 14001) are already taking steps to make their procurement practices more sustainable. In Canada, the province of Manitoba has even passed a Sustainable Development Act that requires organizations that receive funding from the government to institute green procurement regulations.

Sustainable procurement makes for sound fiscal practice. Products that use natural resources efficiently can reduce the total costs to a municipality by using less energy, by being easily recycled, by being healthier for employees, by lasting longer, and by producing less waste. Hazardous and toxic waste, in particular, can be very expensive to dispose of or recycle.
The Experience of Santa Monica, California

The City of Santa Monica has taken several steps to implement a sustainable procurement program. The City passed several laws and ordinances related to their purchasing policy, including:

- A Recycled Products Procurement Policy
- Administrative instructions pertaining to office paper
- The U.S. Conference of Mayors / CALPIRG Buy Recycled Campaign
- Janitorial products purchasing criteria
- A ban on purchasing wood from tropical rainforests
- Ozone-depleting chemical purchasing regulations
- A Reduced-Emission Fuel Policy for City vehicle purchases
- A Print Shop Purchasing Policy

The measurable benefits to the City since these policies have gone into effect have been many. The janitorial purchasing criteria, for example, have produced the following:

1. Replacement of toxic products throughout the city with less toxic or nontoxic alternatives in 15 of 17 cleaning product categories.
2. The elimination of approximately 3200 pounds of hazardous materials in products purchased annually.
3. A cost savings of approximately five percent resulting from the purchase of more concentrated products having lower packaging and shipping costs; lower cost per application of the alternative products; and better, less wasteful use of products due to improved custodial training.
4. A proven and effective set of procurement specifications that can be adapted for use in future efforts to reduce the use of toxic agents.
5. Increased morale of the custodians, who recognize the city’s concern for their health and working conditions and who appreciate the opportunity to participate in making decisions about their work.

Santa Monica saved money, improved morale, developed good governance strategies, saved resources, and reduced environmental impact. That’s a win-win-win-win strategy — all five areas of sustainability in the community have been improved.
The Experience of Portland, Oregon

The City of Portland, Oregon went through an extensive sustainable procurement process, which they have documented in a report called “Sustainable Procurement Strategy, A Joint City of Portland and Multnoma County Effort.” The criteria they developed to help them evaluate their purchasing practices can serve as a good set of questions for any municipality considering a new procurement system:

**Procurement Criteria**

<table>
<thead>
<tr>
<th>Economic</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume used</td>
<td>How much does the City / County purchase? How often?</td>
</tr>
<tr>
<td>Cost</td>
<td>What are the total costs of products, including purchase, operating, maintenance, liability, and disposal costs?</td>
</tr>
<tr>
<td>Effect on business</td>
<td>Would a change in practice have an impact on small or local business?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Environment</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact</td>
<td>Does the continued use of this product have a highly toxic impact, regardless of volume?</td>
</tr>
</tbody>
</table>
| Market readiness of alternatives | Are there certified products or reliable standards?  
|                          | Are there alternatives with clear life-cycle benefits?  
|                          | Are there suppliers available? |

<table>
<thead>
<tr>
<th>Social</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Visibility</td>
<td>Does purchasing this product educate our employees or the public?</td>
</tr>
<tr>
<td>Established policy</td>
<td>Does this product elimination support established goals of City Council or the local community? Is there pressure for government to change its purchasing of this product?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Timely / Ease</th>
<th></th>
</tr>
</thead>
</table>
| Ease of implementation  | What administrative barriers must be overcome?  
|                          | Who do we need to work with to implement changes? |
| Upcoming purchases      | When are the supply contracts up for renewal?  
|                          | What upcoming capital projects present opportunities? |

It is not sufficient to simply pass a policy and assume that everyone will follow it without some training and education about why it’s important. The City of
Portland realized that to make their policy change work, a substantial education effort was needed, both internally and externally. The education strategy they adopted aims to fully integrate the sustainable procurement policy into all city departments, and to reach all the various stakeholders and professionals involved. (Details of Portland’s educational strategy, as well as the full text of their procurement policy resolutions, can be found in Appendix IV).

**Ethics in Action**

A key insight gleaned from understanding whole systems is recognition of the value and necessity of integrity. Mahatma Gandhi said, “We must be the change we wish to see in the world.” Here is a firm and final rejection of the Machiavellian notion that one’s goals can be achieved through actions and ethics not consistent with the ideals those goals represent. Gandhi also said “There is no way to peace; peace is the way.” The idea that a violent, top-down, inequitable or environmentally harmful strategy could produce a peaceful, democratic, just, and healthy result is simply nonsense. Every aspect of our actions must reflect the values inherent in the goals we want to achieve.

On the community level, this means integrating the principled, ethical approach into every facet of the projects and activities we undertake to pursue the sustainability plan. The way we construct the budgets, for instance, must reflect an interest in offering people a livable wage for their work. The products and services we employ in our sustainability efforts must themselves contribute to sustainability. Do they support local businesses, or distant corporations? Do they build trust, enhance neighborhoods, and strengthen families? The least-cost method of most municipal purchasing, when viewed through the long–view lens of a sustainable world, can often be seen as the most-cost method, if all factors are considered.

An operational ethic that is at all times consistent with our desired ends is the final implementation requirement.
ACTION STEP

Alignment with Existing Community Plans

Many of the traditional planning documents communities employ are based on conventional development scenarios, relying on incremental approaches to economic development and land use. The issues they address are important, but they can be better addressed by expanding the horizon to see a more complete view of all the community systems at work, and to align the planning documents with the whole system, asset-based approach.

Alignment means that you take a hard look at all the different planning documents and processes, including your own, to make sure that they aren’t working at cross purposes. This is a lot harder, in fact, than coming up with a shared vision for the future, because there are often powerful vested interests engaged in maintaining the recommendations of different plans. So don’t imagine that it will be done in a week or two — it will require a long term commitment. But once your Action Plan is drafted, and the community has prioritized the strategies within it, it will be a lot easier to see where there is work to do.

There are a number of steps you can take to align the existing plans with your sustainability project:

1. Involve the players from the other plans in the process at the outset.
2. Incorporate the priorities, data, and recommendations of the other plans into the Community Action Plan.
3. Work to understand the linkages and synergies that are possible while the Action Plan is being developed.
4. Identify implementation mechanisms that fit into existing plans (e.g. changing the zoning laws) and initiate the process to get the necessary legal approvals, adoption, or legislative policy changes.
5. Secure commitments from all the departments, boards, commissions and other government structures to take on the implementation elements that are appropriate for their level of responsibility.
6. Develop agreements with community organizations, NGOs, and businesses for the elements of program implementation that apply to their work.
7. Create an overall timeline, accountability structure, and reporting process, so that people can measure progress on the plan together. It helps to hold an annual meeting of the stakeholders to make a report and see what has happened over the past year.

A planning effort that takes a whole system, asset-based approach adds several dimensions to the existing level of local/regional planning that is currently practiced in the U.S. The goals of the two types of planning efforts are very similar. The traditional approach to planning is designed to provide safe, healthy areas for residential development which are consistent with historical and planned housing patterns. A goal of most local plans is to identify areas where different types of residential development are allowed, being mindful of both environmental and infrastructure limitations.

Another goal for local and regional planning is to create areas where economic development is encouraged, so that 1) wealth can be generated and retained by the community, 2) everyone who can contribute can have meaningful work, 3) everyone has access to long-term economic security, in all stages of life, not dependent on ability, health, or merit, and 4) a solid tax base can be secured to provide local services. All of the other planning efforts — transportation, solid waste, affordable housing, energy, and infrastructure, support these two primary goals.

The role of local and regional government under traditional planning processes cannot be overemphasized. The current system does not adequately value either environmental goods and services or social well-being, so governmental leadership is needed to protect these assets for present and future generations. Local and regional government needs to take responsibility for a long-range plan and establish an integrated strategy that will achieve community goals, while allowing the marketplace to do what it does best: short-term allocations of goods and personal incentives for excellence.

As mentioned above, the process of aligning existing plans with the new Action Plan is likely to take a long time. Plans often have legal mandates, and are required to be updated at set intervals, so it might even be several years before the incorporation of the new vision and goals into the existing planning framework is complete. Because the sustainability planning effort has been made with the
long-term future in mind, however, it is a good idea to get moving, and not worry too much about the fact that it can’t all be done at once. Because any sustainability plan is designed to be a continuing process, the results of current strategies and the indicator tracking and reporting will feed back into an ongoing process of revision, planning, and implementation.

**ACTION STEP**  *Prioritize Strategies*

Your Action Plan at this point includes a list of strategies for meeting its various targets. You will now need to prioritize these strategies, to identify those that are the most important for your community to work on immediately. The advantage of taking the broadest possible view toward prioritization is that it makes it possible for the community to focus on the overarching goals, rather than always being caught up in a more narrow, problem-defined framework. Cross-disciplinary prioritization will often reveal areas where a strategy that was originally developed for one goal can help meet multiple goals.

There are several factors to consider as part of the prioritization process:

- what synergy is possible between strategies, or if there are strategies that are important because they have a strong link to several needs simultaneously;
- how feasible a given strategy is in the short-term, or if it might be wiser to categorize some of the strategies as medium or long-term;
- whether there is a legal mandate for you to implement a strategy within a particular timeframe or in a specific way;
- the importance of the need the strategy is being employed to satisfy; and
- the preferences of the public.

The following table could be used to provide the Stakeholder Group an objective means of prioritizing strategies. (The subjective judgments of the group, and of the public, will be addressed in turn.) For each strategy, rank its priority for each criteria shown on a scale of 1-10, with 1 being the lowest. Add all the scores to get a total priority value for each strategy.
To measure the priorities of the public, there are a few techniques that have been used for planning in the past. Here are some additional aids that may help you measure the strategy priorities of your Stakeholder Group and/or the public at large:

**Power Dots:** Write the strategies on large pieces of paper and hang them on a wall. Give the members of your committee a set of five small stickers, and have them place the dots on those they think are the most important. After everyone has done this, count the dots on each strategy, and list them in order of priority.

**Adding it Up:** Give the members of your committee a list of all the strategies. Have them rank them from 1-20 (or whatever the total number of strategies is), writing their priority number beside each one. Collect the pages, and total up the numbers given to each strategy on the list. Write down the strategies in order of their total score, from lowest to highest: these are the priorities of the group.

**Voting:** Of course, the old-fashioned democratic process is always an option. Each vision statement could be read to the group, and people could nominate and vote on which they think are most important, allowing time for open discussion of the reasons for their decisions.

---

**Goal:** All farmers have healthy, diversified incomes that bring economic security to their families and the greater community.

<table>
<thead>
<tr>
<th>Strategies:</th>
<th>Synergy</th>
<th>Feasibility</th>
<th>Legal Requirements</th>
<th>Importance</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>A broad-based campaign to encourage diversification and the introduction of value-added farm products</td>
<td>6</td>
<td>8</td>
<td>7</td>
<td>5</td>
<td>26</td>
</tr>
<tr>
<td>Loans and technical assistance to help interested farmers with business plans for new products</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>8</td>
<td>22</td>
</tr>
<tr>
<td>Financial planning, innovation incentives, and marketing assistance to assist start-up operations</td>
<td>6</td>
<td>4</td>
<td>4</td>
<td>7</td>
<td>21</td>
</tr>
</tbody>
</table>
ACTION STEP

*Adopt and Implement the Action Plan*

When the Action Plan is finally developed, all of the members of the Stakeholder Group should have a clear idea of what it means for their own lives, the organizations where they work, and their role as members of the community. It’s important that the plan not be perceived as just a plan for the city government, with all the expectations for success linked to the performance of the city administration (although they will generally play a key role). All of the major institutions in the community need to make a commitment to the implementation of the plan, and their specific roles must be explicitly stated in the plan and whenever it’s appropriate.

Community Adoption of the Action Plan

Every campaign has a beginning, and an end. The end in this case — a vote or other type of endorsement action on whether to adopt the Community Action Plan — is also a beginning. Adoption or endorsement is an important first step toward successful implementation.

It may seem obvious to you and the rest of the Stakeholder Group that the community will support the Action Plan (or impossible for you to imagine the alternative). After all, you have systematically invited the community into the process, asked them for their vision and ideas, and created a representative body to set goals and targets. You have planned strategies, the brilliance of which is exceeded only by their practicality in saving the community resources and headaches. You have done a beautiful thing. Why wouldn’t they love it?

Most of them probably will.

But there will be those who haven’t been paying attention to what the Stakeholder Group has been doing. They will be surprised at how far the plan has evolved without their knowledge. There will be those who weren’t part of the community when the planning process was launched, and others who would feel excluded even if you went directly to their houses to ask for their opinions.
There will be those with strong, clear, detailed agendas that you haven’t totally adhered to, because you are trying to integrate a wide variety of issues and they are focused on a single issue.

And there will be those who love, admire and endorse what you are presenting, but just want to offer a few, final, small changes… and argue about each one.

You may even encounter organized opposition of a more cynical variety. They may suddenly appear to challenge any form of planning, or suggest that your Stakeholder Group is really an elitist conspiracy, a fringe group, a communist plot — you name it. This type of criticism may be supported by some political actors who feel that they are losing influence as a result of the plan. It may arise from folks who are afraid of change. In most communities, the majority of citizens will recognize and respect your conscientious efforts. But you will want to put your ear to the ground to see whether this troublesome minority is in the wings.

To be certain the plan reflects the community’s visions and priorities, and is backed by the political will to ensure real implementation, your Stakeholder Group will need to raise its profile and bring the community up to speed on the plan and the adoption process. This can be done by the same kinds of public outreach methods you used at the outset. For example, you might:

- Place an eye-catching, inspiring ad in the area’s most-read paper, supplying a website URL where people can review the plan;

- If affordable, mail to every household an executive summary of the plan, or a postcard telling them about the endorsement process and referring them to your website;

- Create a display at the public library for people who may lack Internet access at home, including a draft of the plan, information on the work you have been doing, and examples of sustainability plans that have provided foundations for successful action in other communities;

- Hold a press conference with some influential spokespeople from groups whose buy-in is essential, and outline the steps you expect to take for community endorsement;

- Provide copy for the intranets and newsletters of major institutions like the school system, hospital, and industrial park, so that they can help get the word out;

- Schedule one or more appearances by people from your Stakeholder Group on a local radio call-in show, to describe the basics of the plan and answer questions.
The process of reaching back to the community for adoption of the sustainability plan is critical. Allow time for the Stakeholders to prepare themselves and to deal with any gaps in the preparatory work. Are the members confident and knowledgeable about the plan? Will they be able to talk to the press if interviewed? While another retreat may be a luxury, you might try to have a party, or to convene a meeting that will include special treats like ethnic food, a speaker or performer, or a visitor from another community that has gone through this final step and can brief the group on some ways to handle it. Then, let the campaign for adoption begin!

**Tailor the Endorsement Campaign to the Governance Structure**

The type of governance structure you have in the community will dictate how the adoption or endorsement process will work. If there is a provision in your community charter for a referendum, or citywide vote on plans, or a Town Meeting, then your task is to encourage the entire population to vote on the plan. You will be bringing the Action Plan directly to the people, and an important strategy will be to encourage them to turn out for the vote in large numbers. Voter turnout is a time-tested way to help ensure a successful outcome in a democratic vote. Voter turnout campaigns involve a wide range of activities and require numerous volunteers. Consult the voter checklists, then get babysitters mobilized, volunteer drivers recruited, and a whole team of people make sure that voters get to the polls.

If you have a representative form of government, and a City or Town Council will be voting on the plan, then different tactics are called for. Individual councilors should be polled to see where they stand on the issue, and if the votes aren’t there, or if the councilors are undecided, they need to be contacted and convinced, if possible. You should know who is going to be present and voting the day of the vote, and do everything you can to make sure supportive councilors get there. One very effective way to communicate with City Council members is through their constituents, so enlist people in the appropriate Wards or districts to send letters of support. Like all campaigns, yours will benefit from tactics that will broadly disseminate information about the vote. This includes placing public
service announcements and ads on the radio, going door-to-door to talk to people, handing out pamphlets at supermarkets, making phone calls to voter lists, and asking influential people to write letters to the editor. By this point, you will know how gentle and how energetic to be; you are not strong-arming anyone, but are mobilizing supporters while reassuring and engaging critics in a positive way. The broad-based nature of the endorsement campaign is key in building political will for implementing the sustainability plan.

You should be present at the City Council chambers the day of the vote to answer questions that come up. Bring plenty of brochures and other explanatory materials with you, and as many supportive people as will fit in the room. Ask the local cable station to film the meeting, if it doesn’t as a matter of course, and be ready with a press release to hand to area reporters if the vote is successful.

**A Continuing Commitment**

The adoption of the final plan does not mean that the work of the Stakeholder Group is over. They will be asked to make an ongoing commitment to the plan’s implementation, meeting at least once a year to review the progress that has been made on the projects, programs, and policies that the plan advocated.

Continuous feedback, revision, and planning new initiatives are part of any robust planning process, so don’t shirk these steps in your sustainability plan — they are even more important here.
Unit Eight

Tracking and Reporting Progress

Developing an outstanding set of indicators for your goals, targets, and strategies is meaningless if they are not tracked and reported to policy makers and the public. Data for the indicators you have selected must be gathered, and the results incorporated into reports that communicate the progress (or lack of progress) the community is making toward its objectives. The reports should be distributed to the public, civil society organizations in your community, and individuals in the community government.

There are two distinct but interdependent phases presented in this chapter: collecting data to track indicators, and preparing a sustainability report using those results. Tracking indicators consists primarily of data gathering. Preparing a sustainability report consists of analyzing and interpreting the data and writing coherent descriptions and recommendations that are easily understood by the target audiences. Policy makers are busy and will usually not be able to take the time required to read long columns of data. Further, many people find it difficult to understand raw data. The purpose of gathering indicator data is to enable you to inform the community of progress — and this purpose will not be met unless you draw up and present the messages in an easy-to-understand format.

**ACTION STEP**

*Determine the Reporting Frequency*

Before beginning to gather data, the Stakeholder Group should determine a schedule for gathering baseline data and releasing progress reports. The schedule you set will depend on your community’s specific needs, resources, and other factors. When Santa Monica’s Sustainable City partnership began their effort in 1994, they set a target for gathering baseline data and releasing a report within one year. Thereafter, they would release progress reports every two years. Santa
Monica found that this schedule struck a useful balance — long enough for strategies to have an observable impact, frequent enough to revise strategies if the community was in danger of missing targets. Hamilton, Ontario releases an annual sustainability report. Other communities will want to allow for more time between the periodic updates. Generally, though, you don’t want to wait more than five years before making a progress report.

Data should be gathered as frequently as possible within your community’s constraints. There are two reasons for this. First, the data required by many sustainability indicators can sometimes be distorted by outside factors — simple measurement errors, for instance. If data are only gathered every five years, any flaws in that sample could suggest a trend that is, in fact, not happening. For this reason, data should be collected more often — perhaps every year or two. This is especially true early in the program, when revisions to goals, strategies and targets will almost certainly prove necessary.

**ACTION STEP** *Gather Progress Data*

This task of locating and tracking data has already been addressed briefly in the discussion of Indicators (Unit 6). Because of the varied topics for which you will be employing sustainability indicators, and the very specific nature of data gathering, we can only cover the basics here. Your team will need time to learn the specific data collection techniques for your particular indicators. Some helpful hints for places to begin this research are covered below.

**Plan Your Data Tracking**

The following steps constitute a general approach for gathering data, and will provide an outline for you to begin. The precise nature of your own data gathering will depend on the indicators your community has chosen and on the amount and quality of data being generated by other entities in your country and region.

First, consider each indicator you have identified for your chosen targets. You will already have identified possible data sources in the brainstorming session. Your task now is to establish with certainty whether those suggested sources will actually provide the data required. Each indicator should be assigned to a member of your team, who will then be responsible for contacting the anticipated source, learning what they have, and eventually soliciting the data from them.
The responsibility for each indicator should therefore be assigned to an individual who, if possible, has some contact with the relevant organization or government agency.

Confirm the Data Sources

After the responsibility for tracking each indicator has been delegated, individuals should begin to contact the anticipated data sources. For this purpose, it might be helpful to have an official letter about the sustainable community program. This letter would, of course, refer to the program by whatever name you developed for your campaign. It should include all the members of the stakeholder committee, and be written on city letterhead where appropriate. You don’t want to come across as an antagonistic agitator, as some officials may assume, but rather a member of a thoughtful group that includes members of the government and the business community.

Sooner or later, someone will discover that a source where you anticipated find the data will not have it. If this is the case, the individuals you contact can still be useful in directing you toward an agency or organization that does actually have the data you seek.

Finding the data you need is rarely easy, and will sometimes prove impossible. However, there are certain agencies and organizations that tend to be better bets than others when searching for information. Some places that may provide valuable leads include:

- EarthCAT Online. Other communities who have used our approach will have stored their data sources in EarthCAT’s Indicators and Track Progress sections.
- Indicator reports from other organizations. Indicator reports — such as those listed in the Resources section — will tell you where other organizations got their data. Just be sure that the technical elements you seek are included in the reports, and not just referred to in an appendix.
- Government data compendia. These would include national, regional and local ministries and agencies such as the environment ministry, police, schools, motor vehicle agencies, etc. These sources should prove a direct source of data.
- International agencies that have projects on the ground in your country. These can include development agencies run by individual countries, or multi-national organizations such as the World Bank.
- Universities. Researchers and students will sometimes have data you need. You may also be able to interest them in gathering new data as part of a class research project. For example, an environmental science class may be willing to help with air quality sampling.
Overcoming Barriers to Accessing “Public” Data

Some bureaucrats seem to believe that data are meant to go obsolete in obscurity; others believe that outsiders seeking public information must be subversive; and still others believe data is owned by the holder and is available only for a price (whether authorized or not). It will often take innovation, good connections, and persistence to get information, even when you have legal rights to it. Find out whether your country has a Freedom of Information law, and make use of it if need be.

Gathering Original Data

Sometimes, when you cannot locate pre-existing data, you will be forced to choose between abandoning the indicator and deciding to gather your own data. Gathering data, regardless of the variable, will require time and at least some minimal knowledge and expertise in the target subject matter. If you cannot justify investing the resources that gathering your own data would require, you should consider dropping that indicator. If you deem the indicator too important to drop, it may at least be worth postponing gathering that data until you have successfully issued your first report. In this case, you would report that no data were available for that crucial indicator this time around.

Gathering original data may also require appropriate measurement devices or other hardware. This may prompt you to seek out the help of other organizations. Before striking out on your own, it’s a good idea to research all the local organizations — governmental or otherwise — that may have interest or expertise in your chosen target area. When considering organizations to approach for advice, think beyond your own local community. Regional, national, and even international NGOs may have programs or contacts that can provide advice or at least a reference document pertinent to your needs. Similarly, regional government offices may have access to information and resources that your local government does not.

Metadata

Metadata is defined as information about the information — the who, when, how, and where data were gathered. Regardless of what source provides the data, be certain to get information on when and how they were gathered. This is very
important in ensuring that your data can be correctly interpreted, and that your reports will withstand outside scrutiny. Each time somebody gathers data for an indicator they should be sure to gather and record the metadata.

**Gather the Data**

Once you have determined where the pertinent data reside, make a request for it. Again, you will want to present a letter demonstrating your purpose in asking. Hopefully, the organizations you deal with will provide it without argument. If you meet resistance, there are various approaches you can take. First, be sure you know the law pertaining to government information in your country. Government information is gathered using public funds and should, by all rights, be freely available. Sadly, this often isn’t the case in practice. While quoting the law to a reluctant bureaucrat probably isn’t the best initial strategy, it can be useful if all other efforts fail. Before resorting to this, it is probably a better strategy to try to get the mayor of your community to make a formal request, or to have them ask a higher-ranking official in the agency in question. If everything else fails, and your country does have a Freedom of Information law, you can assess the usefulness of trying to apply for release of the information through that channel. If it is a private or non-governmental organization that refuses to give you information, you have no recourse but to ask again or to offer to pay for it.

If you have determined that you will have to gather your own data for a given indicator (don’t assume this without investigating!) you will need to develop your own methodology for the purpose. Unless your data gathering team includes somebody with experience in this area, you’ll probably need to engage an outside expert to guide you. This can be someone in an NGO, government, academia, or perhaps in the private sector. You will generally find that many people will be sufficiently interested in the sustainability effort to be willing to help you think the question through and provide you with some resources to guide your efforts. Before seeking help, determine — at least in a broad sense — what kind of data-gathering approach you need to use. For example, if you will be measuring attitudes and opinions, you will need to find a social scientist who can help you design surveys. If you will be taking water or air quality samples, an environmental scientist would be a better choice.
Record the Results

You can use a worksheet like this to help with the process of recording the data you collect for each of the indicators you are tracking. And once you have the data in hand, have a look at the Track Progress element in EarthCAT Online — this is an easy place to store your tracking data over time.

<table>
<thead>
<tr>
<th>Data Gathering Worksheet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target</td>
</tr>
<tr>
<td>--------</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

In order to assess the success of your strategies, you will need to track the indicators over time. As discussed above, gathering data on each indicator every year or every other year after you establish the baseline, if possible, will allow you to most effectively assess the progress being made toward achieving your goals.
**ACTION STEP**

*Prepare a Sustainability Progress Report*

Now that you have the results in hand, here’s the most interesting part: interpreting the data and publicizing your findings. Remember that each indicator you are tracking has one or more time-specific targets.

There is, of course, no easy step-by-step process to writing a progress report of your community’s sustainability program. The task requires careful analysis of the data you have gathered, and clear explication of the conclusions to be drawn. The interpretation of your data will clearly depend on the targets and indicators you are tracking. The conclusions will depend on the nature of your sustainability program — whether it is a partnership involving local government, civil society, academia, and businesses, or a more limited partnership involving a subset of these players (and possibly others).

Despite the individual nature of each sustainability plan, meaningful reports have a number of traits in common. In general, the report should assess the success of the current program — both in terms of meeting established targets, and regarding its longer term prospects to realize the community vision. All sustainability reports should:

- Analyze the indicators data to convey the pace and extent of progress being made toward targets;
- Assess reasons for successes, or the lack thereof;
- Recommend changes to strategies to keep them on track in meeting community targets;
- Assess whether the body of targets and goals are sufficient to meet the community vision, or whether they need to be revised.

It is important that the report represent a unified voice of the Stakeholder Group. While you will probably choose a smaller committee to draft the report, all of the recommendations should be agreed to by the entire group, and it should be issued with the signatures of each stakeholder who participated in the process.

---

Earth Charter Principle #10d: Require multinational corporations and international financial organizations to act transparently in the public good, and hold them accountable for the consequences of their activities.
Generate a Report Outline

An sample outline for a sustainability report is provided below. You can use this as a starting point, adding elements and fleshing out each section as the data becomes available. The document may begin to feel long and unwieldy, but be sure not to eliminate too much background material, because many readers will not have previous knowledge about the sustainability plan.

➤ Executive Summary

➤ Introduction:
  • History of the sustainability plan
  • Participants and contributors
  • Plan elements: Vision, Goals, Targets, Strategies

➤ Analysis and Assessment:
  • Report of progress being made toward the targets and goals using indicators data
  • Assessment of the effectiveness of the strategies

➤ Recommendations for improving the effectiveness of strategies

➤ Evaluation of the adequacy of current goals and targets for meeting community vision and sustainability

➤ Technical Appendix
  • Data and metadata, including an assessment of any data inadequacies

After following all the steps in this workbook, your sustainability report will be a cutting edge document, even if it feels inadequate to you. Your community is now one of a small number that is making an effort to change based on community consensus and transparent governance, backed by high-quality indicators. If you are unable to report on some indicators due to unavailable or incomplete data, or because public officials haven’t been forthcoming, that problem should be highlighted. If a number of communities begin to express disappointment with the availability and quality of data, the ministries and departments responsible may feel pressured to improve their data collection.
Remember to Consider your Audiences

Who are the target audiences for the report and its messages? You identified some target audiences at the very beginning of this process. The audiences for this report will often overlap, but the sustainability project, and public reaction to it, may have changed significantly enough that you will want to substantially revise the list. Consider who the main target audiences are and who the secondary audiences are. This will depend to some extent on who has participated in the planning, who has been responsible for most of the implementation, and whether there are any audiences you would like to win over to participate in the future. Some target audiences may include: members of local government, civil society organizations, business leaders, spiritual leaders, media outlets, and the general public. Everybody who has participated in the sustainability effort, certainly, should receive copies.

Analyze Indicators Data

The first step once you have sufficient data in hand is to analyze what the data say about how well the community is doing in its efforts to reach the targets and goals. Specifically, where does the community stand in relation to the targets? Is the rate of progress being made toward the targets sufficient to expect they will be met? What is the pace of progress, and how is this rate changing over time?

Assess Reasons for Successes or Lack of Progress

What accounts for the trends the data present? If progress thus far appears to be insufficient for meeting the target, why is that the case? Also, is there reason, under the current strategy, to expect that the pace of change will increase in the coming years? For example, if a strategy calls for replacing the city’s vehicle fleet with alternative-fuel vehicles as they are retired, one wouldn’t expect to see significant changes for the first 3 to 7 years. If progress is on track or exceeding expectations, what are the factors that have contributed to this success? Is there a way they can be brought to bear on other strategies that have been less successful thus far?
Recommend Changes to Strategies

Do the strategies for targets that are in danger of not being met need to be revised or expanded? How does the Stakeholder Group recommend that they be changed?

Assess the Adequacy of Community Goals and Targets

Assess whether the targets and goals you have established remain sufficient to meet the community vision. Are trends outside the community’s control, or issues that were unforeseen by the community when setting its goals and targets, making them irrelevant in terms of reaching the vision? Stated differently, does it now appear possible that, even if all the targets were met, the vision would remain unattained?

ACTION STEP

Publish and Disseminate the Report

After you have completed your Community Sustainability Report, make sure it is made widely available to all interested parties in your community. Luckily, you will already have done much of the thinking for this step at the very beginning of the process, when you planned a public outreach campaign to launch the project. Update that outreach strategy, using the steps below, to serve as the outreach plan for your Sustainability Progress Report.

Prepare to Reproduce the Documents

Before you begin to layout the documents for printing and sign a contract with a printer, you should answer a few preliminary questions. Considering your audiences, should you produce a short promotional report in addition to the longer technical one? Many communities produce both. The short document is meant to be educational, and promotes the sustainability efforts by outlining the program and what it has accomplished in a brief, attractive and approachable format. This allows your community leaders to provide an attractive document that presents the community in a positive light, and can result in goodwill toward the sustainability planning by inviting praise for the leaders and the efforts they are making. A short document will also be cheaper to print than the full report.
In addition, you will want to determine the extent that you can use electronic formats instead of hard copies to disseminate the report to some audiences. Does everyone in your target audience need to receive a hard copy, or can you send some or most recipients an electronic version? Is there a community website to post the report to, or does someone in the Stakeholder Group have the technical skills to produce the report? How many hard copies do you want to hold in reserve in case other interested communities or other officials or individuals request one?

Layout
An attractive layout can make an enormous contribution to the aesthetics and readability of your report. Ideally there will be someone in the community who is willing to offer their professional services for free. Otherwise, try to find someone with experience to do this for you. If necessary, do the best you can using a commercial word processing or graphics program.

Decide How Many Copies
The number of copies you want to print will be based on the foregoing questions and on cost considerations. If you are printing a short version of the report, you can limit the print run of the technical documents. Sometimes it even makes sense to avoid spending the money on professional printing of the technical document, and photocopy and bind a limited number by hand instead. If you choose this approach, you will be able to spend more of the overall printing budget on the promotional version. Printing costs can vary considerably, so be sure to shop around.

Get it Out to the Public
Once again using the launch media strategy as a starting place, you should plan how you will gain media coverage for the release of your report. You want to create broad public awareness of the report and its messages. Customize the key findings of the report into short pieces that contain the most vital information you want each audience to take away. For example, you will want the business community to know that the businesses that participated played a meaningful role by implementing certain activities. If the business community has been mostly skeptical of the process, it may be useful to point out that the projects
businesses have undertaken were not expensive and that some, like reducing energy use, may have saved them money. Each stakeholder should play a role in reaching out to their specific community with the message.

For media coverage, be sure to contact the editors of local papers and public television stations well in advance of the report’s release, and be prepared to send them a pre-release draft of the report. If necessary, draft a sample story for media use. In addition, prepare a press release and issue it the day the report is released.

Be present at town events. During the release of the report and beyond, be sure to be visible. Hold a booth at festivals where citizens can get the report and information about how they can participate during the process of revising the plan.
Unit Nine

Revise, Refine, and Start Again

Congratulations! You have developed a sustainability plan, you have begun to implement elements of it, and you are using indicators to track its progress. Or, at the very least, you are studying the EarthCAT approach in anticipation of taking action, and will be at this point soon.

As we all know — and as the sustainability reports you prepare will make clear — the best laid plans don’t always result in the intended outcomes. Revising and refining your sustainability plan should therefore be seen as an integral part of the process. You will find you are completely missing the mark on some targets and need to revise your strategies in order to meet them. Other times you will be succeeding beyond your expectations with a particular target, and will want to revise the target to make it more ambitious. And, sometimes, county or provincial law will dictate some change you need to respond to.

If you make certain to address the following points in your sustainability plan, you will have the mechanism in place for assessing and revising the plan as events proceed:

- Who will share in responsibility for implementing the plan?
- How will evaluation of our progress feed back into policies and practices, in order to move the community closer to its goals and targets?
- Beyond the capacities of the community to meet its needs (as we have assessed earlier in our planning), what is the community’s capacity to actually to implement this plan? For example, how strong is the political will? How well is the plan understood? What is the person-power needed? How about financial resources — where might these be found? What kinds of training and development are needed to move into this new phase?
To ensure that the community makes good use of all this work, the implementation phase will need to cover the following:

- Identification of roles and responsibilities for implementation, ideally in a combination of elected officials, municipal staff people and stakeholders who maintain their connection to the project in the new phase.
- Budgeting, fundraising, and project management.
- Reporting by front-line implementers to some agency — for example, the Planning Department — that makes the connection between what’s happening and what was intended; that calls attention to any large discrepancies between the two; and that organizes data from the field to reflect the chosen goals, targets and indicators, tracking gaps as they evolve.
- A timetable for when and how evaluation will occur, indentifying who will be responsible for carrying it out.

At this point in the process, it should be clear that you won’t get it all right the first time. The inputs, the decision-making processes, the unknowns, the trade-offs… they are all too complex! Like any meaningful change initiative, this approach is about continuous adaptation.

What have you created by engaging your citizens, developing and activating a stakeholder group, analyzing your community systems, and translating vision into goals, targets and strategies? You have created a structure that allows the community to draw on the work of many individuals and groups, and integrates that into decision-making in a more rational, participative, systematic way than it could otherwise aspire to. And not just once — this way of proceeding will become the new norm. That is the real accomplishment of communities that see this process through.

Moving forward, the community will have substantial lessons to draw upon in terms of: information gathering; communication across the boundaries of disciplines, ideologies and culture; collaborative decision-making; scenario analysis and systems thinking. These are the skills that must be present in those who implement the plan. They must be cultivated, as much as possible, in the community as a whole. As new policies and practices take root over the coming months
and years, you will receive plenty of cooperation and thanks, along with a share of misunderstanding and backlash. The need for two-way communication with citizens, stakeholder groups, and the press will become clear very quickly. So will the need for ongoing public education about what the community has taken on. New people will be moving in. Others will leave. There will be turnover among elected officials and many others who have been involved in the process. People who felt excluded, in spite of your best efforts, may become critics. The good news, however, is this: if you have succeeded in reaching this point of completion with your stakeholder group relatively intact, you have probably built up a fine reserve of capacity and morale to deal with these challenges.

The longevity of all this new capacity for progress relies on a few basic features: a system for gathering, evaluating and acting on feedback; an open channel of communication with the public and stakeholder groups; and a cycle for evaluation and adjustment, within the plan, that is understood and supported by the community.
The Path to Sustainability...
Unit Ten

Leadership for Innovation and Change

To initiate dialogue about the future, carry out a visioning process, and then implement the changes you hope to achieve, you will need to have some basic skills for dealing with different types of people. These include leadership skills, listening skills, team building, conflict management, and facilitation skills for public meetings. These are all tools that can be used in every phase of the community planning process. The object of this Unit is to help you develop the practical skills that will enable you to accommodate peoples’ different reactions to new ideas for change. The skill-building exercises that follow are designed to help you manage the essential task of involving real people in all your planning efforts.

**SKILL Connecting With Those You Lead**

If leaders are needed for the kind of change the world needs, what kind of leaders are they? The idea of leadership tends to conjure up images of the brave and powerful soldier out at the front of the troops as they go forth in battle. Or the charismatic statesman, speaking eloquently to crowds of admirers. There is a mystique to leadership… hard to define, but we know it when we see it.

The kind of long-term structural change demanded by sustainable development may require a different style of leadership, however. Leaders in this effort must appreciate the systemic nature of the relationships and processes in an organization, and be able to focus on aligning and enhancing relationships so that everyone can be successful. They must work to maximize the strengths of a system, while rendering its weaknesses immaterial.

This is a new kind of leader, one who must be able to choose from a wide variety of styles and approaches, rather than the traditional command and control, top-down model that is so prevalent in bureaucratic systems. The Type A, Alpha Male style of leadership is not the way to real systems change. There will be times
to be a galvanizer and motivator, a coach, a problem-solver... and also, paradoxically, a servant, who removes barriers and helps the rest of the organization meet its goals. Because this philosophy of leadership runs so counter to the convention in many traditional organizations, we emphasize it here.

**Servant Leadership**

Much attention has been paid to the concept of “servant leadership” over the past twenty years, and its effectiveness is well documented. Robert K. Greenleaf, the founder of the Robert K. Greenleaf Center for Servant Leadership, describes it this way:

> It begins with the natural feeling that one wants to serve, to serve first. Then conscious choice brings one to aspire to lead. He or she is sharply different from the person who is leader first, perhaps because of the need to assuage an unusual power drive or to acquire material possessions. For such it will be a later choice to serve — after leadership is established. The leader-first and the servant-first are two extreme types. Between them there are shadings and blends that are part of the infinite variety of human nature.

The difference manifests itself in the care taken by the servant-first to make sure that other people’s highest priority needs are being served. The best test, and difficult to administer, is: do those served grow as persons; do they, while being served, become healthier, wiser, freer, more autonomous, more likely themselves to become servants? And, what is the effect on the least privileged in society; will they benefit, or, at least, will they not be further deprived?[^1]

Larry Spears, in an article titled “Servant Leadership: Quest for Caring Leadership”, describes ten characteristics of a servant-leader:

1. Listening receptively to what others have to say.
2. Acceptance of others and having empathy for them.
3. Foresight and intuition.
4. Awareness and perception.
5. Highly developed powers of persuasion.

6. An ability to conceptualize and to communicate concepts.
7. An ability to exert a healing influence upon individuals and institutions.
8. Building community in the workplace.
9. Practicing the art of contemplation.
10. Recognition that servant-leadership begins with the desire to change oneself. Once that process has begun, it then becomes possible to practice servant-leadership at an institutional level.¹

Leadership with service as its primary objective is fundamentally different from leadership where self-promotion is the underlying motivation. The former is based on a deeply caring relationship with those served, and the latter is often based on a desire to control, to gain advantage or personal prestige. Controlling behavior, which expresses itself in many ways — micromanagement, bureaucratic control systems, and strict organizational hierarchy — severely limits the kind of creativity and spontaneity that can create successful innovations in systems.

A Willingness to be Changed

Another important concept for even the best leaders to recognize is that one person can’t really change anyone else. It is true that a lot can be done — and is done — to try to impose changes on other people. We educate them, lock them in jail, preach to them on Sundays, and go door-to-door to talk to them about important issues. We advertise products for them to buy, we go to war to change the way their country works, and we pass laws that the must follow. All of these actions represent one group of people trying to impose change on another group of people.

Yet anyone who has pursued any of these efforts knows that they tend to be successful only when the people on whom the change is imposed agree to it. Education works best when the student wants to learn something. Laws only work when the people agree to them. This means that our methods of making changes have to be inclusive; it has to involve all the affected parties. The way change is made is as important as the goal itself … the means are as important as the end. Regardless of how enlightened a particular strategy or technology or new idea may be, unless it has broad support, it will go nowhere.

Lao Tse may have said it best when he wrote: “A leader is best when people barely know he exists, not so good when people obey and acclaim him, worse when they despise him. But of a good leader who talks little, when his work is done his aim fulfilled, they will say: ‘We did it ourselves.’” (Lao Tse, *Tao Te Ching*)

**Exercise:**

**Are You a Servant Leader?**

Take the following leadership quiz. For each statement, indicate your level of agreement by entering a number between 1 and 7. A 7 means that you completely agree with the statement, a 1 means that you completely disagree. A 4 would be used if you are not in disagreement or agreement, but please use this choice sparingly.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>__ A.</td>
<td>I choose a position within an organization based on the status of the job, the pay it offers, and the benefits I can receive from it.</td>
</tr>
<tr>
<td>__ B.</td>
<td>I choose a position within an organization based on the responsibilities of the position, and the degree to which it enables me to fulfill my personal and professional goals.</td>
</tr>
<tr>
<td>__ A.</td>
<td>Leaders are characterized by their skill and the position they hold within an organization.</td>
</tr>
<tr>
<td>__ B.</td>
<td>Leadership is derived from relationships between leaders and those who are not in leadership positions.</td>
</tr>
<tr>
<td>__ A.</td>
<td>I think that discretion is the better part of valor; I don’t want people to think I disagree with them, so I often keep my contradictory opinions to myself.</td>
</tr>
<tr>
<td>__ B.</td>
<td>I am always open, honest, and candid with people.</td>
</tr>
<tr>
<td>__ A.</td>
<td>I feel it’s important to let others know when I’ve accomplished something worthwhile.</td>
</tr>
<tr>
<td>__ B.</td>
<td>I often work behind the scenes and let others take the credit.</td>
</tr>
<tr>
<td>__ A.</td>
<td>I think that being a leader is an important position, and people should respect people in positions of authority.</td>
</tr>
<tr>
<td>__ B.</td>
<td>I believe that leadership is more of a responsibility than a position.</td>
</tr>
<tr>
<td>__ A.</td>
<td>It’s important for leaders to maintain a good public image. They shouldn’t diverge too much from what is acceptable to their constituents.</td>
</tr>
<tr>
<td>__ B.</td>
<td>I am more concerned about doing what is right than looking good.</td>
</tr>
<tr>
<td>__ A.</td>
<td>I want to achieve my full potential, and so I’ll work hard to maintain and improve my position within an organization.</td>
</tr>
<tr>
<td>__ B.</td>
<td>I am always prepared to step aside for someone more qualified to do the job.</td>
</tr>
</tbody>
</table>
A. I think that authority within society is established by rules, restrictions, and regulations, and sometimes needs to be maintained by force.

B. The authority I trust comes from within, and I use encouragement, inspiration, motivation, and persuasion to convince others to act.

A. When I’m in the workplace, I want to be accountable to my boss. I’m not interested in what other people think of me.

B. I think that my actions at work have an impact on the whole organization, so I’m interested in knowing how everyone perceives me.

A. I am very uncomfortable when people accuse me unfairly of having the wrong position on an issue. I’d prefer it if they didn’t know what my position was.

B. I am willing to endure opposition and unfair criticism from people if I know I’m right, and if the position I take helps other people.

A. I need to put myself first in competitive situations, or I’ll lose some of my status and influence.

B. I am willing to make personal sacrifices to help others.

A. When I’m in dialogue with someone, I work hard to make it clear to them what I’m thinking.

B. I try to understand what the other person is saying before I tell them what I think.

A. If I’ve had a conflict with someone, I usually want them to meet me halfway in the reconciliation process.

B. I can forgive others even when they do not reciprocate.

A. I will often do a task myself to make sure it’s done well, rather than running the risk of its not being done right.

B. I am willing to risk mistakes by empowering others to “carry the ball.”

A. I spend a lot of time working to improve my skills and knowledge.

B. I invest considerable time and energy equipping others for their work.

A. I think it’s important to be clear with employees about where their weaknesses are. I don’t tolerate incompetence.

B. When others make a mistake, I am very forgiving, and I help them learn from their mistakes.

A. I give my employees clear guidelines and expectations for the tasks I ask them to do.

B. I grant all my employees a fair amount of responsibility and latitude in carrying out their tasks.
A. My leadership is based on my sense of my own strengths, and the characteristics I have that I can share with others.
B. My leadership is based on a strong sense of mission.

A. I think that new and creative solutions are always emerging for our pressing problems. I am always interested in new programs for change.
B. I am more interested in results than activities or programs.

A. I think it is a leader’s job to create a structure where people know their roles, and work to achieve the organization’s purpose.
B. An important part of my job is to inspire others to strive for excellence.

A. I don’t like working with people who have personality problems.
B. I know how to work with and around difficult people to achieve results.

A. I think that my time is best spent at the tasks that use my skills and experience to their best advantage.
B. I never ask anyone to do what I am unwilling to do myself.

A. I work well in teams, but I’m very sensitive to the problems that can arise for me personally if the team isn’t performing up to my standards.
B. I am willing to sacrifice personal benefits to promote group harmony and team success.

A. I often find people that I like to work with, and will spend time helping them develop their talents and skills so we can make a better team.
B. I do not play favorites, and try to treat everyone with dignity and respect.

A. I work hard to get input from key people when I have a decision to make, but I recognize that “the buck stops here.”
B. I am willing to share my power and authority with others.

A. I am uncomfortable when people challenge the direction I’ve set for the organization.
B. I welcome ideas and input from others, including critics and detractors.

A. I think that an organization should be structured with clear lines of authority, and that responsibility for decision-making should follow the structure.
B. I try to remove all organizational barriers so that others can freely participate in decision-making.
To score yourself on the quiz, add up the scores you have in the A statements, and the totals that you have on the B statements.

______ Total on the A statements.

______ Total on the B statements.

If your total on A is higher than on B, you still work within the more hierarchical, top-down leadership paradigm. This may mean that your co-workers often perceive that you treat them as inferiors, rather than peers. People might think that you are motivated by power, rather than principles. You may need to spend more time training people to do their work well, and investing time in the relationships within your workplace.

If your score on B is higher than it is on A, you’re on the way to becoming a true servant leader. You might be able to pass the real servant leadership test, where “the people you work with grow as persons, become healthier, wiser, freer, more autonomous, more likely themselves to become servants. The least privileged in society benefit, or, at least, they will not be further deprived.”

Exercise: Develop Your Listening Skills

However you scored on the Servant-Leader test, one area you can develop that will make you a better leader, and a more effective initiator of change, is your listening skills. We all take listening for granted, but in fact listening — really listening — is more than passively hearing. It involves actively working to really understand and affirm what the other person is saying.

We tend to take listening for granted; we hear the other person...what more is needed? Well, the other person doesn’t always know that you hear them, or that you understand what they’re saying. If you listen to people in the midst of an argument, you might notice that they are saying the same thing to each other — over and over and over. That’s largely because a person expressing an opinion needs to know that the other person understands their point of view, and this doesn’t happen if the other person is not making an effort to do so. Every conversation you have with someone else is an opportunity to practice good listening skills.

---

1 Greenleaf, *The Servant as Leader*
There are three stages of good listening:

1) **Real listening**
This involves actually hearing what the other person is saying, asking clarifying questions, repeating back to them what they’ve said in summary form, and identifying any emotional content they might have expressed, without making judgments.

*Example:*

Jane: I got the job! What a great day! I can’t wait to start!
Anna: Hey, you got the job… I can see you’re really happy about it. What are your responsibilities going to be?

2) **Understanding**
This involves probing a little deeper into what was said. Asking questions about the underlying meaning, identifying the criteria or values they seem to be expressing, and affirming an element of truth in what you heard.

*Example:*

Jane: I’m going to be responsible for seven day care centers in the city. I’ll be fundraising, supervising the directors, and reporting to the board.
Anna: Wow, that’s a lot of responsibility. You must really love working with child care services.
Jane: I do — I think it’s so important to have high quality care at costs that working families can afford. So I’ll try to offset the costs by writing grants and organizing special events, plus taking on some of the administrative responsibilities for the individual directors so they have more time to spend with their staff and the children.
Anna: You are so right — families need good child care, and if staff are overwhelmed with fundraising and administration, the children often suffer.

3) **Communicating**
Only when you have been through the first two stages is it really possible to communicate your own views. In this phase, you should be careful to use only “I”
statements when expressing opinions (as opposed to saying things like “everyone knows that…” or “experts agree…”), and to avoid using judgments or personal interpretations of what they’ve said.

Example:

Anna: I’m going to miss you around here, though. You’re an important part of our team. I wish you had told me you were looking for another job — I might have been able to make this one work better for you.

Jane: Oh, Anna, I’m sorry. I didn’t know that I was that important to you. But we can work together to make sure that the transition goes smoothly — I don’t need to start right away.

Anna: That would be very helpful. I’d appreciate it if you could plan to work here for a month before you begin, so we have time to recruit a replacement, and then you could help train them.

Listening Practice

Practice your listening skills by inviting out to lunch a colleague who you know has views that differ from yours. Make a promise to yourself to avoid expressing your own views during the conversation, but use the entire time getting as complete a picture of their views as you can. Be creative — ask questions, and reflect back what they’re saying. Affirm things that they say, with comments like “I see what you mean. If I was in your place, I’d feel the same way”.

SKILL

Managing Personalities in Team Situations

All of us have individual personality characteristics. When placed on a continuum with those of our colleagues, the intersection of these tendencies forms our team persona. Several personality tests measure these characteristics in depth — the Meyers Briggs test, the Enneagram, and others. People who are committed to working over the long term with a group of people would do well to take these tests together and learn more about each team member’s traits. Even a more simple personality analysis can give team members a place to start.
One personality trait that shapes how we perform in teams is whether we tend to be active (assertive), or passive. There’s no right or wrong — there are places for the different ends of the spectrum on every team. Active people are the ones who leap to take on a project; they have lists of things “to do,” and sometimes tire you out with their endless activity. Passive people are less oriented toward accomplishments; they tend to value quality over quantity. They can be frustrating when they procrastinate and delay projects for picky reasons.

Another personality trait that bears on our team performance is whether we are task-oriented or people-oriented. Task oriented people are capable of concerted and singular focus; they like to check things off lists. If you are people oriented, you tend to mind the relationships within a team; it’s less important that something gets done, and more important that everyone is happy. Again, neither trait is right or wrong — all of the orientations have a place.

As a result of their dominant personality traits, different people will have different goals when working on a team. People who are active and task oriented tend to be motivated by getting the job done. We might call them Activists. They are helpful to have around, because they are usually hard workers, can be depended on to finish the job, and will keep a project moving along. If they think their goals are not being met, however, they can also be likely to cause conflict by moving forward without consulting with everyone involved.

People who are passive and task oriented (Scholars) tend to be motivated by doing things right. They will spend the extra hour proofreading the newsletter, and finding every typographical error, while the Activists wait impatiently to deliver it to the printer before they close. They are helpful to have around, because their attention to detail can often make the difference between a slipshod project and a quality one. If they think their standards are not being met, however, they can also be likely to cause conflict, as they seem to their goal-oriented colleagues to endlessly nitpick and criticize, never wanting to let things move forward.

People who are passive and people oriented (Conciliators) tend to be motivated by getting along with other people. They mind the relationships in the group, tending to how people feel. They are the peacemakers and the hand-holders. They are good to have around because they do help keep group dynamics oriented around friendly and cooperative interactions. If their goal of getting along is not met, however, they can often dissolve into paralysis, not knowing what to do in tense situations, and unable to function with some of the inevitable conflict that
all groups have.

People who are active and people-oriented (Organizers) tend to be motivated by getting recognition for their work. They work hard, and work well with people. As long as they are given credit for the work they do, they're happy, and can be very productive team members. They are helpful to have around because they are full of good ideas for motivating other people to act. If their goal of getting recognition is not met, however, then they can tend to cause conflict by attracting negative attention, by becoming passive/aggressive, or by making judgmental attacks on other team members.

All of these traits have their place on the team. After all, when we’re working on a collaborative project, we all want to get it done, do it right, get along with each other, and get recognition for our work. With this in mind, it is imperative that the value of these different traits is recognized and honored in the beginning. Otherwise, conflict can result as the ‘get it done’ types chafe at the endless decision-making and processing that the ‘get along’ types need. Or the ‘do it
right’ types threaten the ‘get recognition’ people by making it seem that their endless research, editing, and questioning is designed to bring more attention to their own contributions to the project.

This is not to say that conflict should be avoided at all costs. Conflict is inevitable, and is an important part of group process. It indicates that the group is growing, changing, and moving forward with some level of passionate commitment to their goals. And just as we each bring our own personality traits to the group effort, we each have our own ways of dealing with the conflicts that arise. This fact is essential to understanding how an effective team can work together. At one end of the spectrum are the *Challengers* — people who almost seem to relish conflict. They’re good arguers, they can be confrontational, and they are often kind of prickly as personalities. At the other end of the spectrum are the *Avoiders* — they would rather have their toenails pulled out than engage in conflict. They can be peacemakers, but more often will keep their opinions to themselves if they disagree, preferring instead to leave the group or find a way around a difficulty, rather than dealing with it head on.

We are hard wired to take one or the other of these approaches when threatened; the fight or flight response is instinctive. Adding these tendencies to the other two dimensions described above, the group dynamics become very rich indeed. People who are active and task oriented, and who also fall close to the challenger end of the spectrum, can be the irresistible force on a team; if you stand in the way of ‘getting it done,’ you’ll be flattened by the force with which they move. People who are passive and people oriented, and who fall at the avoider end of the spectrum, are the classic passive/aggressive profile; they will smile and tell you that of course they’ll get to your priority first thing, and then promptly put it at the bottom of the pile. All the other combinations of the three characteristics fall somewhere in between, but you get the picture. Everyone has known these stereotypical personalities.

The important thing to recognize is that every group has built-in probability for conflict. Everyone can agree 100% on the mission and the strategy, but still, when it comes to acting on it, the unspoken goals of the personalities involved are bound to sometimes clash. Knowing how to deal with it, and taking steps in advance to make sure that the team has an understanding about how to handle conflict, is critically important for the sustainability of your sustainable development project.
Exercise: Discover Your Team’s Personality Types

The quiz below can give you an idea of what the dominant personality traits on your team might be. This is not intended to be a comprehensive evaluation at all, and its brevity might make it inaccurate for some individuals who don’t have one dominant style. But it will give you a sample of the types of traits that go along with each style.

Have each participant rank the statements in each group of four, using the numbers 12, 7, 3, and 0. The subject should assign 12 to the statement that is truest for him or her, and 0 to the least true. They are statements about different parts of your life, and you might feel that some of them are equally important. It’s a very short test, so try to prioritize each set in order of your preferences, even if you agree with more than one.

Keep in mind that there is no judgment associated with this test, and that no test can really identify who a person is. You may, however, find it useful for helping the team discuss how their various work styles might impact their working relationship, for better and for worse.

Statement Set #1

___ A. I like checking things off a list. If I’ve accomplished a lot in a day’s work, I feel better.
___ B. I get anxious if I’m in a group of people and they are disagreeing with each other.
___ C. When I was a child, I hated it when I got answers wrong on a test.
___ D. I love going to parties and meeting new people.

Statement Set #2

___ A. The most effective organizational structure is one that has clear lines of authority.
___ B. It is very important that everyone have a voice in important decisions that are made.
___ C. I will work long hours to make sure that documents we show to the public are correct.
___ D. Freedom is important to me — I can do some things best when I’m being spontaneous.
Statement Set #3

___ A. I get annoyed when people make a lot of small talk, or tell stories that are off the point.
___ B. I am dedicated to the organization where I work, and I try hard to be like others there.
___ C. It is better to be late with a project that is high quality, than to be slipshod and on time.
___ D. I often can ease a tense situation by making people laugh.

Statement Set #4

___ A. If I have a hard decision to make, I make sure to consult with my superiors first.
___ B. It is as important for people to feel good about a project as it is for it to have results.
___ C. I am often in situations where I’m the lone voice for accuracy and high quality.
___ D. Many of my past accomplishments have been recognized as being outstanding. I have received several awards for my performance.

Now add together your scores for each letter: A, B, C, and D. If your highest total is for the A statements, you have some of the traits of an Activist. If your highest score is in category B, you are more like a Conciliator. If you scored high in category C, you share the Scholar’s traits, and those with more points in D share the traits of an Organizer.

The following table summarizes some of the key characteristics of each personality type. No types are better or worse than others — in fact, if all of the types are represented in an organization, you can hope to get things done, to do them right, to get along, and to get recognition for what you do. All of these things are important for an organization’s success. But recognizing these traits, and their operating principles, will help you to better understand and get along with your teammates.
### TEAM CHARACTERISTICS TABLE

<table>
<thead>
<tr>
<th></th>
<th>Conciliator</th>
<th>Scholar</th>
<th>Activist</th>
<th>Organizer</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Orientation</strong></td>
<td>Passive/People</td>
<td>Passive/Task</td>
<td>Active/Task</td>
<td>Active/People</td>
</tr>
<tr>
<td><strong>Goal</strong></td>
<td>To get along</td>
<td>To get it right</td>
<td>To get it done</td>
<td>Recognition</td>
</tr>
<tr>
<td><strong>Work Style</strong></td>
<td>Slow/Casual</td>
<td>Slow/Methodical</td>
<td>Fast/Decisive</td>
<td>Fast/Spontaneous</td>
</tr>
<tr>
<td><strong>Likes people who are:</strong></td>
<td>Pleasant and friendly</td>
<td>Detail-oriented and accurate</td>
<td>Concise and decisive</td>
<td>Interesting and Involved</td>
</tr>
<tr>
<td><strong>Decisions best made by:</strong></td>
<td>Consensus, asking others</td>
<td>Considering all the angles</td>
<td>Clear lines of authority</td>
<td>Spontaneity, depending on the circumstances</td>
</tr>
<tr>
<td><strong>Feels secure when they have:</strong></td>
<td>Close relationships</td>
<td>Well-prepared information</td>
<td>Control</td>
<td>Flexibility</td>
</tr>
<tr>
<td><strong>Needs support and affirmation:</strong></td>
<td>For feelings</td>
<td>For thoughts</td>
<td>For goals</td>
<td>For ideas</td>
</tr>
<tr>
<td><strong>When backed into a corner:</strong></td>
<td>Is submissive, gets quiet, gives up</td>
<td>Withdraws and avoids conflict</td>
<td>Asserts their position</td>
<td>Makes a personal attack</td>
</tr>
<tr>
<td><strong>Fears:</strong></td>
<td>Conflict</td>
<td>Mistakes</td>
<td>Loss of Control</td>
<td>Embarrassment</td>
</tr>
<tr>
<td><strong>Strategies for Success:</strong></td>
<td>Conformity &amp; Loyalty</td>
<td>Thoroughness &amp; Accuracy</td>
<td>Leadership &amp; Results</td>
<td>Charm &amp; Humor</td>
</tr>
<tr>
<td><strong>Decision information needed:</strong></td>
<td>How it will affect the people involved</td>
<td>How it works and what is the logic of it</td>
<td>What it does, by when, and what it costs</td>
<td>Who else does it and how s/he will be perceived</td>
</tr>
</tbody>
</table>

### SKILL  Understanding Group Dynamics and Managing Conflict

It is important for your people to know they are not the first group in the world to get together and work on improving their community. Studies of different groups that have formed for a common purpose reveal a typical four-stage pattern of group behavior. We'll go through what each of these stages look like, so you can anticipate how the working relationship of your team might evolve.
In the first stage, known as **Forming**, the people don’t know each other very well. They tend to avoid conflict, preferring instead to defer to others — maybe to a natural leader — and to keep their opinions to themselves.

This only lasts for so long, and the next phase, **Storming**, might be quite disruptive, depending on the past experience individual members may have with other groups. In this phase, the gloves come off. People start to make their egos and suppressed opinions known, engaging in conflict, and not shying away from confrontation. This can become so severe and unpleasant that groups break up and stop their work. In a community planning process, you want to prepare people to work together through this phase. It is helpful to arrange for training on a continuing basis — preferably in a retreat setting — to educate the team in the fine art of communicating authentically and respectfully. Storming is also an opportunity for the testing of ideas, of listening carefully and respectfully without reacting or judging — all skills worthy of mastery. Group work will provide many opportunities to practice.

In a typical group process, the advent of open conflict prompts people to realize they need to strive for agreement and develop rules for interaction. This is known as the **Norming** phase — when the group sets standards and rules, so they can manage the conflicts that have arisen.

After the norms have been established, the **Performing** phase begins. People now work together effectively to reach their goals. With this in view, and with the proper preparation at the start of any group effort, it is possible to manage conflict as you steer the group toward its shared objectives.

**Conflict**

What is conflict? At its most elemental level, conflict is a function of power and of competition. Conflict emerges when there is competition for something — ideas, money, control, space, affection, time, or resources, to name a few. Conflict is inevitable in any group process, and the course it takes can either reinforce a healthy group dynamic or serve to undermine it.

A sustainable community will promote peace. The process of creating a plan for such a community, however, involves politics, and thus is bound to engender conflict. This isn’t negative. Conflict arises out of disagreement, and is an inevitable part of organizational growth and development. Working through conflict
— rather than avoiding it — can lead to progress on even the most sensitive of topics, including race, social and economic inequity, and other issues of power and voice.

Successfully harnessing conflict for progress requires the ability to reach peaceful resolution. All teams must recognize the need for non-violent approaches to relationships, both within their groups and in the community at large. Moreover, the members of these groups will need to accept a responsibility for helping community members to communicate peacefully even when impassioned.

Violence is defined in the dictionary as “involving great force, or strength, or intensity.” In the context of human relationships, we define violence as any interaction in which one party imposes a dominating force on another person or group of people. The language and practice of domination includes actions and words that impose blame, judgment, unilateral direction, force, coercion, and/or power over someone else. Domination compromises the well-being of others by denying them an equitable voice in decisions that are made which affect them, and by using power to change them against their will and/or best interests.

The key to making conflict a positive force in group dynamics is to recognize that it is inevitable — not an unexpected and unpleasant phenomenon to be avoided at all costs — and to plan for it in advance, before the conflict emerges. This means adopting some conflict resolution rules at the outset of a group process, so that there will be a safe and productive procedure to follow when it happens. It is also helpful to have decision-making structures articulated in advance, so conflict won’t emerge simply because the decision-making process is unclear or ineffective. The exact form the conflict resolution and decision making procedures will take will vary depending on the group involved, and the constraints it is under. Part of any procedure should be a clear articulation of the Vision Statement, mission, and conflict resolution criteria. Achieving agreement on these matters in advance makes it possible to guide decisions through any later conflict that may arise.
A Process for Conflict Resolution

No one approach to conflict resolution will make sense in all group situations. However, the following steps and guidelines can serve to help manage a conflict so that it works to enhance the team, rather than detracting from it.

Step One:

The people who are directly involved with the conflict should be contacted by the person who perceives that a conflict has arisen. This person can be one of the parties to the conflict, or can be an outside observer.

Step Two:

The people in conflict should schedule a meeting with each other at a mutually convenient time, with enough time set aside to discuss all of the issues associated with the difficulty. It would be best if this meeting could take place within ten working days of the original contact.

Step Three:

During the first meeting, the people involved in the conflict should use their conflict management skills as they engage in an open discussion on the matter. This includes active listening, open inquiry, non-violent communication, identification of unmet needs, and a proposed strategy to meet the future needs of all parties involved.

Step Four:

If during this meeting the conflict cannot be resolved, then the parties should identify a neutral person to serve as a mediator, and a meeting should be scheduled at a mutually convenient time for all the people involved. This meeting should take place no more than fifteen business days from the initial meeting. The mediator so designated should have training in mediation skills, and must be completely neutral — both in terms of their emotional ties with the parties in conflict, and in their real or perceived interest in its outcome.

Step Five:

All parties, with the help of the designated mediator, should use this meeting to identify the needs of each party and come up with a strategy to meet those needs.

Step Six:

If during this meeting the conflict cannot be resolved, then the issue should be brought to the attention of the whole team, or some higher decision-making body, for resolution. The action by the Stakeholder Group will be considered final.
Actions to Avoid:

1) Talking to anyone about the conflict, other than those directly involved, before the first or second meeting. Exceptions to this policy are understandable if the conflict involves illegal behavior or behavior that poses a direct threat to someone’s physical safety.

2) Suppressing the factors and signs that indicate there is a conflict to be addressed.

3) Using language that can be perceived as judgmental, blaming, and/or coercive when engaged in dialogue with a person involved.

4) Behavior toward a person involved that could be described as hostile, threatening, harassing, angry, demeaning, insulting, or otherwise uncivil.

A Community Ethic for Conflict Resolution:

It is essential to recognize that conflict during a group process is inevitable, and that it should be embraced as a part of working through complex issues. This requires that the group avoid violent communication, which is the primary reason people are fearful of conflict. To this end, the group will embrace an ethic of peaceful communication and a process for resolving any conflicts that persist.

For all decisions, the team strives to be inclusive of all points of view, and works to balance the needs of the organization with the needs of the people involved with the organization. To this end, the Stakeholder Group commits to using non-violent, democratic, and transparent processes to ensure that the decisions it makes are ethical and just, and that they meet people’s needs in ways that enhance their well-being.

The team will make every reasonable attempt to schedule meetings at times when all the parties to a conflict can attend, and to make enough time available on the agenda to fully discuss the issues involved. The team recognizes the need to provide due process for people whose positions or financial well-being are involved, as well as the need to conduct business about confidential personal issues in a way that protects everyone’s privacy.

We will make a commitment to treating everyone with respect and civility, and to working to find solutions to problems that match the goals and aspirations of the organization as a whole. We seek to be life-enhancing, peace building, and non-violent in all of our work, and we strive to interact with all the people involved in a ways that foster this ethic.
**SKILL** *Public Meeting Facilitation*

For anyone involved in group decision making, it is useful to consider the question: What distinguishes an effective meeting? Effective meetings improve productivity; people are able to confront difficult issues, participation is robust, time is used efficiently, issues are discussed and decisions are made. An excellent resource for managing effective meetings is the book *How To Make Meetings Work: The New Interaction Method* by Michael Doyle and David Strauss.\(^1\) It is a small, inexpensive paperback with very readable information for layperson and professional manager alike. Leaders have been using this method for over 25 years with great success.

Very briefly, the Interaction Method separates the *what* (the content) from the *how* (the process). The process is how the group works through issues. Some examples of processes are: making a list, evaluating, solving, and discussing. The content is what you list, evaluate, or discuss. In a group you must agree on a common what and a common how or the whole thing will fall apart. The meeting can become a shambles of individuals trying to be heard, and can easily deteriorate into an angry mayhem. Think of a traffic jam, and you will get the picture of a group out of control.

Managers often try to anticipate this potential ahead of time, and develop an agenda to control the meeting. That approach may ensure efficiency, but not effectiveness, because the creativity and spontaneity of the group can be squelched. The book shows you how to build an agenda on the spot to include the latest information. Every meeting needs a sensitive moderator who will keep the conversation open and balanced, and who will be able to adjust to the moment-by-moment needs of individual participants without letting any one person dominate. The Interaction Method also details the roles necessary to make meetings work: the *Facilitator*, the *Recorder*, and the *Group Member*.

The Recorder’s job is to create a group memory from what the participants are saying. This helps to focus the group on a task, provides a record of a meeting’s content and process, frees people from taking notes, assures people that their ideas were heard, and helps prevent needless repetition. The recorder writes the

---

\(^1\) Michael Doyle and David Strauss, *How to Make Meetings Work* (Jove, 1976)
words of the speaker and listens for key words and phrases to capture the essence of the meeting.

When a group discusses issues that affect a large number of people, it is important to record the information where everyone can see it. Charting it with marker and newsprint is the usual way, and using a computer and projector is becoming more common. Anytime someone has information to share about a particular issue, the source of the information should be recorded as it is presented, and then followed-up on to determine its accuracy. A person could be designated to verify questionable information or to do further research on a particular topic. The Recorder also might also agree to keep minutes, making a knowledge repository open and accessible to the community, perhaps in a website.

The other participants are the Group Members. The Group Members lead and the Facilitator assists. The Facilitator may need to coax the group along until people feel comfortable participating. The quality of the meeting depends on the group members and their contributions. The Facilitator will take care of the process. Being a good listener is is the hallmark of good facilitators. If you’re not interested in perfecting the skills of active listening, dialogue, and conflict resolution, it might be that meeting facilitation is not your true calling.

**Guidelines for Effective Meetings**

When anything goes in a group setting, respectful and insightful discussion may be very difficult to achieve. It’s best to begin with some ground rules and guidelines on which people can agree. Consider how group discussion will develop, and have an adept facilitator to guide the process. In any planning process there will be strong opinions and special interests. People are not always comfortable in a group, stating their opinions, questioning others, or arguing points of disagreement. Many people will sit quietly and not participate for fear of confrontation or of breaking some unwritten rule. Displaying, discussing, and agreeing to the rules or guidelines before you begin your work will encourage participation, and the process will be much more successful.
Eight guidelines to consider—

1. Speak so everyone can hear you; one person speaks at a time. Speak the truth without blame or judgment.

2. Give the speaker your full attention. Stay open to new ideas, stop the mind chatter, and listen without making assumptions or judgments. Please do not have side conversations while one person is speaking.

3. Make an agreement with each other to begin and end the meeting on time. Show up on time prepared to share the results of your effort.

4. Focus on the system as the problem, not the people.

5. Be open to the outcome; we don’t usually know what the results of group process will be until it's done.

6. Keep your agreements; be impeccable with your word.

7. Avoid using hypothetical instances to make your point, but do formulate scenarios that create opportunity pathways to where you want to go and what you want to accomplish.

8. Always do your best.

The Elements of a Successful Meeting

A Meeting Plan

Good facilitation begins with the plan for the meeting agenda. There is a balance to strike between giving the participants some input into the agenda and planning it enough in advance so that you can include activities and topics that will keep the meetings engaging and meaningful. This is especially true of a retreat, where you need to both cover important decision-making and offer activities that will inspire people and get them thinking outside the box.

Opening

The opening of the meeting sets the tone for the gathering. To create a respectful and safe meeting environment, you must consider carefully how it is to be opened. One mandatory feature of every meeting opening is to ask those assembled to introduce themselves to the group. If people are still learning each other’s names and positions, then this information should be included in the introduction. If they all know each other, then a brief check-in introduction is helpful. Ask each participant to state something about him or herself. Each introductory statement should last less than a minute — as a facilitator it’s up to you to keep time. Some sample opening statement topics:
• The most exciting event of the week.
• What they did that morning before work.
• The book they’re reading now, or just finished.
• What they like about the weather today.

As you can see, it doesn’t have to be particularly topical, or central to the purpose of the meeting. Its purpose is to establish communication and identity before the business of the meeting begins. Once everyone has made their statements, it can be nice for the facilitator to read a short passage that relates to the work of the group — some inspirational writing, a poem, a paragraph from the newspaper — just to set the stage for the work to come.

Reports
It is a good idea to set aside time at the beginning of the meeting for people to make reports on any progress made since the last meeting. Ideally, a lot of the information in these reports will have been circulated in writing beforehand. If so, this would be the time for group members to address questions and concerns they may have about what they read. The facilitator should keep this section of the meeting concise, so that it doesn’t drag down the momentum.

Brainstorming Sessions
When it’s time to generate new ideas for projects, programs, and other activities, it’s time for a brainstorming session. To brainstorm on an idea, the facilitator would go around the group and ask each member to offer ideas. No idea is too crazy or farfetched, and no one is allowed to say anything negative about the suggestions offered. This round robin can continue several times, until people have exhausted all the possibilities.

Prioritization Exercises
There are several ways to help a group prioritize. Whether it’s items in a workplan, strategies to pursue, mission statements, goals for the organization, or whatever, you want to rank them as a group to discern which is the most important. One way is to set some agreed-upon criteria, and apply them to the suggested list of priorities. Another way is to have the group members rank their priorities by number, and add up all the numbers submitted to determine the consensus

Public Meeting Checklist ✓

WHO?

Who will want to come to the meeting?
Will an invitation or brochure be used to advertise the workshop?
Who will design and print it?
How many will be printed and who will pay?
Who will supply the names and addresses?
Who will pay for postage?
Will the brochure be distributed in other ways?
Who will keep track of the registration?
Will a press release be sent?
Who will write it and send it to the media?
Who will be the contact person?
Who will make sure the media attends the workshop?
Who will contact local officials to ask them to attend?
of the group as a whole. Still another way is to give group members several votes
that they can distribute as they will to the different priorities on the list. Whatever
technique is used, being clear on how it will work, and the reason for the priori-
tization in the first place, is the facilitator’s job.

Structured Sharing

Often, the topics you need to discuss will require that the group put all the in-
formation they have collectively on the table, in order to appreciate the different
points of view that are present in the room. In a group where trust and commu-
ication levels have not been well established, this can be very intimidating. The
level of discomfort will increase depending on the divergence of opinions about
the issue at hand.

There are techniques that can create a safe environment for this type of shar-
ing. One is to break up into smaller groups of no more than four or five people.
Each person will be responsible for speaking, without interruption, for two min-
utes on the subject, while the other members listen and someone takes notes. No
reply or debate is allowed— simply a straightforward airing of different perspec-
tives. The facilitator will serve as a timer, and recruit other members of the group
to rotate as recorders. The recorders will then present the summary information to
the group as a whole, without identifying the people who had the specific input.

Dialogue

A very productive way to structure part of every meeting is to have a group dia-
logue about a topic that is relevant to the work the group is doing. With dialogue,
it is important for people to suspend judgment and use their listening skills to re-
ally explore the deeper meanings of the issues presented. The facilitator must mind
this process with careful attention to whether some people aren’t participating, or
are participating in a way that is critical or negative for the rest of the group.

Closing

As with the Opening, the Closing of the meeting is another opportunity to rein-
force a sense of teamwork and community. It is also is a good way to make sure
the group is feeling positive about the progress made during the meeting. This
is a good time to go around the room and get people to reflect (briefly) on the
results of the meeting. Did they accomplish their objectives? Was the meeting
productive? Were there any things that needed follow-up?
Facilitation Skills and Responsibilities

Group facilitators wear many hats. They need to be able to simultaneously be a cheerleader, a negotiator, a mediator, an interpreter, and a guide. The work of a group facilitator takes a lot of energy to do right. Don’t go into meetings halfheartedly, but prepare yourself in advance—study the materials you’ll be discussing, and try to envision challenges ahead of time, so you can be prepared for anything that happens.

The Moderating Role

Facilitators are responsible for keeping the meeting on topic and on time. To do this, they need to:

- Clarify the task or objective for the group.
- Encourage active participation.
- Pick up the contributions from the group and help structure different ideas.
- Mediate conflicting positions.
- Use different methods for visualization (e.g. small cards, pictures, paper, black board, 3-D models etc.)
- Help the group in participatory decision making
- Define conclusions and/or action plans.

The Listening Role

Facilitators must be skilled listeners on behalf of the group, summarizing what’s been said, clarifying people’s points, etc. To do this effectively, they need to:

- Ask questions to clarify situations and opinions,
- Use questions to foster analytical thinking: Strong points? Weak points? So, what is the conclusion?
- Ask the speaker to go deeper with the point they are trying to make … probe, dig, query.
- Listen actively: summarize the point that has just been made, identify the underlying criteria the speaker seems to be using, affirm their position before asking for reactions.
- Give feedback, and invite feedback from the participants.

Public Meeting Checklist

**HOW?**

- How will the meeting be run?
- Will pre-printed name badges be used?
- Are directional signs needed for the meeting and breakout rooms?
- Will someone be available to greet participants as they arrive?
- Will there be a sign-in sheet for participants?
- Will there be an information packet for participants?
- What will be included in the packet?
- Will there be worksheet(s) for participants?
- Will someone be available to oversee refreshments?
- Who will pay for the refreshments?
- Will participants be pre-assigned to breakout groups?
- Will the proceeding be recorded?
- Who will record the meeting and how will the recording be distributed?
- Will any type of information be sent to participants after the workshop?
- Who will prepare this information?
- Who will pay for the postage?
- Who will answer any follow-up questions?
The Empathetic Role

Facilitators also need to be very sensitive to the feelings and dynamics of the group — both the individuals in it and the group as a whole. A good facilitator can make the difference between a positive or negative meeting experience for each individual participant. To be empathetic, the facilitator will:

➢ Express enthusiasm and commitment to the work so participants enjoy the session.
➢ Listen actively to the people’s experiences and needs.
➢ Give positive and helpful feedback.
➢ Be respectful of and interested in the participants’ experiences
➢ Build up mutual understanding and trust, and encourage participants to respect mutual comments, especially of weaker group members. This is critically important for good facilitation.

SKILL Anticipating and Understanding Reactions to Community Sustainability Planning

All of us who are involved in trying to bring about change, whether in our communities or any other area of life, know that there are some people who stand against change just because that’s who they are. Other people embrace it automatically. Anticipating these reactions can be very important to the success of the sustainability planning you are embarking on, not to mention saving you a lot of frustration. The exercise described below can give your stakeholder group a clear idea of what to expect as you prepare to counter the various personalities you will face.

In his book, Believing Cassandra [citation], Alan AtKisson describes a game he has developed called the Amoeba Game, based on Everett Rogers’ work on innovation diffusion. In it, he uses idealized types to identify the various ways in which people respond to a proposed change. These personal response patterns do not describe any one person, but rather characterize how people react to change generally (any individual may embrace certain kinds of changes and resist others). The ways in which these personal attributes manifest themselves in any given change process depends on the success of the implementation effort.
In the examples below, we’ve used the general response patterns identified by Atkisson and Rogers to characterize people in relation to the community, in order to clarify the roles they will play when plans for change get underway.

Those who comes up with the new ideas, the new approaches to how the community can accomplish something, are the Innovators. Innovators are often perceived as being on the fringes of society. In reality, Innovators are often right under your nose — a store clerk who finds a new way to market a product is an Innovator. Most of us are, at some point in our lives, Innovators. We have come up with ideas for how our companies can work better or how social organizations we belong to can be improved. If you have ever tried to get one of these ideas adopted, you know from experience that Innovators almost always face hurdles in getting their ideas implemented, and many good ideas are simply dropped due to inertia. Innovators that deal with social issues, and who don’t give up on their ideas easily can sometimes risk being marginalized and being seen as slightly “wacky.”

The second group of people, the Change Agents or Opinion Leaders, has the social skills and connections necessary to introduce innovations to others. They are the sales people who are able to take complex new ideas and explain them in words of one syllable, making people believe that the new idea is a good one. They are particularly effective in introducing new ideas to the next group...

The Trendsetters are a critically important group of people for the introduction of an innovation. These people go out and buy the first pet rocks or the first desktop computers. They like new things, they are not resistant to change, and, best of all, they tell their friends about it. While this group may not be large, there are more of them in any community than there are Opinion Leaders. Connecting with the Trendsetters on the community level means doing things like holding neighborhood meetings in the homes of the Opinion Leaders, who then invite their Trendsetter friends to hear about the new community development strategy. Or you can get the Opinion Leaders to write letters to the editor of the local paper in support of a new initiative.
A group that tends to be even larger than the Trendsetters and the Opinion Leaders combined is the **Conservatives**, or “Mainstreamers”, as AtKisson describes them. These people are more resistant to change; the label does not reflect a political orientation but rather their receptivity to a particular innovation. They are satisfied with the way things are, and are likely to wait a long time before they buy a new desktop computer or that new automotive technology that reduces gas consumption. They are a big part of the reason that significant change is so hard to achieve. Yet, when you consider that not all change is for the good, these people are also responsible for a certain level of stability within a community system. Any implementation effort must accommodate this group, and to factor in a strategy to help them adopt whatever is being proposed. This group needs proof that an innovation will benefit them in some way before they will be ready to sign on.

There are a few other types of people to take into consideration as part of an implementation plan: **Iconoclasts**, **Reactionaries**, and **Curmudgeons**. Iconoclasts are the outspoken social critics, people who are not afraid to fight with city hall or protest something they think is wrong. These people do not generate new ideas; they challenge old ones. If they can be included in the implementation plan, their energies challenging the existing conditions that your plan proposes to change, they can be very effective allies, especially if their work deflects the Reactionaries.

Reactionaries fight any change that comes along. They defend business-as-usual and the status quo. In doing so, the Reactionaries often undermine their own credibility. Some of their underlying biases and dysfunctional motivations come to light, and they lose supporters… moving them, grudgingly in the direction of the change they have been opposing.
The Curmudgeons go one step beyond the Reactionaries. These people are against everything — at least the Reactionaries are in favor of the status quo. Curmudgeons can be miserable, bitter people, and their efforts often work to make other people miserable as well. It is best to avoid them at all costs, because their negativity can be a real poison for any implementation of transformation. If avoidance is impossible, one strategy that occasionally works to defuse Curmudgeons is to actively recruit them for some sort of decision-making role (although it would be best if the decisions entrusted to them were not central to the success of the effort). Often, if they feel that they play an important part in something, they can turn around.

The final group that is worth mentioning is the Spiritual Leaders. Spiritual Leaders can help the public transcend forces that might work to resist change. They call people to a higher consciousness, and can be very important — if not critical — in solidifying a consensus on the need for change. While they are not always easy to pull into a program, they should be invited to be part of the process. Sometimes, depending on the issue, Spiritual Leaders will bring their followers along. Historical exemplars of this group include Martin Luther King, Gandhi, and the Dalai Lama.

All of these personality types should be considered and involved in the implementation plan. For example, knowing that Conservatives often need clear demonstrations of the benefits of an innovation, the strategy might include highly visible examples of Trendsetters using it. Useful approaches include providing incentives for people to adopt the innovation for a trial period, or simply inviting neighbors to a demonstration. Recognizing that different people in the general population have very different reactions to change is critical for the development of a successful implementation plan.
Exercise: The Community Change Game

This is a large group exercise designed to familiarize participants with the typical patterns of human behavior when faced with new ideas and initiatives. It can be very useful practice for people to hone their communication and negotiation skills.

Materials Needed:

- Flip charts and markers
- Cards or paper (see preparation instructions below)
- Nametags for all participants

Scenario: Housing units in the City where you live are deteriorating. A group of citizens believes that the City is not taking sufficient action to address this issue; they believe that more residents need to be involved in the management of the housing units the city owns, and, in general, that citizens should have more of a voice in housing decisions. This group of citizens is proposing to establish a permanent Citizen Committee on Housing.

The Mayor has declared housing issues to be a priority in the coming year. There are so many repairs needed that, if residents don’t start to pay some of the bills, the City will not be able to maintain the housing in a safe and habitable condition. Under some public pressure, the City Council has called a special meeting to address housing issues. You are participants at this meeting.

Object of the game: Supporters of the idea of forming a permanent citizen committee on housing get 80% of the people in the room to sign a petition.

Preparation:
Prepare a set of cards and a nametag for each participant. Each participant has two roles to play, as described on the cards: 1) the Vocational role; and 2) the Personality role. The Vocational role refers to whether the participant will be a citizen, NGO member, government employee, City Council member, or businessperson. (The roles assigned to each player need not correspond with the roles they play in real life; in fact, it is probably better if they don’t.) The Personality roles describe each individual’s willingness to support the idea of forming a permanent Citizen’s Committee on Housing. These Personality cards should be distributed in the following proportions:
The EarthCAT Guide to Community Development

1 card – “Initiator”

1 card – “Internal Change Agent”

15% – “Early Adopters”

35% – “Early Majority”

35% – “Late Majority”

10% – “Obstructionists”

Participants should not show their card to other participants... their Vocational and Personality roles will emerge during the exercise. These roles are as follows:

- **Initiator** You are a Citizen Activist who initiates the idea of forming the citizen committee on housing and urging people to sign a petition.

- **Internal Change Agent** You are the Associate Director of the City’s Housing Department, who recognizes that citizens will have to be involved in the decision making if the city is going to be more effective in maintaining its property. The meeting begins with you as a facilitator trying to solicit public input on how to improve housing conditions in the community.

- **Early Adopter** You are a NGO Member or a Citizen who has been frustrated by the lack of responsiveness of city government to your concerns about safe and affordable housing. You think that it’s time that city government changes the way it deals with the public. You are supportive of new efforts to improve city-owned housing.

- **Early Majority** You are a Citizen, Business Person, Government Employee, City Council member, or NGO Member who is pretty satisfied with the current housing situation in the City. You think that the city government is doing a good job in general. You support the Mayor and City Council. However, you feel that housing issues have not had the benefit of enough public discussion in the recent past, and you are interested in becoming more involved in city decisions on this issue. (Trainer’s Note: Divide up the vocational roles — citizens, business people, etc — as you like.)

- **Late Majority** You are a Citizen, Business Person, or City Council member who is very busy. You do not have a lot of time for getting involved in the latest cause or fashion. You are skeptical about new initiatives from the city, as you believe these efforts are mostly politically motivated. You don’t really trust the City. You do, however, begrudgingly acknowledge that there is a problem with city-owned housing.

- **Obstructionist** You are a Citizen or Business Person who doesn’t like change! You are not happy with the way city government is working, but you would prefer it if things just stayed the same. You don’t trust city government, and you don’t trust NGOs. You own your own home outside the city limits, and you don’t want any more tax dollars spent on city housing.
To Play:

1) Distribute cards to participants describing their Vocational and Personality roles.

2) Game begins in a meeting at city hall where people are discussing the city’s housing problems. The Associate Director of the City’s Housing Department (the “Internal Change Agent”) serves as the facilitator. Participants can choose to work in one large group, in small groups, unstructured individual discussion time — or any combination of the above.

3) The game is over when 80% of participants sign the petition (on a flip-chart) to form a permanent citizen committee on housing.

Time Allocation: The time limit will depend on the progress of the workshop so far. 45 minutes is generally enough time for this exercise.

Debriefing Session:

Once the game is over, take some time with the group to discuss what the implications are for the community change process you are embarking on. Anticipate where some of the obstacles might be, and try to identify actual groups of people in the community that might serve in a helpful role for the planning process.
Appendix I  The Earth Charter

PREAMBLE
We stand at a critical moment in Earth’s history, a time when humanity must choose its future. As the world becomes increasingly interdependent and fragile, the future at once holds great peril and great promise. To move forward we must recognize that in the midst of a magnificent diversity of cultures and life forms we are one human family and one Earth community with a common destiny. We must join together to bring forth a sustainable global society founded on respect for nature, universal human rights, economic justice, and a culture of peace. Towards this end, it is imperative that we, the peoples of Earth, declare our responsibility to one another, to the greater community of life, and to future generations.

Earth, Our Home: Humanity is part of a vast evolving universe. Earth, our home, is alive with a unique community of life. The forces of nature make existence a demanding and uncertain adventure, but Earth has provided the conditions essential to life’s evolution. The resilience of the community of life and the well-being of humanity depend upon preserving a healthy biosphere with all its ecological systems, a rich variety of plants and animals, fertile soils, pure waters, and clean air. The global environment with its finite resources is a common concern of all peoples. The protection of Earth’s vitality, diversity, and beauty is a sacred trust.

The Global Situation: The dominant patterns of production and consumption are causing environmental devastation, the depletion of resources, and a massive extinction of species. Communities are being undermined. The benefits of development are not shared equitably and the gap between rich and poor is widening. Injustice, poverty, ignorance, and violent conflict are widespread and the cause of great suffering. An unprecedented rise in human population has overburdened ecological and social systems. The foundations of global security are threatened. These trends are perilous—but not inevitable.

The Challenges Ahead: The choice is ours: form a global partnership to care for Earth and one another or risk the destruction of ourselves and the diversity of life. Fundamental changes are needed in our values, institutions, and ways of living. We must realize that when basic needs have been met, human development is primarily about being more, not having more. We have the knowledge and technology to provide for all and to reduce our impacts on the environment. The emergence of a global civil society is creating new opportunities to build a democratic and humane world. Our environmental, economic, political, social, and spiritual challenges are interconnected, and together we can forge inclusive solutions.

Universal Responsibility: To realize these aspirations, we must decide to live with a sense of universal responsibility, identifying ourselves with the whole Earth community as well as our local communities. We are at once citizens of different nations and of one world in which the local and global are linked. Everyone shares responsibility for the present and future well-being of the human family and the larger living world. The spirit of human solidarity and kinship with all life is strengthened when we live with reverence for the mystery of being, gratitude for the gift of life, and humility regarding the human place in nature.

We urgently need a shared vision of basic values to provide an ethical foundation for the emerging world community. Therefore, together in hope we affirm the following interdependent principles for a sustainable way of life as a common standard by which the conduct of all individuals, organizations, businesses, governments, and transnational institutions is to be guided and assessed.
PRINCIPLES OF THE EARTH CHARTER

I. Respect and care for the community of life

1. Respect Earth and life in all its diversity.
   a. Recognize that all beings are interdependent and every form of life has value regardless of its worth to human beings.
   b. Affirm faith in the inherent dignity of all human beings and in the intellectual, artistic, ethical, and spiritual potential of humanity.

2. Care for the community of life with understanding, compassion, and love.
   a. Accept that with the right to own, manage, and use natural resources comes the duty to prevent environmental harm and to protect the rights of people.
   b. Affirm that with increased freedom, knowledge, and power comes increased responsibility to promote the common good.

3. Build democratic societies that are just, participatory, sustainable, and peaceful.
   a. Ensure that communities at all levels guarantee human rights and fundamental freedoms and provide everyone an opportunity to realize his or her full potential.
   b. Promote social and economic justice, enabling all to achieve a secure and meaningful livelihood that is ecologically responsible.

4. Secure Earth’s bounty and beauty for present and future generations.
   a. Recognize that the freedom of action of each generation is qualified by the needs of future generations.
   b. Transmit to future generations values, traditions, and institutions that support the long-term flourishing of Earth’s human and ecological communities.

In order to fulfill these four broad commitments, it is necessary to:

II. Ecological Integrity

5. Protect and restore the integrity of Earth’s ecological systems, with special concern for biological diversity and the natural processes that sustain life.
   a. Adopt at all levels sustainable development plans and regulations that make environmental conservation and rehabilitation integral to all development initiatives.
   b. Establish and safeguard viable nature and biosphere reserves, including wild lands and marine areas, to protect Earth’s life support systems, maintain biodiversity, and preserve our natural heritage.
   c. Promote the recovery of endangered species and ecosystems.
   d. Control and eradicate non-native or genetically modified organisms harmful to native species and the environment, and prevent introduction of such harmful organisms.
   e. Manage the use of renewable resources such as water, soil, forest products, and marine life in ways that do not exceed rates of regeneration and that protect the health of ecosystems.
   f. Manage the extraction and use of non-renewable resources such as minerals and fossil fuels in ways that minimize depletion and cause no serious environmental damage.
6. Prevent harm as the best method of environmental protection and, when knowledge is limited, apply a precautionary approach.
   a. Take action to avoid the possibility of serious or irreversible environmental harm even when scientific knowledge is incomplete or inconclusive.
   b. Place the burden of proof on those who argue that a proposed activity will not cause significant harm, and make the responsible parties liable for environmental harm.
   c. Ensure that decision making addresses the cumulative, long-term, indirect, long distance, and global consequences of human activities.
   d. Prevent pollution of any part of the environment and allow no build-up of radioactive, toxic, or other hazardous substances.
   e. Avoid military activities damaging to the environment.

7. Adopt patterns of production, consumption, and reproduction that safeguard Earth’s regenerative capacities, human rights, and community well-being.
   a. Reduce, reuse, and recycle the materials used in production and consumption systems, and ensure that residual waste can be assimilated by ecological systems.
   b. Act with restraint and efficiency when using energy, and rely increasingly on renewable energy sources such as solar and wind.
   c. Promote the development, adoption, and equitable transfer of environmentally sound technologies.
   d. Internalize the full environmental and social costs of goods and services in the selling price, and enable consumers to identify products that meet the highest social and environmental standards.
   e. Ensure universal access to health care that fosters reproductive health and responsible reproduction.
   f. Adopt lifestyles that emphasize the quality of life and material sufficiency in a finite world.

8. Advance the study of ecological sustainability and promote the open exchange and wide application of the knowledge acquired.
   a. Support international scientific and technical cooperation on sustainability, with special attention to the needs of developing nations.
   b. Recognize and preserve the traditional knowledge and spiritual wisdom in all cultures that contribute to environmental protection and human well-being.
   c. Ensure that information of vital importance to human health and environmental protection, including genetic information, remains available in the public domain.

III. Social and Economic Justice

9. Eradicate poverty as an ethical, social, and environmental imperative.
   a. Guarantee the right to potable water, clean air, food security, uncontaminated soil, shelter, and safe sanitation, allocating the national and international resources required.
   b. Empower every human being with the education and resources to secure a sustainable livelihood, and provide social security and safety nets for those who are unable to support themselves.
   c. Recognize the ignored, protect the vulnerable, serve those who suffer, and enable them to develop their capacities and to pursue their aspirations.
The Earth Charter continued

10. Ensure that economic activities and institutions at all levels promote human development in an equitable and sustainable manner.
   a. Promote the equitable distribution of wealth within nations and among nations.
   b. Enhance the intellectual, financial, technical, and social resources of developing nations, and relieve them of onerous international debt.
   c. Ensure that all trade supports sustainable resource use, environmental protection, and progressive labor standards.
   d. Require multinational corporations and international financial organizations to act transparently in the public good, and hold them accountable for the consequences of their activities.

11. Affirm gender equality and equity as prerequisites to sustainable development and ensure universal access to education, health care, and economic opportunity.
   a. Secure the human rights of women and girls and end all violence against them.
   b. Promote the active participation of women in all aspects of economic, political, civil, social, and cultural life as full and equal partners, decision makers, leaders, and beneficiaries.
   c. Strengthen families and ensure the safety and loving nurture of all family members.

12. Uphold the right of all, without discrimination, to a natural and social environment supportive of human dignity, bodily health, and spiritual well-being, with special attention to the rights of indigenous peoples and minorities.
   a. Eliminate discrimination in all its forms, such as that based on race, color, sex, sexual orientation, religion, language, and national, ethnic or social origin.
   b. Affirm the right of indigenous peoples to their spirituality, knowledge, lands and resources and to their related practice of sustainable livelihoods.
   c. Honor and support the young people of our communities, enabling them to fulfill their essential role in creating sustainable societies.
   d. Protect and restore outstanding places of cultural and spiritual significance.

IV. Democracy, Non-violence, and Peace

13. Strengthen democratic institutions at all levels, and provide transparency and accountability in governance, inclusive participation in decision making, and access to justice.
   a. Uphold the right of everyone to receive clear and timely information on environmental matters and all development plans and activities which are likely to affect them or in which they have an interest.
   b. Support local, regional and global civil society, and promote the meaningful participation of all interested individuals and organizations in decision making.
   c. Protect the rights to freedom of opinion, expression, peaceful assembly, association, and dissent.
   d. Institute effective and efficient access to administrative and independent judicial procedures, including remedies and redress for environmental harm and the threat of such harm.
   e. Eliminate corruption in all public and private institutions.
   f. Strengthen local communities, enabling them to care for their environments, and assign environmental responsibilities to the levels of government where they can be carried out most effectively.
14. Integrate into formal education and life-long learning the knowledge, values, and skills needed for a sustainable way of life.
   a. Provide all, especially children and youth, with educational opportunities that empower them to contribute actively to sustainable development.
   b. Promote the contribution of the arts and humanities as well as the sciences in sustainability education.
   c. Enhance the role of the mass media in raising awareness of ecological and social challenges.
   d. Recognize the importance of moral and spiritual education for sustainable living.

15. Treat all living beings with respect and consideration.
   a. Prevent cruelty to animals kept in human societies and protect them from suffering.
   b. Protect wild animals from methods of hunting, trapping, and fishing that cause extreme, prolonged, or avoidable suffering.
   c. Avoid or eliminate to the full extent possible the taking or destruction of non-targeted species.

16. Promote a culture of tolerance, nonviolence, and peace.
   a. Encourage and support mutual understanding, solidarity, and cooperation among all peoples and within and among nations.
   b. Implement comprehensive strategies to prevent violent conflict and use collaborative problem solving to manage and resolve environmental conflicts and other disputes.
   c. Demilitarize national security systems to the level of a non-provocative defense posture, and convert military resources to peaceful purposes, including ecological restoration.
   d. Eliminate nuclear, biological, and toxic weapons and other weapons of mass destruction.
   e. Ensure that the use of orbital and outer space supports environmental protection and peace.
   f. Recognize that peace is the wholeness created by right relationships with oneself, other persons, other cultures, other life, Earth, and the larger whole of which all are a part.

THE WAY FORWARD

As never before in history, common destiny beckons us to seek a new beginning. Such renewal is the promise of these Earth Charter principles. To fulfill this promise, we must commit ourselves to adopt and promote the values and objectives of the Charter.

This requires a change of mind and heart. It requires a new sense of global interdependence and universal responsibility. We must imaginatively develop and apply the vision of a sustainable way of life locally, nationally, regionally, and globally. Our cultural diversity is a precious heritage and different cultures will find their own distinctive ways to realize the vision. We must deepen and expand the global dialogue that generated the Earth Charter, for we have much to learn from the ongoing collaborative search for truth and wisdom.

Life often involves tensions between important values. This can mean difficult choices. However, we must find ways to harmonize diversity with unity, the exercise of freedom with the common good, short-term objectives with long-term goals. Every individual, family, organization, and community has a vital role to play. The arts, sciences, religions, educational institutions, media, businesses, nongovernmental organizations, and governments are all called to offer creative leadership. The partnership of government, civil society, and business is essential for effective governance.

In order to build a sustainable global community, the nations of the world must renew their commitment to the United Nations, fulfill their obligations under existing international agreements, and support the implementation of Earth Charter principles with an international legally binding instrument on environment and development.

Let ours be a time remembered for the awakening of a new reverence for life, the firm resolve to achieve sustainability, the quickening of the struggle for justice and peace, and the joyful celebration of life.
Appendix II

Systems Indicators: Pressure, State, and Response

The Pressure-State-Response Indicators Framework

The study of indicators has grown into a science, with volumes published on the topic all over the world. Cities, national governments, international bodies, and businesses all use indicators to help assess the success of sustainability programs. As the application of indicators has become more sophisticated, different classifications of indicators have emerged.

One common and useful means of understanding and tracking change in overall community systems is known as “pressure-state-response”. This is a framework that differentiates indicators into three types: pressure indicators that measure what is driving the system, state indicators that measure the status of the system, and response indicators that measure the direct effects of the efforts being made to improve the system.

It is useful to note — if initially confusing — that the same information can be a pressure, state, or response indicator depending on the context. We will discuss this at greater length after we introduce the pressure-state-response framework.

If you are preparing a sustainability plan under the EarthCAT approach, you will already have thought about pressure, state, and response while developing your strategies for action. The conceptual thinking you have already begun will serve you well in identifying indicators. The Systems Mapping exercises were designed to help you fully understand the state of the current system. Identifying intervention points has allowed you to determine what it is that really needs to be shifted in order to bring about change — in other words, the drivers that are putting pressure on the system. Finally, the strategies you have developed are the responses that your community is planning to undertake.

Pressure indicators, also called “driving-force” indicators, measure the pressure being placed on the issue in question. Tracking pressure indicators is important, because if you are able to reduce negative pressures being placed on your system, you will have a fundamental impact on its health. Use your systems analysis from the strategies chapter (Unit 5) to consider what is driving the problems you are
trying to address. For example, if your community has a goal to improve air quality and a target to meet World Health Organization (WHO) air quality guidelines by 2010, you will want to think about what is causing the air pollution in your community. Air quality pressure indicators could potentially include any of the following:

- the average number of vehicle-kilometers driven per week (especially during hot, sunny weather)
- the average vehicle fleet efficiency and vehicle emissions per km driven
- the percentage of homes cooking with biomass such as wood, charcoal or straw instead of cleaner burning fuel like gas or electricity
- the number of power plans upwind that do not have state-of-the-art emissions controls

**State indicators** measure the current status, or state, of the system. These indicators tell us where we stand in relation to where we aim to be. When monitored over time, state indicators can give you a clear idea of whether your efforts are helping to achieve the specific targets you have set. You have done a lot of thinking about the state of your community system in the mapping exercise in Unit 5. State indicators are usually the easiest to identify within this framework, and often serve as a good starting point. Building on the previous example, where the target is to meet World Health Organization (WHO) air quality guidelines by 2010, the state indicators would include direct measurements of air quality like the concentration of sulfur oxides (SOx), nitrogen oxides (NOx), particulates, ozone, and so on.

**Response indicators** measure the response made by the community toward achieving your targets. In the context of sustainability planning, the response indicators should measure the implementation of the strategy your community has developed. Continuing the example of the target to meet World Health Organization (WHO) air quality guidelines by 2010: If one of the strategies developed was to increase the number of households cooking with gas instead of biomass fuels, some response indicators could be as follows:

- the number of new gas burners distributed and installed
- the average price of gas and gas burner supplies
- the number of businesses providing supplies needed for indoor gas cooking
A different community may develop a strategy of working to increase the number of people taking public transportation instead of driving independently. This community could choose the following as response indicators:

- number of people taking buses and other public transportation
- average number of cars driven during rush hour per week

As stated above, the same indicator can be a pressure indicator, a state indicator, or a response indicator. Take, for example, the following indicator: the average number of private vehicle trips per week. If you are developing indicators for a target focused on improving air quality, since vehicles contribute a significant amount of air pollution in most places, this figure could be a pressure indicator. If a community’s goal is to improve the health of people in their community, and one target under that goal is to increase the number of people walking and taking public transport by 10% by 2010, the average number of private vehicle trips per week could be a state indicator.

To take another example: the number of girls graduating from secondary school can be both a state and a response indicator. If a community has adopted a goal of achieving gender equality and a target of achieving equal secondary school graduation rates by 2030, the number of girls graduating from secondary school would be considered a state indicator. However, if a community has adopted a goal of reducing population growth and a target of reducing the average birth rate by 25% by 2020, it may seek to postpone the age of childbirth for first time mothers. This may lead them to adopt a strategy of increasing the number of girls that are graduating from secondary school, and this figure would serve as a response indicator.

The fact that the same indicator can potentially serve as a pressure, a state, or a response indicator should not cause concern — it is not a problem if you find that the same data can serve as an indicator in two places. In fact, the overlap between indicators can sometimes be beneficial. As these examples make clear, many indicators are relevant to a more than one issue, so, by gathering data for one indicator, you can often track progress toward multiple targets. To expand upon our last example, the percentage of children graduating from secondary school can serve as much more than just an indicator telling us about the state of the community’s school system. It also can tell us about why incomes or un
wanted pregnancy rates may be different from one part of the community to another. The City of Santa Monica, California, has developed a matrix that demonstrates how broadly applicable their indicators are (you can view this matrix at: http://santa-monica.org/epd/scp/matrix.htm). Whenever the same indicators are appropriate for more than one target, it will naturally help you save time and energy on data collection.

While helpful, it is often not necessary to have a pressure, state, and response indicator for each of your chosen targets. By selecting your indicators carefully, you will often be able to provide enough information to assess progress even if only have one indicator type per target.

<table>
<thead>
<tr>
<th>Target</th>
<th>Pressure Indicators</th>
<th>State Indicators</th>
<th>Response Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achieve WHO indoor and outdoor air quality standards by 2020</td>
<td>Vehicle-miles driven</td>
<td>Concentration of SOx, NOx, Ground-level Ozone, PM, etc. (Measured in atmosphere)</td>
<td>Number of people taking public transport and joining carpools</td>
</tr>
<tr>
<td></td>
<td>Total industrial emissions in our airshed</td>
<td></td>
<td>Legislative progress of laws compelling reduced point-source emissions</td>
</tr>
<tr>
<td></td>
<td>Number of households using biomass fuels without emissions-control technology</td>
<td>Concentration of SOx, NOx, Ground-level Ozone, PM, etc. (measured in households)</td>
<td>Legislation requiring more non-polluting electricity sources</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Increase in percentage of town electricity use from green power sources</td>
</tr>
<tr>
<td>Achieve educational equality between boys and girls through secondary school by 2025</td>
<td>Attitude of parents as expressed in a survey about the relative importance of educating girls and boys</td>
<td>Number of girls graduating from secondary school</td>
<td>Progress of national legislation mandating free education for all children through secondary school</td>
</tr>
<tr>
<td>Reduce birth rate to an average of three children per woman</td>
<td>Number of girls graduating from secondary school</td>
<td>Average birth rate</td>
<td>Percentage of parents who recognize that educating girls is important</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Amount of support available to help families cope with the loss of labor of girls who are continuing with school</td>
</tr>
</tbody>
</table>
Appendix III
Integration Opportunities with Traditional Planning

Land Use Plans

Land use plans determine how land is used and regulated within environmental, service delivery, infrastructure, and health and safety constraints. Land use planning can contribute to the sustainability action plan in a variety of ways; here are a few ideas:

➤ Adding uses to the land use districts that support the development of community assets.

➤ Adding strategies that achieve multiple goals, like allowing businesses that enhance environmental assets to locate with a streamlined permit process.

➤ Zoning regulations that balance community values. For instance, laws that provide for the transfer of development rights laws can protect important resources while allowing more development in areas that can accommodate it, and cluster zoning can protect farm and forestland while still allowing for higher density housing.

When planning for a more sustainable community under the whole systems, EarthCAI approach, it is necessary at every stage to seek out ways to align your planning efforts with improvement efforts already underway in the community. Following are some of the common types of plans that communities initiate, along with examples of ways such plans might be aligned with your Community Action Plan. We are indebted to Christopher Juniper of Natural Capitalism, Inc. for some of the following analysis. It is not intended to be exhaustive, but rather to give you some ideas on where to begin with your own alignment process.

Growth Management Plans

Growth plans determine the speed, direction, economic circumstances and infrastructure development of community expansion. Generally, the expansion rate is determined by the combination of economic growth and the desirability of the area for residents (assuming the availability of appropriate land). Sometimes the growth plans are limited by the existing infrastructure, and the areas where expansion is allowed are limited by environmental conditions. A couple of ideas for how growth management planning can contribute to the sustainability action plan:

➤ Requirements for growth to “pay its own way,” such that subsidies in growth financing that favor more energy-intensive greenfield development are changed to incentives for less energy-intensive development.

➤ Laws with growth management regulations could be changed to favor agricultural operations that produce for the local market, both retail and wholesale.
Economic Development Plans

Economic development planning, where it exists at a community, regional or state level, is generally focused on expanding the economy with more “quality” or “family-wage” jobs or entrepreneurial opportunities. Market strategies are developed to enhance specific sectors, and efforts are made to lower the costs of area infrastructure, land, business start-ups, and transportation. Initiatives are developed to improve the skills of the local workforce, and new financing programs are created such as revolving loans and business incubators. Other types of economic development planning try to retain wealth and enhance economic security.

Sustainability planning can enhance economic development plans by introducing:

➤ Specific strategies to enhance business competitiveness while reducing business’ negative impacts on natural resources and social well-being. For example, a community educational strategy to help business decision-makers obtain the competitive benefits of managing a more sustainable business (i.e. reducing negative natural resource impacts while increasing profitability). Or introducing differential taxation/licensing rates on businesses according to ownership and community investment patterns.

➤ Planning tools for business expansion that respect carrying capacities. For example, an electronically interactive sustainable business “tool kit” that connects business planning to local resources and trends, and helps identify ways to reduce adverse impacts by linking the business to globally-available resources.

➤ Specific strategies for retaining local wealth, including but not limited to renewable energy production and conservation planning. For example, coordinated strategies to reduce wealth leakage out of the community in the form of energy payments. This money can be directed instead toward local businesses in the form of community energy productivity investments like weatherization, efficient transportation, solar design education.

➤ Assessments and strategies for increasing wealth-generating security through additional self-reliance, social investments, etc. Such strategies might, for example, promote distributed energy generation within the community, thus increasing energy expenditures that stay within the community, and improving energy security for residents by disconnecting its price and physical availability from national/international markets and events.

Utility Energy Plans

These plans determine the sources, distribution, and use of primary energy such as combustible energy, heating/cooling capacities (such as ambient and geothermal energy masses), and electricity. They are generally planned by energy utilities — sometimes local governmental entities, and sometimes local, national or international private enterprises under local or state regulation. Their decisions are usually affected by major economic externalities, since energy generation incurs huge environmental costs and security risks not included in market prices. Sustainability planning can contribute by introducing:

➤ Specific area-wide energy strategies to minimize local and global natural resource impacts from energy procurement. These could include, for example, a hydrogen and renewable energy transition strategy, or a whole system strategy for maximizing energy productivity through building standards, design support, and energy usage taxes and fees.

➤ Strategies linking energy generation and uses with waste sinks and ecological carrying capacity.

➤ Resource productivity training strategies for organizations.

➤ Explicit energy security strategies for incorporation into energy production strategies. This would place a monetary value on energy security (e.g. $.02/kw./hr.) to be included in energy procurement computations.
**Water Supply, Wastewater, and Air Quality Management Plans**

Most municipalities have long-range water supply and distribution plans based on population and industry projections, loosely coordinated with regional/state bodies and highly regulated by state and federal water laws. In the U.S., only those municipalities that are out of compliance with air quality standards have air management plans, and they are not well-integrated with other resources. These are critical plans for any community. The sustainability plan can contribute to these efforts by:

- Making the linkages between air, water, wastewater and solid waste disposal systems explicit; mutually reinforcing the whole-system goals and strategies adopted; using lifecycle cost methodology to understand and minimize system costs. For example, water planning decisions can be made in the context of total natural resource impacts, not just water quality/quantity.

- Linking development levels to watershed / waste / air system capacities. For example, explicit strategies to support business in generating wealth while improving watershed quality can be adopted into land-use plans and/or tax structures.

- Making natural resource services explicit, placing an economic value on them, and including all of this in development decision-making. A whole-system cost-effectiveness analysis approach would be used to support actions towards sustainable water quality and quantity, air quality, and wastewater management goals.

- Focusing on reducing waste before it happens rather than dealing with it afterwards, thus reducing disposal costs and increasing business competitiveness. This could include a comprehensive waste prevention program for the business community involving education, financial incentives, etc.

**Solid Waste Plans**

These plans manage all materials that are uneconomic byproducts from organizations or are no longer useful to individuals… as a whole system (in other words, both waste materials and input materials). Strategies are frequently based on cost-effective service delivery that complies with state/federal regulations, not reduction in solid waste generation or disposal volumes. Some governments have explicit goals for “recovering” solid waste from dead-ending in a landfill through recycling, incineration, etc. Few if any have specific goals for waste reduction. Sustainability planning can contribute to solid waste planning by:

- Making the linkages between air, water, energy, land use, and solid waste disposal systems explicit.

- Adopting mutually reinforcing whole-system goals and strategies.

- Using lifecycle cost methodology to understand and minimize system costs.

- Focusing on reducing waste before it happens rather than dealing with it afterwards.
Transportation Plans

Transportation plans generally consider the physical infrastructure provided by the public sector to facilitate mobility; the goal is to support social and economic development. Most urban area planning is focused on developing multimodal transportation systems — rapid transit, regional busses, bicycle and pedestrian facilities, and roadway improvements — to give residents a choice and minimize congestion. Sustainability planning can contribute to transportation plans by:

➣ Integrating the plans with energy-efficient transportation modes that are made possible by proactive community investment in sustainable technologies/systems.

➣ Incorporating the true costs of transportation/mobility into land-use and economic development plans, helping optimize all systems together.

➣ Considering wealth losses from transportation system choices as additional system costs. Expenditures on gasoline, for instance, mostly leave the local economy whereas locally-generated renewable electricity to power transit systems will retain more of the transportation expenditures in the community, boosting local prosperity.

Affordable Housing Plans

Affordable housing plans help support shelter that is affordable to community residents, and are typically focused on resident ownership. More and more communities are finding that making housing affordable for a broad cross-section of its citizens is more and more difficult. Affordable housing plans can be aligned with the sustainability plan by:

➣ Linking Affordable housing to economic development in a long-term synergistic system, rather than making it a short-term regulatory burden. This might mean, for example, incentives or regulations that give businesses appropriate responsibility for the availability of housing for its workers — either by providing affordable housing, or offering “livable compensation” through wages and housing benefits.

➣ Minimizing the negative impacts of housing on natural resources while enhancing social well-being. This might be done through housing design requirements, the formation of cooperative housing projects, to simply enhancing the sense of community and neighborhood relationships.

Workforce Development Plans

These plans are designed to enhance the ability of workers to add value to local manufacturing or service products, whether as individuals or working together. The sustainability plan can add to such efforts by:

➣ Linking workforce development strategies to business/community needs to accomplish prosperity through sustainability. For example, construction workers can be trained in sustainable construction techniques and sustainable entrepreneurship.

➣ Encouraging the learning organizations in the community to help spread knowledge about the possibilities for increased prosperity through sustainable natural resource management, ecological education, and good governance.
Appendix IV
Sustainable Procurement Policies

Following are the full texts of resolutions passed by the City of Portland and Multnomah County (Oregon, USA) in adopting their policy for sustainable procurement in government purchasing decisions (see Unit 7).

**RESOLUTION No. 36061**
Adopt Sustainable Procurement Strategy - A Joint City of Portland and Multnomah County Effort (Resolution)

WHEREAS, In November 1994 Council adopted the Sustainable City Principles which direct the City to “purchase products based on long-term environmental and operating costs and find ways to include environmental and social cost in short-term prices;” and

WHEREAS, In April 2001, the City of Portland and Multnomah County adopted a joint Global Warming Action Plan which includes actions items addressing purchase of efficient equipment and vehicles and paper with recycled content; and

WHEREAS, The City of Portland values procurement actions that are beneficial for the environment and the natural resource capital base as well as for the health and safety of employees and the public. Changing purchasing practices is an important strategy for meeting the City’s solid waste and clean river goals and the City should be a model of good practice; and

WHEREAS, The City of Portland values a strong, varied, adaptive, and diverse contracting economy that provides employment and training for all individuals; and

WHEREAS, The City of Portland values a long-term perspective in evaluating products, avoiding those that appear inexpensive, but cost more in the long run due to maintenance, operation, insurance, handling, training, disposal, or other costs; and

WHEREAS, An evaluation of alternatives is required to make recommendations for changes in how particular commodities are purchased. Identifying workable solutions will require a team approach because responsibility for purchasing within city government is very diffuse and widespread involvement and support will be needed for implementation; and

WHEREAS, A large number of employees affect the City’s purchasing decisions, and many are unaware of current procurement policies, or are unclear about how to apply the City’s policies; and
WHEREAS, Both the City and Multnomah County are working to promote more sustainable policies and actions, including the evaluation of the environmental, social, and economic impacts of the purchases they make. Improvements will occur faster by pooling resources and working together; and

WHEREAS, Assuming a joint leadership role and establishing a joint Strategy and shared procurement standards will increase coordination and staff ability to assess sustainable procurement information of both the City and the Multnomah County,

NOW, THEREFORE, BE IT RESOLVED
That The Sustainable Procurement Strategy: A Joint City of Portland and Multnomah County Effort, attached hereto as Exhibit A, is adopted, and that The Sustainable Procurement Strategy is Binding City Policy.

BE IT FURTHER RESOLVED
That the implementation of the Strategy in a timely fashion is imperative in order to address the many challenges identified; therefore, this Resolution shall be in full force and effect from and after its adoption by the Council.

Adopted by the Council: March 20, 2002
GARY BLACKMER
Auditor of the City of Portland
Mayor Vera Katz
Sue L. Klobertanz, Deputy
By /S/Susan Parsons
March 14, 2002

---

BEFORE THE BOARD OF COUNTY COMMISSIONERS
FOR MULTNOMAH COUNTY, OREGON

RESOLUTION NO. 02-058
Approving a Joint Multnomah County and City of Portland Sustainable Procurement Strategy to Balance Environmental Issues with Economic and Equity Issues in the Expenditures of Public Funds Promoting the Long Term Interests of the Community

The Multnomah County Board of Commissioners Finds:

a) To achieve a sustainable community, Multnomah County must balance environmental, economic and social equity values in the procurement of goods and services.

b) Multnomah County values procurement actions that reduce adverse impacts and effects on our natural capital base and on the health and safety of our employees and the public.
c) Multnomah County values a strong, varied, adaptive, and diverse contracting economy that provides employment and training for all individuals.

d) An evaluation of alternatives is required to review and make recommendations for changes in how particular commodities are purchased.

e) All decisions should be evaluated with the standard of investing funds wisely today and in the future. Wherever possible, more than the initial purchase price should be considered in the evaluation of goods and services such as evaluating the full life cycle cost of the purchase including maintenance, disposal, or other costs.

f) Multnomah County and the City of Portland have assumed leadership roles in working together to identify a strategy to develop recommendations that would balance environment, economics and equity issues with our procurement decisions.

g) In April 2001 by Resolution No. 01-052, Multnomah County adopted a joint Global Warming Action Plan with the City of Portland that includes actions addressing purchase of recycled content products and energy efficient equipment and vehicles.

h) In January 2002, the Board approved Ordinance No. 972 to establish the Sustainable Development Commission to “advise and make recommendations to the Jurisdictions’ governing bodies on policies and programs to create sustainable communities and to encourage sustainable development.”

i) This strategy is consistent with Resolution No. 01-052 and Ordinance No. 972 in recommending a sustainable procurement strategy that reduces greenhouse gases and promotes sustainable communities.

The Multnomah County Board of Commissioners Resolves:

1. The Board approves the attached Sustainable Procurement Strategy to partner with the City of Portland and advance sustainable purchasing decisions that promote the long-term interests of the community.

ADOPTED this 25th day of April, 2002.
BOARD OF COUNTY COMMISSIONERS
FOR MULTNOMAH COUNTY, OREGON

Diane M. Linn, Chair
REVIEWED:
THOMAS SPONSLER, COUNTY ATTORNEY
FOR MULTNOMAH COUNTY, OREGON
By________________________
John S. Thomas, Assistant County Attorney
The City of Portland also developed the following chart, outlining the comprehensive educational effort they undertook to ensure understanding of and compliance with the new sustainable procurement policy:

<table>
<thead>
<tr>
<th>Target Audience</th>
<th>Learning Goals</th>
<th>Strategies</th>
</tr>
</thead>
</table>
| Employees with procurement or contracting authority | 1. Content of new policies  
2. New ways of evaluating product costs  
3. Guidelines for evaluating sustainable products  
4. Sustainable procurement task force process  
5. How to identify sustainable products | • Purchasing 101  
• Agency liaison system  
• Purchasing Advisory Committee (MCO)  
• Contract Process Team (MCO)  
• Contract Coordinating Committee (COP) |
| Procurement agents in each of the commodity areas | 1. How to interpret and apply new policies  
2. Problem-solving methods for applying sustainable procurement concepts  
3. New ways of evaluating product costs  
4. How to identify sustainable products | • Purchasing 101  
• Agency liaison system  
• Specialized training (LEEDS, etc.)  
• Informal working groups |
| Procurement card users | 1. Guidelines for identifying sustainable products  
2. New ways of evaluating product costs | • New user orientation  
• User manual |
| Product users | 1. What makes a product “sustainable”  
2. Product usage reduction policies  
3. How to address product performance issues | • Product evaluations  
• Information sheets about products  
• Website information  
• Meetings with vendors |
| All City / County employees | 1. Why sustainability matters  
2. How procurement and product usage relates to sustainability  
3. How sustainable procurement relates to City / County sustainability goals | • New employee orientation  
• Displays and events  
• Bureau recognition system  
• Green Teams  
• Website information |
| Bureau and Department supervisors | 1. New approach to cost evaluation  
2. Education requirements and resources  
3. Data tracking requirements | • Bureau liaison system  
• Presentations to agency staff  
• Standing committees |
| Bureau and Department heads | 1. Sustainable procurement is a political priority  
2. How it contributes to agency and City / County goals  
3. Necessary resource allocations  
4. Learn how to implement and monitor new policies | • Presentations to meetings of agency heads  
• Bureau recognition system  
• Mayoral and County Commission support  
• SDC planning and reporting tools |
| Vendors | 1. City / County sustainable procurement goals  
2. New product specifications | • Bid specification packets  
• Website information |
| Public | 1. City / County sustainable procurement activities and goals  
2. Sustainable procurement accomplishments | • Website information  
• Press releases  
• Reports and publications |
FOR IMMEDIATE RELEASE

CONTACT:  Gwendolyn Hallsmith
PHONE:  802-454-7829
E-MAIL:  ghs@innevi.com
ADDRESS:  177 Bunker Hill Circle
          Plainfield, VT  05667

Twenty-One Towns Endorse Earth Charter

At Town Meetings held over the past several days, 21 Towns endorsed the Earth Charter. These approvals came despite some fairly strong opposition from sportsmen who took exception to the principles describing hunting practices, and others who likened the principles of social and economic justice to communism, or questioned the mandate for peace and non-violence when we are at war. The debates that took place on Town Meeting floor were lively and enlightening, no matter how the vote for endorsement came out. Seven towns tabled consideration of the Charter until next year, one town had a tie vote, and four towns defeated the article endorsing the Charter.

The Earth Charter is a comprehensive statement of principles for a just and sustainable world. Sixteen principles and sixty-two sub-principles are outlined in four main categories of the Charter: respect and care for the community of life; ecological integrity; social and economic justice; and democracy, non-violence and peace. Together they form a declaration of the necessary steps toward building a just, sustainable, and peaceful global society in the 21st century.

The Towns that endorsed the Charter are: Bethel, Bristol, Bolton, Charlotte, Granby, Hinesburg, Huntington, Isle La Motte, Lincoln, Marlboro, Marshfield, Middlebury, Monkton, Norwich, Plainfield, Randolph, Ripton, Starksboro, Warren, Weston, and Weybridge. They represent communities from all corners of the state.

Gwendolyn Hallsmith, the coordinator of the Earth Charter Town Meeting campaign in Vermont, plans to take the endorsements to the World Summit on Sustainable Development in Johannesburg this coming September. “The campaign was an unqualified success,” Hallsmith said. “We wanted to make people aware of the principles in the Charter, and engage in a public discussion about the ethical choices and values it promotes. In many ways, the opposition to the Charter made us even more able to do that, so we are grateful that people took it as seriously as they did.”
Appendix IV  Resources

Resources for Public Outreach

Center for Agroecology and Sustainable Food Systems
http://zzyx.ucsc.edu/casfs/community/
Located in Santa Cruz, CA, the Center has developed a very effective public outreach program.

Sustainable Coastal Communities
http://
This Rhode Island organization has developed several fact sheets which provide a variety of tools for public participation.

Center for Livable Communities
1414 K Street, Suite 250, Sacramento, CA 95814
Tel: 916.448.1198; 800.290.8202
http://www.lgc.org/center/index.html
The Center, a national initiative of the Local Government Commission, helps local governments and community leaders be proactive in their land use and transportation planning and adopt programs and policies that lead to more livable and resource-efficient land use patterns.

Communities by Choice
427 Chestnut Street, Suite 4, Berea, KY 40403-1547
Tel: 859.985.1763, Fax: 859.985.9063
Email: info@CommunitiesbyChoice.org
http://www.CommunitiesbyChoice.org
A national network of communities, organizations and individuals committed to learning and practicing sustainable development. Its website contains extensive resources and case studies.

The National Center for Outreach
http://www.nationaloutreach.org/PublicBroadcastingWorld/AboutNCO.htm
NCO was formed in 1999 with the vision of helping Public Television stations become better connected to their communities through community outreach. Nationally, NCO trains and facilitates effective outreach by television stations and producers. Locally NCO helps stations share a wealth of content and resources within their communities through collaboration and partnerships.

Resources for Community Visioning

Steve C. Ames
Guide to Community Visioning
(Chicago, IL, APA Planners Press, 1998; rev. ed.)
This book, a product of the Oregon Visions Project, helps citizens understand the connection between the kind of place they want their community to be and the policies that will support their vision. It shows how to design and implement an effective visioning process. Available from:
Planners Book Service, 122 S. Michigan Avenue, Suite 1600, Chicago, IL 60603
Tel: 312.786.6344; Fax: 312.431.9985
http://www.planning.org/bookstore

Center for Rural Pennsylvania
Planning for the Future: A Handbook on Community Visioning
The focus of this guide is on the process of visioning, not the outcome — defining and creating vision, elements of successful visioning, and helpful case studies. Contact the Center at:
212 Locust Street, Suite 604, Harrisburg, PA 17101
Tel: 717.787.9555; Fax: 717.772.3587
http://www.ruralpa.org

National Civic League
The Community Visioning and Strategic Handbook (1996)
This 53-page handbook explains the community visioning process, both the rationale behind it and how to do it. Contact the National Civic League, 1445 Market Street, Suite 300, Denver, CO 80202
Tel: 800.223.6004
http://www.ncl.org

Planning for the Future: A Handbook on Community Visioning
http://www.ruralpa.org/
Describes a community visioning process. Contains helpful case studies from the Center for Rural Pennsylvania in Harrisburg, PA.

Preparing for a Collaborative Community Assessment
http://www.extension.iastate.edu/pubs/co1.htm
Outlines strategies for conducting community assessments. from the Iowa State University Continuing Education and Communication Services.
Resources for Establishing Goals

Silicon Valley 2010 Vision, Joint Venture
84 West Santa Clara St., Suite 440, San Jose, CA 95113-1820
Tel: 408.271.7213, Fax: 408.271.7214
Email: info@jointventure.org
http://www.jointventure.org

The goal of this initiative is to craft a vision, goals, and progress measures for Silicon Valley.

Southern California Council on Environment and Development (SCCED)
1247 Lincoln Blvd. #253, Santa Monica, CA 90401
Tel: 310.455.1603, Fax: 310.455.3011
Email: scced@saol.com
http://www.scced.org

SCCED works through facilitated task forces, forums, and conferences toward building consensus on programs and policies to protect the environment, strengthen the economy, and ensure equity for Southern California’s 15 million residents.

Planning for Results Guidebook: Practical Advice for Building Successful Rural Communities

County and other local government officials, planning commissioners, staff, and interested citizens can use this book as a starting point in designing and conducting a local community planning process that is inclusive and action-oriented. The 104-page guide was developed with the Sonoran Institute to help rural Western county officials effectively manage growth. The $12 Guidebook is available from NACo Publications
440 First St. NW, Washington, DC 20001
Tel: 202-393-6226
http://www.naco.org

Francesca Lyman
Twelve Gates to the City
This article presents a dozen ways to build strong, liveable, and sustainable urban areas.
Published by Sierra Magazine online
http://www.sierraclub.org/sierra/199705/gates.asp

Alice Hubbard and Donella Meadows
What Are Sustainable Communities?
This article introduces the concept of sustainability and offers six basic strategies that communities can implement to achieve sustainable economic development. Published in the Smart Communities Network online.
http://www.sustainable.doe.gov/articles/whatare.shtml

“What is Sustainability Anyway?”
This is the transcript of an online discussion with Worldwatch Institute researchers Thomas Prugh and Erik Assadourian fielding more than a dozen questions on the broad topic of sustainability.
http://www.worldwatch.org/live/discussion/84

Jim Motavalli
Chattanooga on a Roll: From America’s Dirtiest City to One of its Greenest
and Cinderella Story: Chattanooga Transformed
This article describes Chattanooga, Tennessee’s progress toward becoming one of the most talked about successes in sustainability.
http://www.sustainable.doe.gov/articles/cinder.shtml

Asset Based Community Development Institute
http://www.northwestern.edu/ipr/abcd/abcdbackground.html

John Kretzmann and John McKnight, authors of Building Communities from the Inside Out, are the founders of the ABCD Institute. This site is a good introduction to their work in asset-based community development, and includes stories from organizations that have followed this approach as well as materials written by Kretzmann and McKnight.
Coping with Growth: Community Needs Assessment Techniques
http://extension.usu.edu/WRDC/resources/coping/wrep44.htm

This introduction provides background information on the purposes for conducting a community needs assessment; guidelines for determining which techniques are most appropriate; and a brief description of 13 different needs assessment techniques, including the advantages of each method and a list of references to which the reader can go for further information.

Community Toolbox
http://ctb.lsi.ukans.edu

A comprehensive guide to community planning and development prepared by the University of Kansas Work Group on Health Promotion and Community Development. In its over 5,000 pages, the Community Toolbox offers advice in sections on community assessment, promoting interest and participation, developing a strategic plan, leadership, implementing promising interventions, generating and managing resources for the initiative, and much more.

International Council for Local Environmental Initiatives—

“Tools for a Sustainable Community: One-Stop Guide for U.S. Local Governments”
http://www.iclei.org/la21/onestop.htm

This section of the ICLEI website identifies resources from the federal government and other agencies (technical assistance, funding, publications, and Internet sites) that can help local governments create sustainable communities.

The Local Agenda 21 Planning Guide: An Introduction to Sustainable Development Planning
(ICLE, Toronto, Canada 1996)

This Guide offers tested and practical advice on how local governments can implement the United Nation’s Agenda 21 action plan for sustainable development. To obtain this resource contact:
Local Agenda 21 Team, ICLEI World Secretariat,
City Hall, West Tower, 16th Floor
Toronto, ON M5H 2N2, Canada
Tel: 416-392-1462
http://www.iclei.org

Resources for Understanding Systems

Donella Meadows, Jorgen Randers, Dennis Meadows
Limits to Growth: The 30-Year Update
(Chelsea Green Publishing Company, 2004)

Jay Forrester
Road Maps: A Guide to Learning System Dynamics
http://sysdyn.clexchange.org/road-maps/rm-toc.html

Gene Bellinger
Mental Model Musings
A great resource for understanding system archetypes.
http://www.systems-thinking.org/

Stephen G. Haines
The Manager’s Pocket Guide to Systems Thinking and Learning
(Human Resource Development Press, 1998)

Linda Booth Sweeney
When a Butterfly Sneezes: A Guide for Helping Kids Explore Interconnections in Our World Through Favorite Stories
(Pegasus Communications, March 2001)

Jamshid Gharajedaghi
(Elsevier, 1999)

Peter M. Senge, et al.
The Fifth Discipline Fieldbook
(Currency, Doubleday, 1994)

Virginia Anderson, Lauren Johnson
Systems Thinking Basics: From Concepts to Causal Loops
(Pegasus Communications, 1997)

Resources
Resources for Sustainability Strategies

www.earthcharter.org
The Earth Charter website provides an extremely rich and well organized resource library including brochures, posters, case studies, a handbook, and a community study guide.

“Best Practices Database in Improving the Living Environment” (UN-Habitat 2004)
http://www.bestpractices.org/

The National Council for Science and the Environment (NCSE)

Achieving Sustainable Communities: Science and Solutions
A Report from the second National Conference on Science, Policy, and the Environment released by the NCSE. This far-reaching document underscores new approaches for creating strong economies and healthy communities and provides constructive approaches to address complex issues such as economic development versus ecosystem protection. Available online at cnie.org/NCSEconference/2001conference/report/page.cfm?FID=1692
Editors of the report have also created a list of the “Top 10 Keys To Sustainable Communities.” These “Keys” identify the crucial aspects of achieving sustainable communities at the local, regional and national levels. To receive a printed copy of the conference report, email your name and mailing address to: conference@NCSEonline.org

International Council for Local Environmental Initiatives (ICLEI)
City Hall, East Tower, 8th floor
100 Queen Street West, Toronto, ON M5H 2N2
Tel: 416.392.1462, Fax: 416.392.1478
Email: iclei@iclei.org, Website: http://www.iclei.org

ICLEI is the international environmental agency for local governments. It serves as a clearinghouse on sustainable development and environmental protection policies, programs and techniques, initiates joint projects or campaigns among groups of local governments, organizes training programs, and publishes reports and technical manuals on state of the art environmental management practices.

Communities by Choice
Thinking About Forever: A Personal Journey (PDF)
This article explores the principles individuals can use to guide their personal path toward sustainability.
www.communitiesbychoice.org/docs/booklet24.pdf

Wendell Berry
“Community in 17 Sensible Steps”
In this speech, delivered in November 1994, Wendell Berry suggests a set of rules for a sustainable local community to follow in order to function.
http://www.utne.com

Chris Maser
Sustainable Community Development: Principles and Concepts (Delray, FL: St. Lucie Press, 1997)
This publication describes a community-directed process of development that is based on human values, active learning, shared communication and cooperation, within a fluid system, void of quick fixes.
http://www.chrismaser.com

William McDonough
“Hannover Principles”
This resource can be found online at: http://www.mindfully.org/Sustainability/Hannover-Principles.htm
Resources for Developing Indicators

The following list of resources under-represents non-North American communities. We will be adding resources from other countries as we come across them; please visit http://www.earthcat.org for updates. Specifically refer to the help function within the “Indicators” page. In addition, please help us to improve this page and keep it up-to-date by sending us your own work. And let us know of other examples that belong here.

Hart, Maureen
Guide to Sustainable Community Indicators, 2nd ed.
- Explains how to identify sustainability indicators for your community;
- Provides detailed examples of good indicators;
- Explains concepts such as community capital and pressure-state-response indicators;
- Has expanded information on the key issues of carrying capacity, consumption, and population;
- Includes indicators for topics including business, production, recreation, land use, and transportation
- Has an updated list of almost 700 indicators being used by communities of all sizes.
Available from:
Sustainable Measures, P.O. Box 361, North Andover, MA 01845; Tel: 978-975-1988 Fax: 978-975-1934 http://sustainablemeasures.com

City of Santa Monica, Sustainable City Program
1685 Main St., Santa Monica, CA 90401
Tel: 310.458.2213, Fax: 310.393.1279
Email: environment@santa.monica.org http://santa-monica.org/environment/

International Institute for the Urban Environment
“Indicators for Sustainable Urban Development” 5th – 12th July, 1997, Delft, The Netherlands

Sustainable Seattle
Indicators of Sustainable Community: A status report on long-term cultural, economic, and environmental health for Seattle/King County (1998)

Bay Area Alliance for Sustainable Communities
http://www.ncccsf.org/DataCentral/PDF_StateoftheBayArea.pdf

Hamilton Ontario: Vision 2020
http://www.vision2020.hamilton.ca/about/indicators.asp

“Sustainable Development Indicators”
http://www.sdi.gov/

Northwest Environment Watch
This Place on Earth 2002: Measuring What Matters
If we don’t measure what we value, we’ll end up valuing what we measure. This work takes a close look at why society’s most-influential indicators — from the GDP to the Dow Jones — are failing us. It also presents a first effort at an alternative yardstick for the Northwest, by measuring how the region is doing in critical areas such as salmon health, sprawl, income inequality, and land use. Price: $12.50
www.northwestwatch.org/publications/tpoe02.asp

The Oregon Progress Board
“Oregon Shines Benchmarks”
http://egov.oregon.gov/DAS/OPB/obm.shtml

California Environmental Protection Agency
Environmental Protection Indicators for California: Understanding environmental conditions through indicators
Office of Environmental Health Hazard Assessment, 1001 I Street – 12th Floor, Sacramento, CA 95814.
Phone: 916-324-2829 Email: cmilanes@oehha.ca.gov

Iowa Environmental Council
Iowa Environmental Indicators: Measuring what Matters

World Resources Institute and The Access Initiative
You may download the software and workbook at:
http://www.accessinitiative.org/

Crossroads Resource Center for Urban Ecology Coalition
Neighborhood Sustainability Indicators Guidebook: How to Create Neighborhood Sustainability Indicators in your Neighborhood (1999)
http://www.crcworks.org/guide.pdf
Resources for Tracking and Reporting Progress

We believe you will find this list helpful as a reference as you are gathering data to track progress or developing your community sustainability reports. As with the resource list for developing indicators, however, the following list under-represents non-North American communities. We will be adding resources from other countries as we come across them; please visit EarthCAT for updates. Specifically refer to the help function within the “Track Changes” page. Please help us to improve this page and keep it up-to-date by sending us your own work or to inform us of other examples that belong here.

Examples of Community Sustainability Reports:

City of Santa Monica, Sustainable City Program, 1685 Main St., Santa Monica, CA 90401, Tel: 310-458-2213, Fax: 310-393-1279
Email: environment@santa.monica.org
http://santa-monica.org/epd/scp/reports.htm

Sustainable Seattle
Indicators of Sustainable Community: A status report on long-term cultural, economic, and environmental health for Seattle/King County (1998)
http://www.sustainableseattle.org/

Hamilton, Ontario
Annual Sustainability Indicators Report, December, 2003

Examples of other Sustainability Reports:

California Environmental Protection Agency
Environmental Protection Indicators for California: Understanding environmental conditions through indicators.

Iowa Environmental Council
Iowa Environmental Indicators: Measuring what Matters

Bay Area Alliance for Sustainable Communities
http://www.ncccsf.org/DataCentral/PDF_StateoftheBayArea.pdf

Oregon Progress Board
http://egov.oregon.gov/DAS/OPB/os.shtml
A 2003 benchmark report is available at:
Action Coalition for Global Change

Building A Sustainable Community: An Organizer’s Handbook (California)

This handbook can be used as a primer to educate people on sustainability or as a guide to create a full sustainable community project. Contact ACGC at: 415-341-1126.

“SCN: Community Building and Democracy”
http://www.chebucto.ns.ca/Environment/SCN/CommLink/CBD.html

While the focus is on environmental issues, this site also contains useful tools and information on building partnerships, visioning & implementation, and civic engagement for community planners. See also: Sustainable Communities Network http://www.sustainable.org/

Marge Schiller, Bea Mah Holland, and Deanna Riley (editors)

Appreciative Leaders: In the Eye of the Beholder (Taos Institute Publications, 2001, $19.95)

Appreciative leadership is a whole-systems approach focusing on ways to link up people and resources to capitalize on strengths and make weaknesses irrelevant. This anthology of profiles, written by seasoned business consultants, shows the power of the model in settings ranging from coffee wholesalers to nuclear power plants. Human, insightful, and easy to read.

Geoffrey M. Bellman

Getting Things Done When You Are Not in Charge (Berrett-Koehler, 2001 $15.95)

This “leadership at any level” text is written for people who have responsibility but not necessarily authority. It is a principled, sensible, accessible approach to figuring out your goals, resources, allies and path of least resistance.

George Leonard and Michael Murphy

The Life We Are Given: A Long-Term Program for Realizing the Potential of Body, Mind, Heart, and Soul (Inner Work Book) ($15.95 Paperback)

This is a powerful personal development workbook based on extensive research and the experience of an aikido master and the founder of Esalen Institute. An ultimate self-defense/self-nurturance guide for those on the front lines. Order from the authors: http://www.itp-life.com/order.html or ITP, P.O. Box 609, Mill Valley, CA 94942

Peter Senge, Art Kleiner, Charlotte Roberts, Richard Ross, George Roth, Bryan Smith

The Dance of Change: The Challenges of Sustaining Momentum in Learning Organizations (1999, Doubleday/Currency $35.00 paperback)

After the publication of The Fifth Discipline Fieldbook, Peter Senge and the other Fieldbook authors (and a growing community of “learning organization” researchers and practitioners) began to hear stories of challenging learning and change initiatives in various corporations. They convened groups of managers and consultants and, based on their experiences and our own, developed the underlying theory of the book: that all efforts to create institutional change will naturally come up against inhibitions. Leverage comes not from “pushing harder,” or “changing faster,” but from learning to recognize and redesign the built-in limits that keep change initiatives from growing.
Bibliography

Alan AtKisson  *Believing Cassandra*

Dr. Rick Brinkman and Dr. Dick Kirschner  *Dealing with People You Can’t Stand*  

City of Burlington, Vermont  *Legacy Action Plan*  
(published online, 2000)  
<http://www.iscvt.org/burlingtonlegacy.pdf>

Herbert Girardet  *The Gaia Atlas of Cities: New Directions for Sustainable Urban Living*  
(Gaia Books, 1992)

Robert K. Greenleaf  *The Servant as Leader*  
(Indianapolis: The Robert Greenleaf Center, 1970)

Donella Meadows et. al.  *The Limits to Growth.*  
(New York: Universe Books, 1972)

Donella Meadows  *Leverage Points: Places to Intervene in a System*  
(Sustainability Institute, 1999).

The Natural Step US  *The Natural Step’s Four System Conditions*  
(published online)  
<http://www.naturalstep.org/what/index_what.html>

Robert Putnam  *Bowling Alone: The Collapse and Revival of American Community*  

Larry C. Spears  “Servant Leadership: Quest for Caring Leadership”  
Inner Quest #2 (1994).

James Gustave Speth  *Red Sky at Morning: America and the Crisis of the Global Environment*  

Lao Tse  *Tao Te Ching*

The World Bank Group  *Social Capital for Development*  
(published online)  

*Our Common Future, From One Earth to One World,  
An Overview by the World Commission on Environment and Development*  
(Oxford: Oxford University Press, 1987)

(Washington, DC: Island Press, 1993)
About the Authors and their Organizations

Global Community Initiatives (GCI) helps communities move forward with confidence and enthusiasm to achieve their vision for a healthy environment, a vibrant economy, good governance, and a sense of deep connection to their neighbors and the world. We assist communities with projects that foster democratic values, social and economic justice, respect and care for the community of life, and environmental integrity. We work to create a context where people feel inspired to work for positive change.

Gwendolyn Hallsmith, GCI’s Executive Director and lead author of Taking Action, has over 20 years of experience working with municipal, regional, and state government in the United States and internationally. She has served as a Town Manager, a Regional Planning Director, a Senior Planner for the Massachusetts Executive Office of Energy Resources, the Deputy Secretary of the Vermont Agency of Natural Resources, and as an international specialist on sustainable community development. Her international experience has included work with the United Nations Environment Program, the United Nations Development Program, the Institute for Sustainable Communities, the International City/County Management Association, the Academy for Educational Development and Earth Charter International. For the past few years, she has been a divinity student at the Andover Newton Theological School, exploring the links between our wisdom traditions, spirituality, and work on the community level. Her new book, The Key to Sustainable Cities: Meeting Human Needs, Transforming Community Systems, explores a whole systems approach to community planning, using assets and capacity building to help communities build on their strengths to achieve their goals. She lives in Montpelier, Vermont, with her husband George and her son Dylan.

World Resources Institute (WRI) is an environmental think tank that goes beyond research to find practical ways to protect the earth and improve people’s lives. The World Resources Institute’s mission is to move human society to live in ways that protect Earth’s environment and its capacity to provide for the needs and aspirations of current and future generations.

Because people are inspired by ideas, empowered by knowledge, and moved to change by greater understanding, WRI provides — and helps other institutions provide — objective information and practical proposals for policy and institutional change that will foster environmentally sound, socially equitable development. WRI’s quarter century of prominence includes an ambitious publications program, original research, and partnerships with industry and governments to achieve results in four primary areas:

- Preserving and restoring biological resources.
- Protecting the global climate system.
- Harnessing markets and enterprise for sustainable development.
- Guaranteeing public access to information and decisions.

Christian Layke works as Senior Associate at the World Resources Institute, creating tools and information and indicators to inform and improve public policy. In addition to co-authoring Taking Action, Christian is the lead author of EarthCAT, Taking Action’s companion online management software. EarthCAT: The Earth Charter Community Action Tool is available at http://www.earthcat.org. This software package allows communities to track and revise their sustainability programs as they develop and implement them over time. In addition to designing EarthCAT online, Christian created EarthTrends: The Environmental Information Portal and directed the World Resources report data tables. He has also worked on WRI’s Tomorrow’s Markets: Global Trends and their Implications for Business, The Weight of Nations: Material Outflows from Industrial Economies, and Monitoring for Impact: Lessons on Natural Resources Monitoring from 13 NGOs. Christian holds a Masters degree in Geography from The George Washington University and a Bachelor’s degree in Natural Resources from Cornell University. Before coming to WRI, Christian conducted forest ecology research in New York State, New Hampshire, and the Dominican Republic, and helped run an organic farm in Vermont. Christian lives with his family in Takoma Park, Maryland.

Sustainable Hudson Valley (SHV) brings tools for sustainable development to the eight county region of New York’s Hudson River Valley. SHV is a network of innovators, a practical think-tank, and a voice of leadership for an economy that respects natural laws and human ingenuity. In addition to its expertise in sustainable technologies, business practices and community development strategies, SHV is a resource on educational, social and organizational psychology, helping people to sustain productive civic participation and organizations to open up their cultures to new learning. Through the Sustainable Living Resource Center near Ulster County Community College, and community-based programs throughout the region, SHV is building the capacity of communities to shift their economies from “single bottom line” to “multiple bottom line” approaches designed for community and environmental well-being as well as economic prosperity.

Melissa Everett, Executive Director of Sustainable Hudson Valley, provided editorial assistance to the project, and is working with Hudson Valley communities to test the concepts and materials in Taking Action. Melissa is an experienced nonprofit executive and a PhD candidate in sustainable development at Erasmus University in the Netherlands. The author of Making a Living While Making a Difference and other books and articles, she teaches Leadership at Rensselaer Polytechnic Institute, and has been a counselor dedicated to helping people make a positive difference in their lives and careers since 1992.

Gwendolyn Hallsmith, GCI’s Executive Director and lead author of Taking Action, has over 20 years of experience working with municipal, regional, and state government in the United States and internationally. She has served as a Town Manager, a Regional Planning Director, a Senior Planner for the Massachusetts Executive Office of Energy Resources, the Deputy Secretary of the Vermont Agency of Natural Resources, and as an international specialist on sustainable community development. Her international experience has included work with the United Nations Environment Program, the United Nations Development Program, the Institute for Sustainable Communities, the International City/County Management Association, the Academy for Educational Development and Earth Charter International. For the past few years, she has been a divinity student at the Andover Newton Theological School, exploring the links between our wisdom traditions, spirituality, and work on the community level. Her new book, The Key to Sustainable Cities: Meeting Human Needs, Transforming Community Systems, explores a whole systems approach to community planning, using assets and capacity building to help communities build on their strengths to achieve their goals. She lives in Montpelier, Vermont, with her husband George and her son Dylan.