

# Sustainable Communities

## Task force Report

Fall 1997

### Dedication

*We dedicate this report to the memory of the late Ronald H. Brown,  
former Secretary of the U.S. Department of Commerce, and a  
Co-Chair of the Sustainable Communities Task Force.*

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# Membership

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## Task Force Coordinator

**Angela Park**, President's Council on Sustainable Development

*The federal officials who served on the task force participated actively in developing the recommendations in this report, but these recommendations do not necessarily reflect Administration policy. This final report represents the consensus of the council members that served on the task force. While the task force delivered its recommendations to the council for its consideration, the entire council did not review or endorse this report.*

# Preface

The strength, prosperity, and vitality of our communities is a fundamental measure of our nation's success. As part of its effort to create a national action strategy, the President's Council on Sustainable Development established the Sustainable Communities Task Force to examine and articulate the leadership role communities are playing in creating a sustainable United States. The ten Council members on the task force were charged with developing consensus-based policy recommendations on how the United States can create opportunities, reduce barriers, and encourage collaborative partnerships to implement sustainable development locally.

The work of the task force began with a simple theory: local communities are providing much of the initial impetus and practical leadership for implementing the concepts of sustainable development. Any national strategy for sustainable development must tap into this energy and momentum and be rooted in the lessons learned from these communities. Accordingly, task force members sought input from community activists, business leaders, trade unionists, developers, academics, architects, policy experts, and elected officials and agency staff at all levels of government. In addition, through a series of meetings, briefings, and roundtables, the task force solicited the expertise and involvement of hundreds of additional community leaders throughout the country.

Many of these community leaders participated in the six working groups established by the task force as well as sharing their knowledge on innovative programs and policies that are already underway and achieving measurable results. The working groups addressed a wide range of issues relevant to building sustainable communities, including economic development and jobs, social infrastructure, environmental justice, transportation and infrastructure, housing and land use, financing, and public participation. The working groups provided the foundation for the task force's work. In a bottom-

up process, materials developed by working groups were integrated into task force draft issue statements, goals, and policy recommendations.

To further ensure that the task force's work was rooted in the realities facing communities today, the task force worked with communities to draft case studies, and asked the U.S. Environmental Protection Agency's Urban and Economic Development Division to commission a compilation of 51 community profiles. The case studies and community profiles are not intended to serve as models, but rather to highlight the diversity of initiatives already underway, and to share lessons learned by communities that are developing integrated approaches to social, economic, and environmental issues while emphasizing opportunities for broad public participation.

It is with immense gratitude that we recognize and thank the hundreds of individuals who contributed to the Sustainable Communities Task Force.

This final report reflects the synthesis of three years of work, and it represents the consensus of council members who served on the task force. While the task force's goals were ambitious, its recommendations only begin to deal with the wide range of challenges facing our nation's communities. But by addressing the most important issues the task force identified, we hope this report will stimulate a national discussion on how the concepts of sustainable development can be applied in local decision-making to make all of our communities better places in which to live.

Thomas R. Donahue  
Task Force Co-chair  
Former President  
AFL-CIO

# Executive Summary

Flourishing communities are the foundation of a healthy society. One important measure of America's potential for long-term vitality will be the emergence of communities that are attractive, clean, safe, and rich in educational and employment opportunities. But before engaging in any discussion about sustainable communities, an understanding of the shared concepts and definitions of sustainable development must exist.

## What is Sustainable Development?

The term "sustainable development" and its definitions originated in an international context. The term was popularized by the World Commission on Environment and Development, which is also known as the Brundtland Commission, named after its chair Gro Harlem Brundtland. Established by the United Nations (U.N.) General Assembly in 1984, the commission was asked to learn about the connections between the issues of environment and development. It held meetings on every continent with people from all walks of life and presented its final report, *Our Common Future*, to the U.N. General Assembly in 1987.

In *Our Common Future*, the Brundtland Commission defined sustainable development as development that allows people "...to meet the needs of the present without compromising the ability of future generations to meet their own needs." This definition was adopted by the President's Council on Sustainable Development in 1993 as it initiated its work.

Although the Brundtland Commission's definition addresses the intergenerational and long-term aspects of sustainable development, alone it is not a comprehensive definition of the term and its affiliated concepts.

Sustainable development has been described as the integration of the three e's — environment, economy, and equity. In addition, a variety of themes have become closely associated with the concept of sustainable development. For development to be sustainable, it must satisfy five criteria. Decisions must consider and account for:

- Long-term impacts and consequences — Sustainable development requires the use of a long-term horizon for decision-making in which society pursues long-term aspirations rather than simply making short-term, reactive responses to problems. By keeping an eye out for the long-

term, sustainable development ensures that options for future generations are maintained if not improved.

- Interdependence — Sustainable development recognizes the interdependence of economic, environmental, and social well-being. It promotes actions that expand economic opportunity, improve environmental quality, and increase social well-being all at the same time, never sacrificing one for another.

- Participation and transparency — Sustainable development depends on decision-making that is inclusive, participatory, and transparent. It recognizes the importance of process and decision-making that includes the input of the stakeholders who will be affected by decisions.

- Equity — Sustainable development promotes equity between generations and among different groups in society. It recognizes the necessity of equality and fairness, and it reduces disparities in risks and access to benefits.

- Proactive prevention — Sustainable development is anticipatory. It promotes efforts to prevent problems as the first course of action.

Sustainable development is one of those rare ideas that could dramatically change the way we look at "what is" and "what could be." It is about doing things in ways that work for the long run because they are better from every point of view — better economically, environmentally, and socially. It provides a new framework for working together to expand economic opportunities, rebuild communities, revitalize democracy, develop a new generation of environmentally superior technologies, link entrepreneurship to environmental stewardship, and bring our increasingly urban way of life into balance with nature. Sustainable development challenges us to envision a society superior to today's society, and to make it a reality for our children and grandchildren.

## What are sustainable communities?

Sustainable communities are cities and towns that prosper because people work together to produce a high quality of life that they want to sustain and constantly improve. They are communities that flourish because they build a mutually supportive, dynamic balance between social well-being, economic opportunity, and environmental quality. While it is not possible today to point to a list and say, "These communities are sustainable," the emerging ideal of

sustainable communities is a goal many are striving to achieve. And while there is no single template for a sustainable community, cities and towns pursuing sustainable development often have characteristics in common. Generally speaking, they integrate the five concepts outlined above and demonstrate their application locally. Some communities have adopted sustainable community principles through legislation, executive order, or other actions.

The concept of sustainable communities should be viewed as an ideal for communities to pursue — an ideal whose possibilities are enormously exciting.

In sustainable communities, people are engaged in building a community together. They are well-informed and actively involved in making the decisions that affect their lives. In making decisions, they consider the long-term benefits to future generations as well as themselves. They understand that successful long-term solutions require partnerships and a process that allows for representatives of a community's diverse sectors to be involved in discussions, planning, and decisions that respond directly to unique local needs. They also recognize that some problems cannot be solved within the confines of their community, and that working in partnership with others in the region is necessary to deal with them effectively.

In sustainable communities, people use this participatory approach to make conscious decisions about design. The concepts of efficiency and livability permeate decisions about physical structure. Development patterns promote accessibility, decrease sprawl, reduce energy costs, and foster a human-scale built environment.

In sustainable communities, all people have access to educational opportunities that prepare them for jobs to support themselves and their families in a local economy that is dynamic and prepared to cope with changes in the national and global economy. In sustainable communities, partnerships involving business, government, labor, and employees promote economic development and jobs. They cooperatively plan and carry out development strategies that create diversified local economies built on unique local advantages and environmentally superior technologies. These efforts can strengthen the local economy, buffering the effects of national and international economic trends that sometimes result in job losses in a community. Such partnerships also invest in the education and training necessary to make community members more productive, raise their earning power, and help strengthen and attract business. Use of environmentally superior technologies for transportation, industry, buildings,

and agriculture boosts productivity and lowers business costs while dramatically reducing pollution, and solid and hazardous wastes.

Businesses, households, and governments in sustainable communities make efficient use of land, energy, and other resources, allowing the area to achieve a high quality of life with minimal waste and environmental damage. These communities are healthy and secure and they provide people with clean air, clean water, and safe food.

## **Why are communities key to sustainable development?**

Whether the United States and other nations will achieve a sustainable future largely depends on how well the concepts and principles of sustainable development are integrated into decision-making at the community level. If efforts to build a sustainable future are to take hold, they must do so in the day-to-day lives of people in their workplaces, stores, neighborhood associations, community organizations, local government, labor unions, schools, and religious institutions.

It is in communities where people work, play, and feel most connected to society. Problems like congestion, pollution, and crime often seem abstract when they appear as national statistics, but they become personal and real at the community level. In the same way, sustainable development may remain a remote theoretical concept for many people until it is described in the context of community. Then it becomes more clear that sustainable development is directly related to aspects of people's daily lives and their fundamental needs, such as educational and job opportunities, health care, affordable housing, clean air and water, and convenient transportation. It is within communities that children receive the basic education and skills that will allow them to thrive in the changing marketplace.

It is within communities that people can most easily bring diverse interests together, identify and agree on goals for positive change, and organize for responsive action. While the challenges facing the nation are difficult to resolve at any level of government, local communities offer people the greatest opportunity to meet face-to-face to fashion a shared commitment to a sustainable future. Nothing could do more to foster sustainable development than a nationwide effort to apply this idea at the community level.

Much of what is needed to create more sustainable communities is within reach if people and their community institutions join forces. Many communities are beginning to

use sustainable development as a framework for thinking about their future. By building upon their leadership and innovation, marshaling and reorienting government resources, and creating new standards for process and participation, strengthened communities can provide the foundation for a stronger, revitalized America.

## Task Force Recommendations

### Policy Recommendation 1

#### *Community-Based Public Dialogue, Planning, Priority-Setting, and Implementation*

*Bring people together to identify, prioritize, and learn about key issues in their community; develop a vision of what they want their community to be; set goals for realizing that vision; establish indicators for measuring progress; identify the resources needed to reach the goals; and implement actions that will advance them.*

**Action 1.** Community-based coalitions can create educational, media, and civic journalism campaigns to encourage participation in civil life and voting, disseminate high-quality information on community issues, and promote public discussions that will lead to the resolution of these issues. Coalitions should be as broad as possible, including industry and business, schools, newspapers, television and radio stations, community groups, labor, local government, religious institutions, and organizations working on social, economic, and environmental issues.

**Action 2.** As part of the dialogue and planning process, community-based coalitions can work to draft an economic development strategy that will fulfill basic human needs by taking advantage of local and regional opportunities and new economic trends, such as the opening up of global markets and the improvement of environmental and communications technologies. Coalitions should include businesses, employees, unions, chambers of commerce, local government, community groups, and residents.

**Action 3.** Federal and state governments — in consultation with local government, the private sector, and nongovernmental organizations — should support local planning that integrates economic development, environmental protection, and social equity concerns and should promote public participation in planning efforts. For example, they should reaffirm the value of such planning through the reauthorization of the Intermodal Surface Transportation Efficiency Act, and they should apply the

requirements of such planning to federal and state funding and incentives for economic development, housing, transportation, and environmental programs.

### Policy Recommendation 2

#### *Open and Inclusive Decision-making*

*Encourage and facilitate open and inclusive decision-making processes.*

**Action 1.** All levels government should ensure substantial opportunity for public participation in all phases of planning and decision-making to allow those affected by decisions to have a voice in the outcome. Governments should create new methods and expand existing ones for getting the public involved in planning and development decisions, as well as in the legislative process, taking steps to ensure that historically under-represented groups are involved.

For example, regional planning organizations, metropolitan planning organizations (MPOs), zoning boards, and other government entities that are active in the design of communities should take responsibility for ensuring that local residents have a substantive opportunity to participate in crucial early planning and development decisions.

**Action 2.** All levels of government, but especially local government, should identify impediments to greater public involvement in decision-making — such as language barriers and lack of child care and transportation — and develop strategies to overcome them.

**Action 3.** Businesses can encourage their managers and employees to participate in community affairs and can establish advisory boards to recruit residents to provide input to the company on issues relevant to the community. In addition, businesses can give employees flexibility to increase the time that they and their families can devote to community activities.

**Action 4.** While working to minimize all unacceptable environmental risks, all levels of government should work with community groups and the private sector to ensure that environmental risks and benefits are more equitably distributed among and within communities.

### Policy Recommendation 3

#### *Access to Information on Sustainable Communities*

*Increase the ability of communities to improve their economic, environmental, and social well-being by improving access to usable information about sustainable communities' initiatives, and disseminating that information to interested parties and key decision-makers.*

**Action 1.** Institutions and individuals with knowledge or expertise in sustainable community development should coordinate efforts to share and provide information to communities, decision-makers, and other relevant constituencies. They should explore ways to link currently existing databases; coordinate technical assistance; co-sponsor conferences and other meetings; take advantage of emerging communications technologies, such as the Internet; and provide easily accessible points of entry for those interested in this information.

These institutions and individuals include government agencies, elected officials, nonprofit organizations, businesses, academic institutions, economic development and environmental organizations, community groups, and professional associations (from planners, architects, and engineers to ecologists and economists).

**Action 2.** All levels of government should improve the user-friendliness of government-collected information and technologies to help communities use them to solve problems and to educate the public. Potentially useful information includes census data, Toxics Release Inventory data, other right-to-know statistics, public investment and lending information, economic statistics, and data derived from remote sensing and satellite technologies. Potentially useful technologies for manipulating this data include mapping tools, geographic information systems (GIS), and customized GIS application databases (e.g., LandView II).

**Action 3.** Community-based coalitions should work with companies, federal and state regulatory agencies, and health risk assessors to develop profiles of neighborhoods that are environmentally high-risk as a tool for setting pollution abatement priorities.

### Policy Recommendation 4

#### EXECUTIVE SUMMARY

#### *Cooperation Among Communities*

*Encourage the communities within a region to work together on issues that transcend their political boundaries.*

#### PRESIDENT'S COUNCIL ON SUSTAINABLE DEVELOPMENT SUSTAINABLE COMMUNITIES TASK FORCE REPORT

**Action 1.** Communities should collaborate to identify, prioritize, and learn about key problems in their region; develop a vision of what they want their region to be like; set goals for realizing that vision; establish benchmarks for measuring progress toward these goals; ascertain the resources needed to reach the goals; and determine the actions that will advance them.

**Action 2.** States, counties, and municipalities should collaborate to create a system of regional accounts that measures the costs and benefits of local land use, development, and economic trends, and show how these benefits and costs are distributed in the short and long run. The federal government should work with state and local governments to ensure that federal statistical resources are available and used appropriately to support the measurement of benefits and costs.

**Action 3.** Federal and state governments should provide incentives for communities to collaborate on issues that transcend local political jurisdictions, such as transportation, land use, economic development, and air and water quality. Federal and state agencies responsible for environmental protection, economic development, land use, and transportation policies should work with one or more selected geographic areas to develop integrated planning and development activities, and to require region-wide cooperation in these areas.

### Policy Recommendation 5

#### *Building Design and Rehabilitation*

*Streamline processes and encourage design and rehabilitation of new and existing buildings to use energy and materials efficiently, enhance public health, preserve historic and natural settings, and contribute to a sense of community identity; and discourage zoning and construction practices that do the opposite.*

**Action 1.** Builders, architects, and engineers should design new buildings and rehabilitate existing ones to be healthy, livable, resource-efficient, and adaptable to new uses. These buildings should feature energy efficiency, daylighting, non-

toxic recycled and recyclable construction materials, and designs that promote human interaction. They should also recognize the importance of historic preservation — capturing the resource of the embodied energy of existing buildings — and promote zero-waste building practices.

**Action 2.** Builders and landscape architects should encourage building design that recognizes the integration between the built and natural environments through landscaping techniques such as the use of native plants, which can reduce the need for fertilizers, pesticides, and water; and shade trees which can reduce energy use.

**Action 3.** Federal, state, and local governments should work with builders, architects, developers, contractors, materials manufacturers, service providers, community groups, and others to streamline regulations that allow builders and architects to implement the above-outlined sustainable building and construction practices. They should publish or otherwise make available information about model building codes, zoning ordinances, and flexibility for better building permit approval processes for residential and commercial buildings — so that local decisionmakers can adapt them to reflect local conditions and values.

**Action 4.** Lenders, community groups, and historic preservation groups can work together to identify financing for retrofitting buildings to be energy-efficient and for rehabilitating historic buildings. Local governments can enact ordinances to preserve historic buildings, adapting them for new uses whenever possible, and removing incentives for demolishing them.

**Action 5.** Educational institutions at all levels, particularly technical and graduate schools, should provide interdisciplinary training to encourage engineers, architects, landscape artists, and other design professionals to integrate sustainable building and construction practices, as outlined above, into common use.

## **Policy Recommendation 6**

### ***Community Design***

*Design new communities and improve existing ones to use land and infrastructure efficiently, promote mixed-use and mixed-income development, retain public open space, and provide diverse transportation options to integrate the places in which people live and work with the natural environment.*

**Action 1.** Local jurisdictions should structure or revise local zoning regulations and permit approval processes to encourage mixed-used, mixed-income development co-located with diverse transportation options in areas that are already developed and especially where transit infrastructure is already in place.

**Action 2.** Federal and state governments and the private sector should form teams to help local jurisdictions reduce sprawl, and design developments that are resource-efficient and livable.

Teams should include design and financing professionals, engineers, transportation specialists, land use experts, economic development and energy-efficiency experts, retailers, natural resource managers, and others.

**Action 3.** The federal government should change federal tax policy to provide the same tax treatment of employee parking benefits and employee benefits relating to the use of mass transit, walking, and bike riding. For example, employers currently receive a tax deduction for providing parking and most do not charge for employee parking. While a much smaller tax-free benefit (less than half the amount) is also available for transit, no such incentive exists for those who neither drive nor take transit.

**Action 4.** The federal government should give credit toward attainment of national Clean Air Act Amendment ambient air-quality standards to communities that lower traffic by adopting zoning, building code, and other changes that encourage more efficient land use patterns that reduce air pollution from motor vehicles.

## **Policy Recommendation 7**

### ***Reduce Sprawl and Promote Smarter Growth***

*Reduce sprawl and promote smarter geographical growth of existing communities and the siting of new ones to enhance economic opportunities and meet future needs while conserving open space and respecting the carrying capacity of the natural environment.*

**Action 1.** The federal government should redirect federal policies that encourage low-density sprawl to foster investment in existing communities. For example, it should encourage shifts in transportation spending toward transit, highway maintenance and repair, and expansion of transit options rather than new highway or beltway construction. It should also change the capital gain provision in section 1034

of the Internal Revenue Service code to allow homesellers to defer tax liability even if they purchase a new home of lesser value. Currently the code allows deferred tax liability on capital gain realized during ownership only if homesellers purchase another home priced at least equal to the one sold.

**Action 2.** Federal agencies should work with states and communities to develop ways to evaluate the costs of infrastructure in greenfield or relatively undeveloped areas to examine subsidies and to correct market incentives in the financing of capital costs of infrastructure, such as sewers and utilities, for development of land bordering metropolitan areas. In addition, local governments and counties can work together to use community impact analyses and other information on the environmental carrying capacity of a region as the foundation for land use planning and development decisions.

Federal and state governments should also help local governments develop a metropolitan or regional planning instrument to evaluate alternative modes of development, accounting for the present value and costs of infrastructure, transportation inefficiency, land consumption, provision of social services, environmental quality, congestion, and fiscal impacts, as well as the impact on access to jobs, services, open space, and social and cultural amenities.

**Action 3.** All levels of government, policy experts, residents, and community organizations can work together to conduct analyses of how public resources for infrastructure are spent to benefit different communities — for example, comparing the center city, outer suburbs, and rural areas. These analyses can be used to reorient priorities, if necessary, and direct future expenditures.

**Action 4.** Local governments and counties can create community partnerships to develop regional open space networks and urban growth boundaries as part of a regional framework to discourage sprawl development that threatens a region's environmental carrying capacity. These partnerships can conserve open space through acquisition of land and/or development rights. For example, public water departments can budget to acquire land necessary to protect public water supplies. Private land trusts can expand their acquisition of wetlands or other valuable open space.

## **Policy Recommendation 8**

### ***Creation of Strong, Diversified Local Economies***

*Promote economic development strategies that capitalize on*

*unique local attributes and on technological advances in energy and resource efficiency, to create jobs and build strong, diversified local economies.*

**Action 1.** Communities can conduct an assessment of their economic, natural, and human resources to identify their comparative advantages and niche in the larger regional, national, and global economies. Ideally, this inventory and assessment would be conducted as part of a public dialogue and planning process within the community and the region.

**Action 2.** Local governments, businesses, and nonprofit organizations with relevant expertise should work together to create recycling-related manufacturing in conjunction with community-based projects to collect and recycle municipal solid waste. All levels of government should support these efforts by providing information and incentives, and by supporting pilot projects and leveraging their funding with public-private partnerships.

**Action 3.** Federal and state agencies should assist communities that want to create eco-industrial parks that enhance economic efficiency and promote environmental responsibility. They can do so by reducing regulatory impediments to the siting of eco-industrial parks that produce low levels of pollution through a zero-waste strategy in areas with mixed-use zoning; sharing information on similar efforts; and funding pilot projects.

**Action 4.** National business associations, large corporations, environmental groups, and federal and state agencies can work together to promote best practices and techniques in the areas of pollution prevention, materials reuse, and energy efficiency to small- and medium-sized companies.

**Action 5.** Federal agencies should help communities with former military facilities to convert them to new uses using principles of sustainable development. They can do so by bringing together development experts from multiple agencies and providing information on the range of alternatives for redevelopment.

**Action 6.** The federal government and businesses should improve working conditions. Government, for example, should set an adequate minimum wage and proper health and safety standards; and businesses could provide greater flexibility to telecommute, set work schedules to provide more time for community participation and/or parenting, and provide assistance with day care.

**Action 7.** Federal, state, and local government should support job creation and minimize large disparities in the distribution of wealth through tax strategies, health and welfare programs, and other government policies.

## **Policy Recommendation 9**

### ***Basic Education, Job Training, and Lifelong Learning***

*Expand and coordinate education and job training programs to allow all people to expand their knowledge and improve their ability to adapt to the changing job market and participate in community affairs as informed, educated citizens.*

**Action 1.** Businesses, teachers' unions, school officials, students, religious institutions, and local government within a community should develop training programs to ensure that workers have the necessary skills to take advantage of current and future economic development opportunities. They should work together to integrate current training programs, and they should marshal funding from the private sector, schools, and government to fill gaps in these programs. In addition to school curriculum, the programs include school-to-work, community service, summer jobs programs, apprenticeships, and job corps opportunities.

**Action 2.** Community-based coalitions should work together to invest in education and to link education and the community by sponsoring youth, tutoring, and other programs; directly funding projects; and providing in-kind and volunteer support. These programs should also focus on the needs of local employers.

**Action 3.** Federal and state governments should help people pursue education and job training throughout their lives by providing tax deductions on tuition, low-interest student loans, and other kinds of financial assistance.

**Action 4.** Federal and state governments, the private sector, and local communities should promote widespread public access to computers and computer skills training.

## **Policy Recommendation 10**

### ***Cleanup and Redevelopment of Brownfield Sites***

*Create partnerships with community residents, environmental*

*organizations, community development corporations, lenders, businesses, and all levels of government to clean up, redevelop, or stabilize brownfield sites by eliminating barriers and creating incentives for environmental cleanup and reorienting existing state and federal economic development funding and programs to include these sites.*

**Action 1.** All levels of government should continue to encourage investment in brownfields redevelopment by eliminating barriers to and creating incentives for the cleanup and redevelopment of brownfield sites. Current efforts, such as the 1995 EPA Brownfields Initiative, need to continue evolving to work in partnership with diverse parties to clarify important issues and find shared solutions. These issues include: lender liability for cleanup; uncertainties for investors such as consistent and quantifiable cleanup standards, enforceable indemnity agreements, and covenants-not-to-sue; timely and conclusive efforts to detect contamination to allow cleanup and property sales to proceed; realistic cleanup standards appropriate to future uses of sites; and strengthening local workforce development.

**Action 2.** All levels of government should work with the mortgage bankers and other members of the financial community as well as with community groups to reexamine policies in light of the substantial progress that has been made by EPA and the Congress to respond to the lending community's concerns. Development of innovative financing tools that make inexpensive, renewable capital readily available for brownfields investment should be encouraged.

**Action 3.** State and local governments should be encouraged to develop revolving loan funds for cleanup activities at brownfield sites. Federal agencies should help provide seed money to capitalize a limited number of state or local revolving loan funds to further encourage their development and use. Federal agencies should continue to provide technical assistance to communities to assess what efforts are needed to inventory, assess, clean up, and redevelop brownfield sites.

**Action 4.** The federal government should assure that economic development programs that were in existence prior to the emergence of brownfields issues make brownfields projects eligible for those programs' funds.

## Policy Recommendation 11

### *Financing Sustainable Communities*

*Create partnerships to remove barriers to and expand access for financing innovative community initiatives.*

**Action 1.** The federal government should work with the housing finance community and with transportation and land use experts to further study, develop, and test pilot a location-efficient mortgage program that will be refined and eventually implemented nationally.

**Action 2.** The federal government should lead a public/private sector initiative to identify and end barriers to financing mixed-use, transit-oriented development. Participants should include: developers, architects, planners, local government officials, and development finance experts (banks, pension and insurance investors, public corporations which provide secondary markets and community development corporations).

**Action 3.** The federal government should expand the home mortgage tax deduction to apply to mixed-use, multifamily units. It should also expand low income housing finance programs to include these facilities.

**Action 4.** The financing community, policy experts, and all levels of government should work together to establish underwriting criteria and a broader secondary market for loans for buildings retrofitting, mixed-use development, and businesses that harness environmentally sound technologies.

## Policy Recommendation 12

### *Public Safety*

*Encourage citizens, law enforcement, and governments to work together to make communities safer.*

**Action 1.** Community-based coalitions “including residents, community groups, and businesses” should work with police to mobilize neighborhoods to prevent violence by initiating community meetings, finding and fixing violence hot spots, reclaiming public spaces, and adopting community policing strategies.

**Action 2.** All levels of government should work to implement gun control measures, including the use of background checks and mandatory waiting periods to help reduce violent gun

uses.

**Action 3.** Community-based coalitions should work together to address disorder issues such as littering, graffiti, and loitering before they lead to criminal activities. Law enforcement officials and local governments should work with residents and businesses to identify opportunities to prevent potential problems such as improving lighting in specific areas, and cleaning up vacant lots.

## Policy Recommendation 13

### *Community Environmental Protection Pilots*

*Explore the feasibility and effectiveness of alternative environmental regulatory systems through community-level pilot programs that set performance-based standards that are more stringent than existing environmental standards, and that give businesses greater flexibility in meeting the new standards.*

**Action 1.** The U.S. Environmental Protection Agency (EPA) should encourage communities to develop pilot programs for attaining one or more environmental standards that are more stringent than those set by EPA. Participants in the programs “including but not limited to industry, government agencies, and community groups” would set the standards; and would work with regulators to ensure and verify that they are met.

**Action 2.** EPA and state environmental protection agencies should accelerate efforts to conduct a series of demonstration projects to assess the benefits and costs of alternative regulatory approaches. For example, projects could demonstrate the cost-effectiveness of setting more stringent standards while giving polluters longer time periods to achieve compliance. Another project could research and work to demonstrate the benefits (if any) of environmental performance of an entire facility rather than on separate air, water and soil requirements. Such a project might stipulate that environmental gains for an entire facility exceed what would have been achieved through source-by-source or media-specific regulations. Working with the private sector and nongovernmental organizations, the federal government should review and evaluate the lessons learned from these demonstration projects. Based on the success of the first round of demonstration projects, a second set of projects should be launched within two years.

## **Policy Recommendation 14**

### ***Pollution Prevention Partnerships***

*Increase public-private pollution-prevention efforts at the community level.*

**Action 1.** Regulators, businesses, labor unions, community groups, and policy experts can create partnerships to implement programs that encourage pollution prevention.

**Action 2.** Community-based coalitions can regularly gather data on pollution in a community and combine it with population data and relevant health statistics, including diet and lifestyle choices, to reach agreement on what programs are needed to lower local health risks.

## **Policy recommendation 15**

### ***Prevention and Natural Disaster Reduction***

*Shift the focus of the federal disaster relief system from cure to prevention.*

**Action 1.** All levels of government should identify and eliminate government incentives, such as subsidized flood

plain insurance and subsidized utilities, that encourage development in areas vulnerable to natural hazards.

**Action 2.** Accurate risk assessments can facilitate development of safe land use policies and management approaches, especially in coastal and riverine environments, and near fault zones and other geologically active sites.

**Action 3.** Community-based coalitions can develop improved building codes and related enforcement, and create strategic plans for design and maintenance of community infrastructure, and support appropriate agriculture and forestry practices. For example, local regulatory agencies can adopt more rigorous building codes, to ensure that new construction minimizes the impacts of floods, hurricanes, and other natural disasters.

**Action 4.** Federal agencies, perhaps through a specific interagency effort, should incorporate sustainable re-development principles into the federal disaster relief system. The interagency group should work closely with state, local, and private organizations to create a unified approach within established disaster relief mechanisms. They can package technical assistance programs from existing federal, state, and local programs, utilities, and other public and private resources.

# Introduction

Flourishing communities are the foundation of a healthy society. One important measure of America's potential for long-term vitality will be the emergence of communities that are attractive, clean, safe, and rich in educational and employment opportunities. But before engaging in any discussion about sustainable communities, an understanding of the shared concepts and definitions of sustainable development must exist.

## What is Sustainable Development?

The term "sustainable development" and its definitions originated in an international context. The term was popularized by the World Commission on Environment and Development, which is also known as the Bruntland Commission, named after its chair Gro Harlem Bruntland. Established by the United Nations (U.N.) General Assembly in 1984, the commission was asked to learn about the connections between the issues of environment and development. It held meetings on every continent with people from all walks of life and presented its final report, *Our Common Future*, to the U.N. General Assembly in 1987.

In 1992, at the U.N. Conference on Environment and Development (UNCED) in Rio de Janeiro, Brazil, the countries of the world with participation from non-governmental organizations drafted and agreed to Agenda 21, a global plan of action for better integrating and resolving issues of environmental, economic, and social development. At the conference, national governments agreed to draft their own plans of action with broad participation of nongovernmental organizations. The President's Council on Sustainable Development's mandate from President Clinton to develop a national action strategy is part of the U.S. commitment to that pledge.

The UNCED was the beginning of a series of major international summits that included the Human Rights Summit in Vienna, Austria, in 1993; the International Conference on Population and Development in Cairo, Egypt, in 1994; the World Conference on Social Development in Copenhagen, Denmark, in 1995; and the Fourth World Conference on Women in Beijing, China, in 1995. This series culminated in the second U.N. Conference on Human Settlements (also known as Habitat II or "the City Summit") in Istanbul, Turkey in June of 1996. Habitat II was intended to tie together the themes of the previous conferences and connect them to the

importance of communities.

In *Our Common Future*, the Bruntland Commission defined sustainable development as development that allows people "...to meet the needs of the present without compromising the ability of future generations to meet their own needs."<sup>1</sup> This definition was adopted by the President's Council on Sustainable Development in 1993 as it initiated its work.

Although the Bruntland Commission's definition addresses the intergenerational and long-term aspects of sustainable development, alone it is not a comprehensive definition of the term and its affiliated concepts.

Sustainable development has been described as the integration of the three e's "environment, economy, and equity". In addition, a variety of themes have become closely associated with the concept of sustainable development. For development to be sustainable, it must satisfy five criteria. Decisions must consider and account for:

- Long-term impacts and consequences - Sustainable development requires the use of a long-term horizon for decision-making in which society pursues long-term aspirations rather than simply making short-term, reactive responses to problems. By keeping an eye out for the long-term, sustainable development ensures that options for future generations are maintained if not improved.
- Interdependence - Sustainable development recognizes the interdependence of economic, environmental, and social well-being. It promotes actions that expand economic opportunity, improve environmental quality, and increase social well-being all at the same time, never sacrificing one for another.
- Participation and transparency - Sustainable development depends on decision-making that is inclusive, participatory, and transparent. It recognizes the importance of process and decision-making that includes the input of the stakeholders who will be affected by decisions.
- Equity - Sustainable development promotes equity between generations and among different groups in

society. It recognizes the necessity of equality and fairness, and it reduces disparities in risks and access to benefits.

- Proactive prevention - Sustainable development is anticipatory. It promotes efforts to prevent problems as the first course of action.

Sustainable development is one of those rare ideas that could dramatically change the way we look at "what is" and "what could be." It is about doing things in ways that work for the long run because they are better from every point of view - better economically, environmentally, and socially. It provides a new framework for working together to expand economic opportunities, rebuild communities, revitalize democracy, develop a new generation of environmentally superior technologies, link entrepreneurship to environmental stewardship, and bring our increasingly urban way of life into balance with nature. Sustainable development challenges us to envision a society superior to today's society, and to make it a reality for our children and grandchildren.

## **What are sustainable communities?**

Sustainable communities are cities and towns that prosper because people work together to produce a high quality of life that they want to sustain and constantly improve. They are communities that flourish because they build a mutually supportive, dynamic balance between social well-being, economic opportunity, and environmental quality. While it is not possible today to point to a list and say, "These communities are sustainable," the emerging ideal of sustainable communities is a goal many are striving to achieve. And while there is no single template for a sustainable community, cities and towns pursuing sustainable development often have characteristics in common. Generally speaking, they integrate the five concepts outlined above and demonstrate their application locally. Some communities have adopted sustainable community principles through legislation, executive order, or other actions. (For examples of these principles, see Appendix A.)

The concept of sustainable communities should be viewed as an ideal for communities to pursue - an ideal whose possibilities are enormously exciting.

In sustainable communities, people are engaged in building a community together. They are well-informed and actively

involved in making the decisions that affect their lives. In making decisions, they consider the long-term benefits to future generations as well as themselves. They understand that successful long-term solutions require partnerships and a process that allows for representatives of a community's diverse sectors to be involved in discussions, planning, and decisions that respond directly to unique local needs. They also recognize that some problems cannot be solved within the confines of their community, and that working in partnership with others in the region is necessary to deal with them effectively.

In sustainable communities, people use this participatory approach to make conscious decisions about design. The concepts of efficiency and livability permeate decisions about physical structure. Development patterns promote accessibility, decrease sprawl, reduce energy costs, and foster a human-scale built environment.

In sustainable communities, all people have access to educational opportunities that prepare them for jobs to support themselves and their families in a local economy that is dynamic and prepared to cope with changes in the national and global economy. In sustainable communities, partnerships involving business, government, labor, and employees promote economic development and jobs. They cooperatively plan and carry out development strategies that create diversified local economies built on unique local advantages and environmentally superior technologies. These efforts can strengthen the local economy, buffering the effects of national and international economic trends that sometimes result in job losses in a community. Such partnerships also invest in the education and training necessary to make community members more productive, raise their earning power, and help strengthen and attract business. Use of environmentally superior technologies for transportation, industry, buildings, and agriculture boosts productivity and lowers business costs while dramatically reducing pollution, and solid and hazardous wastes.

Businesses, households, and governments in sustainable communities make efficient use of land, energy, and other resources, allowing the area to achieve a high quality of life with minimal waste and environmental damage. These communities are healthy and secure and they provide people with clean air, clean water, and safe food.

## **Why are communities key to sustainable development?**

Whether the United States and other nations will achieve a sustainable future largely depends on how well the concepts and principles of sustainable development are integrated into decision-making at the community level. If efforts to build a sustainable future are to take hold, they must do so in the day-to-day lives of people in their workplaces, stores, neighborhood associations, community organizations, local government, labor unions, schools, and religious institutions.

It is in communities where people work, play, and feel most connected to society. Problems like congestion, pollution, and crime often seem abstract when they appear as national statistics, but they become personal and real at the community level. In the same way, sustainable development may remain a remote theoretical concept for many people until it is described in the context of community. Then it becomes more clear that sustainable development is directly related to aspects of people's daily lives and their fundamental needs, such as educational and job opportunities, health care, affordable housing, clean air and water, and convenient transportation. It is within communities that children the basic education and skills that will allow them to thrive in the changing marketplace.

It is within communities that people can most easily bring diverse interests together, identify and agree on goals for positive change, and organize for responsive action. While the challenges facing the nation are difficult to resolve at any level of government, local communities offer people the greatest opportunity to meet face-to-face to fashion a shared commitment to a sustainable future. Nothing could do more to foster sustainable development than a nationwide effort to apply this idea at the community level.

The role of local communities is becoming increasingly important as the United States, and much of the rest of the world, move toward more decentralized decision-making. The federal government will continue to bear the responsibility for bringing together diverse interests to establish national standards, goals, and priorities. These federal roles are necessary because national interests may not always be represented in local decisions, and the effects of community choices are felt beyond one municipality. The federal government is providing greater flexibility and expanding the

roles played by states, counties, and local communities in implementing policies and programs to address national goals. This new model of intergovernmental partnership will require information sharing, and an unprecedented degree of coordination between levels of government. Local government will play a key role in creating stronger communities - from planning and facilitating development, to creating community partnerships, to providing leadership.

It is clear that the scope of a problem designates the level at which it is most appropriately solved. For example, some issues have regional, inter-regional, and global ramifications. Air pollution is one of them. Acid rain is caused by air pollutants that manifest themselves in rain that can fall hundreds of miles from where the pollutants were emitted. The cooperation of more than one region is required to correct this type of problem.

Much of what is needed to create more sustainable communities is within reach if people and their community institutions join forces. Many communities are beginning to use sustainable development as a framework for thinking about their future. The big institutions in society - including federal and state governments, businesses, universities, and national organizations - can and should provide support for local community efforts. And in some cases, these institutions need to review the barriers they have (sometimes inadvertently) erected that diminish the ability of communities to pursue sustainable development.

The task force was inspired by communities throughout the country that are using innovative approaches to reinvigorate public involvement in finding solutions to community problems. From small towns like Pattonsburg, Missouri, to cities like Chattanooga, Tennessee, to large urban centers like Seattle, Washington, many communities are taking responsibility for meeting their economic, environmental, and equity objectives. While none of these communities has been transformed into a utopia, much can be learned from their efforts and progress. By building upon their leadership and innovation, marshaling and reorienting government resources, and creating new standards for process and participation, strengthened communities can provide the foundation for a stronger, revitalized America.

# Chapter 1

## Vision Statement and Goals

### VISION STATEMENT

*This is our vision of a better future for America's people, communities, and environment. We hope it will help stimulate a national dialogue followed by action to create the future we want for ourselves, and our children and grandchildren.*

We believe that our nation's communities can be far better places to live and work in than they are today. They can also exist in closer harmony with nature for the benefit of both the community and the natural environment. The key to building sustainable communities - those that get better and stronger over time - will be to recognize that economic opportunity, ecological integrity, and social equity are interlocking links in the chain of well-being. The pursuit of one without the others or in opposition to the others will ultimately jeopardize our future progress. Development that maintains a mutually supportive balance among all three will strengthen our communities for generations to come.

We will have a greatly expanded range of options: better opportunities to learn and earn a living, more choices of the kind of home we wish to live in and where it will be located, and more choices of how to travel - or telecommute - to visit friends, shop, or go to work.

People will participate more actively in community life. Increased flexibility in the workplace - providing more time for involvement in schools, religious institutions, voluntary organizations, neighborhood associations, and local politics - will help revitalize our democratic institutions. Our nation's cultural diversity will be a driving force for creativity and a source of our strength. Wounds of racial and ethnic division will heal.

Communities will expand opportunities and incentives for civic involvement, and they will recommit schools and other community institutions to civic education. They will encourage citizens to look beyond short-term self-interest to the long-term common interest. Widespread participation in programs to envision a sustainable future and to identify shared community goals will help restore a sense of common purpose. Because agreement on shared goals is not always easily reached in our highly diverse society, innovative arrangements will be developed to clearly articulate differences and accommodate them whenever possible.

Participatory decision-making arrangements will promote direct and meaningful interactions among all parties potentially affected by decisions, including traditionally underrepresented groups. Information technologies will be used to maximum advantage to encourage public dialogue and provide easy access to the information

citizens need for effective participation. Critical gaps in our democratic institutions will be filled by strengthening the decision-making role of local neighborhoods and expanding collaborative arrangements among communities for decision-making on a metropolitan and regional scale.

Accounting systems and prices will give us more complete information about the economic, environmental, and social costs that our choices exact. Computer models, for example, will help local communities evaluate alternative land use and development decisions by more fully accounting for the long-term costs of transportation and infrastructure, land consumption, environmental impacts, required social services, congestion, and other factors. New arrays of economic, environmental, and social indicators will give people a detailed picture of how living conditions are improving or declining in their community or region.

Many people will continue to choose to live in suburbs, and the automobile will continue to be a major mode of travel. Gradually, however, major improvements will occur in the convenience and accessibility of our communities, giving us new options of where to live and how to travel. Ultimately, the impact of these improvements will be profound, in raising our quality of life, protecting and restoring the environment, and promoting human-scale development. Government regulations and government-supported market subsidies that favor low-density development will gradually be removed. In place of these subsidies, policies will be put into place that allow and even encourage the development of mixed-use, walkable communities. Market distortions which prevent such communities from developing will be eliminated.

Improvements will occur as both redevelopment and new growth increasingly occur in physically compact spaces, where mass transit can be effective and affordable and where neighborhood-serving businesses reduce the need for driving. New mixed-use, pedestrian and transit-oriented growth will require less new infrastructure and decrease the costs of infrastructure maintenance and repair. It will also protect our farms and rural communities from being overrun by development. Permanent greenbelts, wildlife corridors, and other natural areas preserved from sprawl will enhance ecosystem health and allow future generations to continue to enjoy the beauty of nature.

New neighborhoods produced by this kind of growth will have many of the qualities that make small towns and traditional neighborhoods so appealing. They will be designed with well-defined centers and edges to give them a distinct physical identity. Their centers will contain public facilities such as libraries, meeting halls, government offices, religious institutions, and public squares or greens to

encourage a strong sense of civic identity. Jobs, stores, and housing will be in close physical proximity. Networks of bike trails, paths, and lanes will run everywhere. Affordable, frequent, reliable rail and bus transit will be a short walk away. Streets laid out on a grid pattern will reduce traffic congestion by providing alternate routes to every destination. These high-access livable neighborhoods will be much sought-after places to live.

These new neighborhoods will also offer wider choices of housing types, densities, and costs than conventional suburbs, and a better integration of people of different ages and economic classes. Single-family homes will remain available to all who want them, but more low- and moderate-cost housing will also be available, including small apartment buildings, living space above retail establishments, "granny" flats, and garage apartments. Affordable housing in close proximity to jobs will help break up the concentrations of people living in poverty in the cheapest, most deteriorating housing in urban centers.

Whether we travel by automobile or by public transit, zero-emission vehicles will minimize air pollution. With the information superhighway reaching everywhere, working, studying, shopping, banking, and even consulting the doctor will often be done without physical travel.

Increased energy efficiency and renewable energy use will reduce the negative environmental impacts caused by burning fossil fuels - from local air pollution to regional acid rain to the buildup of greenhouse gases in the atmosphere. Advanced manufacturing systems that use energy and materials efficiently and recycle wastes will make industry a more desirable neighbor. High-quality water purification and sewage treatment will be available at lower costs through systems based on ecological engineering. "Green" building technologies will bring dramatic advances in energy efficiency, indoor air quality, sustainable produced materials, environmentally friendly construction processes - and the livability of homes and workplaces.

Our vision is one of prosperous communities that provide jobs for all. Within those communities, the excessive economic polarization that divides us today will be overcome. Poverty will be reduced steadily as the conditions that produce it are eliminated. High-quality health care will be available to all. Lifelong learning and training opportunities will allow people to continuously upgrade their skills. The needs of the disabled, the mentally disadvantaged, and other special groups will be met with understanding. Homes will be affordable. A sense of security will replace fears of a dismal economic future.

Communities will think globally and act locally. They will attract global businesses and encourage local businesses to reach out into the global economy. But they will also protect themselves from job losses due to changes in global competition by encouraging diversity in the local production of goods and services. Higher energy efficiency and increased use of renewable energy will keep money

circulating in local economies rather than flowing out to pay for oil imports. Farmers adopting sustainable agricultural practices will produce a wider variety of foods for local and regional markets.

Attracting businesses that incorporate environmental considerations into the design of their products and processes will pay off in terms of jobs and growth as well as environmental quality. Many communities will create eco-industrial parks which improve production efficiency and minimize negative environmental impact. Eco-industrial parks that co-locate a number of businesses will make use of each other's byproducts, so that each firm's "waste" is always another firm's "food."

Walkable neighborhoods will encourage neighbors to know and feel responsible for one another. Crime and violence will decline to the point where we feel safe being out in our communities at any time of the day or night. We will invest money to create high-tech schools, not just high-tech prisons.

We will be responsible in our stewardship of the ecosystems and natural resources that underpin our economies and human life itself. The health of our communities will not be threatened by pollution and toxic wastes. The water we drink will be pure and the air safe for all to breathe. Large recreational open spaces and natural areas filled with wildlife will be preserved to sustain and uplift us.

Finally, we hope that these developments will affect the national psyche to the point where Americans feel a strong sense of community has renewed our capacity to work together to solve problems and improve our neighborhoods, communities, and ultimately, our lives. We hope for a nation that can once again feel confident that those who come after us will have better opportunities and choices in the future because of the wise decisions we have made and the positive changes we have created.

This is a hopeful vision. It is not a naive one. We recognize the magnitude of the challenge if we are to achieve these ends - but we also recognize the capacity of the American people to achieve extraordinary ends when we work together. Together we have built a nation that is the envy of many. Is it naive to think we can now save that which we have built, and in the process, make it even stronger?

## **Goals toward sustainable communities**

Ten goals were developed by the task force to express their aspirations for more sustainable communities. These interdependent goals were used as guides for developing the policy recommendations that follow.

Although the task force did not finalize indicators for each of these goals, it recognizes the importance of measures of progress. Appendix E includes a compilation of initiatives to develop indicators.

## **Community Capacity Building**

### **Goal 1: Community Involvement and Decision Making**

To create communities where people participate actively and knowledgeably in community affairs, and where open and democratic decision-making processes involve all parties potentially affected by decisions.

### **Goal 2: Equal Opportunity**

To create equal opportunity for all people to improve their quality of life.

### **Goal 3: Fully Informed Decision Making**

To improve the quality of decisions made by policy makers, businesses, and individuals through more complete information - including accounting and pricing mechanisms - about long-term economic, environmental, and social costs and benefits.

## **Partnerships for Design**

### **Goal 4: Sustainable Community Design**

To design and revitalize communities within a context of regional cooperation to reduce sprawl, preserve open space and historic buildings, use land and infrastructure efficiently, and increase mixed-use and mixed-income development.

### **Goal 5: Transportation and Access**

To improve access to jobs, services, and activities: To decrease pollution by providing greater transportation choices including mass transit, and by encouraging use of communications technologies that reduce the need for travel.

## **Economic Development and Jobs**

### **Goal 6: Economic Development and Jobs**

To improve the ability of people to meet their needs: To provide a high quality of life, and improved employment opportunities, through economic development that preserves and enhances the natural environment.

### **Goal 7: Education and Training**

To achieve full literacy: To provide all people with opportunities for continuing education and training for jobs in the marketplace, and to participate knowledgeably in community affairs, thereby making the United States more competitive.

### **Goal 8: Suitable Technology**

To maximize the benefits and minimize the adverse impacts of economic activities by utilizing environmentally sound technologies for energy production and use, transportation, manufacturing, information transfer, construction, agriculture, and natural resource management.

## **Safe and Healthy Communities**

### **Goal 9: Safe and Secure Communities**

To increase the safety of communities, enabling people to live, work, and play without fear.

### **Goal 10: Healthy Environment for All**

To ensure that all Americans enjoy a healthy environment - where they live, work, and play - that provides access to nature, clean air and water, safe food, and that is free of environmental hazards; and to ensure that no segment of society is disproportionately affected by environmental risks.

## Chapter 2

### Vision Community Capacity Building

*What brings together the members of any community may be common locality, common problems, common interests or investment, or initiative - but at heart, a true community is one in which problems, hopes, and challenges are shared. In a community that sustains itself, people face issues and seek solutions together, accounting for each other's differences and commonalities. We all wish to breathe clean air and drink clean water; we all wish to have good work and real opportunity; and we wish to give these things to our children, whom we love. This is true everywhere.<sup>2</sup>*

-Institute for Sustainable Communities

A simple definition of capacity is the ability to do something. As people and their communities are confronted with the complicated challenges of modern life, their ability to resolve problems and create better visions for the future can often be measured by the answers to a few simple questions:

- Is there a spirit of community that makes people believe that the future of their town or city is a shared responsibility and opportunity?
- Do people believe they can have an impact on the decisions that affect their lives and are they engaged in discussing community problems and subsequent solutions?
- Do people have access to information that translates into the knowledge necessary to understand problems and choose the solutions that will bear fruit in the long term?
- Is the community working cooperatively with others in their region or metropolitan area who are also affected by these problems?

Throughout the United States, communities that can answer these questions affirmatively are pioneering the efforts to implement sustainable development on the ground. By listening to the stories of community successes and failures, the task force learned much about the innovative policies and programs that are being implemented to address critical issues.

But, perhaps most importantly, the task force learned that the fundamentals of sustainable communities are based in process - how people work together to build community, what information they can access, who is involved in making decisions, and how well communities work cooperatively to address shared problems that transcend their borders. The spirit of the four process-oriented recommendations in this chapter lay the foundation for the policy chapters that follow.

A diverse set of key actors is identified in the vast majority of the action items recommended in this report, because no single institution working in isolation can create the kind of broad-based momentum that will revitalize communities. Time and time again, community leaders told the task force that broad-based action is necessary to build the partnerships that can drive us forward. Lasting solutions are best identified when people from every part of a community - business, citizens, economic development and environmental groups, elected officials, civic organizations, religious institutions, and so forth - are brought together in a spirit of cooperation and respect to identify solutions to community problems.

Unfortunately, our ability to work together to find common ground appears to be diminishing, and many Americans feel a loss of the sense of community that once bound people together in neighborhoods and towns. The time and energy of many families is already drained by juggling the demands of work and family. Cynicism toward government is high, and participation in civic life is declining. Recent research shows that membership in community organizations is decreasing steadily.<sup>3</sup> Polls show a decrease in voter participation and a lack of knowledge on even basic issues such as the identity of elected officials. In addition, the diversity that defines the character of our nation is sometimes viewed as a hindrance to community instead of a source of strength.

Despite these negative trends, communities across the country are using a variety of strategies to bring people together to identify, prioritize, and learn about key local issues. They are looking to the future and standing side by side with neighbors to develop a vision of what they want their community to be. They are setting goals and establishing indicators to measure their progress and inform policy decisions. They are prioritizing issues according to the best science and

information, and to the cost-effectiveness of the solutions. They are working to identify resources, securing the funding from businesses, foundations, and other local institutions and individuals needed to reach their goals, and assessing non-monetary resources in their community that can be contributed to these efforts.

This rejuvenated style of community-based strategic planning is expanding the concept of planning. While still relying on the expertise of professional planners, it also recognizes the great value of involving everyday people. From the Northeast to the Pacific Northwest, and the floodplain of the Midwest to the Florida panhandle, communities are using this model of strategic planning to reinvigorate democracy and to create a renewed sense of community. By developing a strategic plan that involves the diverse sectors of the community and generates leadership that results in specific actions, communities have taken active steps to create a better future for themselves.

Communities are creating educational campaigns to increase voter registration and voting, inform residents about important issues, and influence policy decisions on those issues. The growth of civic journalism has been seen in cities as diverse as Charlotte, North Carolina and Wichita, Kansas and states like Wisconsin. Civic journalism projects across the country are using the power of the press to create multimedia campaigns that inform, educate, and engage people in public affairs. By creating forums for debate, discussion, and education, civic journalism is revitalizing democracy. Surveys show that these campaigns are working - spurring interest in elections, encouraging people to vote, and educating people on key community issues.

While every community may not be able to establish a full-blown strategic planning process that includes the entire community, a spirit of cooperation, collaboration, and partnership should permeate decision-making. In addition, all levels of government should encourage this cooperative model of planning to get different stakeholders to work together whenever possible. Not all community plans and policies will be fashioned in a consensus-based process, but the greater the cooperation at the front end, the less the need for confrontation and litigation at the back end.

In addition to spurring a new ethic of partnership, communities are recognizing the value of a decision making process that integrates economic, environmental, and social issues. Recognition of these connections is important because these problems are interconnected in daily life, and

approaching them one at a time is not particularly effective. In fact, it is often counterproductive, leading to short-term fixes and long-term difficulties, a situation society can ill afford.

True participation means giving people the opportunity to take part in the initial phases of planning, not just the ratifying decisions that have already been made, or commenting on plans that have been drafted. In some of the most impressive and effective examples of communities at work, the task force saw leaders working to ensure that people have greater power over and responsibility for the decisions that shape their communities. Fundamental to the long-term success of community-driven solutions is the opportunity for all residents of the community to participate, including people who have been historically under-represented in decision-making. While it is time-consuming and may not be possible in every situation, this model of decision-making should be encouraged. It will add legitimacy to the democratic process about which so many Americans are cynical, and it can lead to decisions that are more likely to be embraced by more people in the community.

While citizen participation is primarily a personal decision made by individuals, governments and the private sector can encourage people to be more involved by addressing the barriers to participation. Accessible locations, convenient times, and well-publicized public meetings should be the norm. In addition, some communities are creating innovative child-care arrangements so that parents can attend meetings, and businesses are allowing employees time off to participate in community activities. Some communities are creating public participation opportunities that go beyond holding meetings. They are setting up bulletin boards, email, and chat rooms on the Internet, and mailing surveys to solicit input on local issues.

As decisions are made, it is important to understand the risks and benefits of policies so that they do not create disproportionate impacts that put some people and communities at greater risk while benefiting others. In this vein, the links between sustainable development and environmental justice are clear. The vision of environmental justice is the development of a holistic, bottom-up, community-based, and cross-cutting paradigm for achieving healthy and sustainable communities - both urban and rural. Environmental justice seeks to integrate economic, environmental and social concerns as does sustainable development. An important component of environmental justice is the right of local residents to participate as equal partners at every level of decision-making, including needs

assessment, planning, implementation, enforcement, and evaluation.

Government policies are not the only important decisions that are made in a community. Businesses, and others in the private sector, make decisions every day that affect people's lives. Understanding their role in the community and as good corporate neighbors, some companies are working to increase their accountability and responsibility to the communities in which they operate. For example, some companies include community participation in reviews of plant managers. Others are working in partnership with community residents where their facilities are located by participating in joint audits, inspections, and asking for input - such as suggestions for toxics use reduction - on how to prevent potential problems.

People need accessible, understandable information to make decisions and educate themselves about community issues. In addition, all stakeholders in community decision-making processes need the skills and training to take advantage of newly emerging technologies and tools that make easy manipulation of information possible.

Accurate, accessible information is not only necessary for sound decision-making, it is also an extraordinary tool for spurring initiatives in other communities throughout the nation and the world. Communities need concrete, identifiable examples of innovative projects that work. This information is pivotal to driving the creation of more sustainable communities, particularly because these examples build a base on which to work and refine strategies for solving economic, environmental, and social problems. The constantly evolving nature of community programs and policies also informs decisions made at the regional, state, and federal levels of government, and eliminates the need to re-create the wheel each time.

Although a community policing project in Des Moines may not be directly replicable in Los Angeles, the lessons learned from one community can inform and educate those in another. The sharing of information among communities, businesses, and individuals is essential if we are to learn from one another's experiences and implement the most effective strategies for achieving safe, healthy, and prosperous communities tailored to the unique needs of a specific place.

A considerable number of articles and publications have been written, and numerous awards programs and databases created, to disseminate information on sustainable development. But this information proliferation can be

overwhelming: If it is not well-coordinated and easily accessible, it does little to help potential practitioners develop the knowledge they need. Technical studies and data also need to be translated into layman's terms so that communities can effectively use this information. At the same time, many communities that are faced with multiple sources of pollution need access to information that accounts for the cumulative nature of their exposure and potential health risks.

Communications technologies, such as the Internet and the World Wide Web, are making it possible to provide a single point of entry to electronic information that is also connected to other related areas. New mapping software and technologies are also simplifying the manipulation of technical information to apply it to specific local circumstances. But because these technologies are not available to many of the people and communities that need them most, any broad-based efforts to use these emerging technologies should be tied to increasing access to the computers and technology that make them possible.

It is not possible to create a perfectly organized stream of sustainable development information. However, governments can leverage their resources by working with nonprofit organizations and associations of elected officials and professionals, for example, to pool information, success stories, case studies, and bibliographies. At a minimum, those who serve as hubs of sustainable communities information should communicate regularly and work cooperatively to identify information gaps and reduce unnecessary redundancies. In addition, these groups should work together with residents and activists to coordinate efforts to get that information into the hands of key decision-makers who can implement policies to eliminate barriers to sustainable development.

Widespread participation by informed stakeholders in an open and inclusive decision-making process within communities can successfully address many problems. However, many issues - such as public safety, economic development, and air and water pollution - require cooperation among communities within a region. Whether the decision-making process of communities within a region is coordinated or disjointed has enormous effects on the nature of development. By working together, communities can tackle these issues that affect and can benefit an entire region. This collaborative approach is not only an opportunity, it is a necessity. Community leaders who met with the task force emphasized that without regional approaches, it will be nearly impossible to solve the most critical problems that affect communities. In particular,

because many design issues - such as transportation, land use, and sprawl - transcend political boundaries, coordinated regional strategies are necessary to realize sustainable community design.

By creating incentives to encourage communities to work together, state and federal governments can improve the decision-making process and promote long-term, holistic solutions to regional problems. Building stronger links among people, communities, and the decisions that affect them can revitalize grassroots democracy to strengthen communities, regions, and the nation.

### **Policy Recommendation 1**

**Action 1.** Diverse community groups and citizens should work together to take the steps outlined above as part of broad community-based process. As part of local planning, issues should be evaluated using the best available information, science, long-term cost effectiveness, and public participation.

**Action 2.** Federal and state governments “in consultation with local government, the private sector, and nongovernmental organizations” should support and further encourage local efforts to integrate economic development, environmental protection, and social equity concerns and should promote public participation in planning efforts. For example, they should reaffirm the value of such planning through the reauthorization of the Intermodal Surface Transportation Efficiency Act, and they should apply the requirements of such planning to federal and state funding and incentives for economic development, housing, transportation, and environmental programs.

**Action 3.** Community-based coalitions can create educational, media, and civic journalism campaigns to encourage participation in civil life and voting, disseminate high-quality information on community issues, and promote public discussions that will lead to the resolution of these issues. Coalitions should be as broad as possible, including industry and business, schools, newspapers, television and radio stations, community groups, labor, local government, religious institutions, and organizations working on social, economic, and environmental issues.

**Action 4.** As part of the dialogue and planning process, community-based coalitions can work to draft an economic development strategy that will fulfill basic human needs by taking advantage of local and regional opportunities and new economic trends, such as the opening up of global markets and

the improvement of environmental and communications technologies. Coalitions should include businesses, employees, unions, chambers of commerce, local government, community groups, and residents.

### **Policy Recommendation 2**

**Action 1.** All levels government should ensure substantial opportunity for public participation in all phases of planning and decision-making to allow those affected by decisions to have a voice in the outcome. Governments should create new methods and expand existing ones for getting the public involved in planning and development decisions, as well as in the legislative process, taking steps to ensure that historically under-represented groups are involved.

For example, regional planning organizations, metropolitan planning organizations (MPOs), zoning boards, and other government entities that are active in the design of communities should take responsibility for ensuring that local residents have a substantive opportunity to participate in crucial early planning and development decisions.

**Action 2.** All levels of government, but especially local government, should identify impediments to greater public involvement in decision-making - such as language barriers and lack of child care and transportation - and develop strategies to overcome them.

**Action 3.** Businesses can encourage their managers and employees to participate in community affairs and can establish advisory boards to recruit residents to provide input to the company on issues relevant to the community. In addition, businesses can give employees flexibility to increase the time that they and their families can devote to community activities.

**Action 4.** While working to minimize all unacceptable environmental risks, all levels of government should work with community groups and the private sector to ensure that environmental risks and benefits are more equitably distributed among and within communities.

### **Policy Recommendation 3**

**Action 1.** Institutions and individuals with knowledge or expertise in sustainable community development should coordinate efforts to share and provide information to communities, decision-makers, and other relevant constituencies. They should explore ways to link currently

existing databases; coordinate technical assistance; co-sponsor conferences and other meetings; take advantage of emerging communications technologies, such as the Internet; and provide easily accessible points of entry for those interested in this information. These institutions and individuals include government agencies, elected officials, nonprofit organizations, businesses, academic institutions, economic development and environmental organizations, community groups, and professional associations (from planners, architects, and engineers to ecologists and economists).

**Action 2.** All levels of government should improve the user-friendliness of government-collected information and technologies to help communities use them to solve problems and to educate the public. Potentially useful information includes census data, Toxics Release Inventory data, other right-to-know statistics, public investment and lending information, economic statistics, and data derived from remote sensing and satellite technologies. Potentially useful technologies for manipulating this data include mapping tools, geographic information systems (GIS), and customized GIS application databases (e.g., LandView II).

**Action 3.** Community-based coalitions should work with companies, federal and state regulatory agencies, and health risk assessors to develop profiles of neighborhoods that are environmentally high-risk as a tool for setting pollution abatement priorities.

## **Policy Recommendation 4**

**Action 1.** Communities should collaborate to identify, prioritize, and learn about key problems in their region; develop a vision of what they want their region to be like; set goals for realizing that vision; establish benchmarks for measuring progress toward these goals; ascertain the resources needed to reach the goals; and determine the actions that will advance them.

**Action 2.** States, counties, and municipalities should collaborate to create a system of regional accounts that measures the costs and benefits of local land use, development, and economic trends, and show how these benefits and costs are distributed in the short and long run. The federal government should work with state and local governments to ensure that federal statistical resources are available and used appropriately to support the measurement of benefits and costs.

**Action 3.** Federal and state governments should provide incentives for communities to collaborate on issues that transcend local political jurisdictions, such as transportation, land use, economic development, and air and water quality. Federal and state agencies responsible for environmental protection, economic development, land use, and transportation policies should work with one or more selected geographic areas to develop integrated planning and development activities, and to require region-wide cooperation in these areas.

## Chapter 3

### Partnerships for Design

Society's investments should aim to create places that people want and can sustain. The built environment is a critical factor in shaping the quality of life, accessibility, environmental burden, and unique character of a community, which contributes to a sense of place. The ways in which homes are designed and constructed, commercial buildings erected, roads and sewers laid, whole neighborhoods and communities planned and built, and open space allocated and preserved are all fundamental to creating a community that is sustainable.

The effect of the built environment is powerful. People can immediately sense when they enter a place whether it is well-designed. Although well-designed communities and buildings may differ in style, scale, or location, they are durable, integrated into their natural setting, and efficient in serving their purposes. Design and architecture also play an important role in facilitating or discouraging human interaction. Communities built with sidewalks, town squares, houses with front porches, parks, and other public meeting places encourage people to interact. Active street life is an excellent indicator of good urban or suburban design. Good planning and design can promote public safety, provide access for handicapped individuals, and create places where children can play safely from traffic.

The principles of sustainable design can be reflected in the physical infrastructure of a community. These principles include efficiency, durability, and respect for the human side of design - aesthetics, history, and culture. Sustainable building design and community planning make efficient use of existing infrastructure, energy, water, materials, and land. Not only does such use save money, it also safeguards public health and the environment and conserves natural resources. Building codes can shape how much energy, water, and materials a building consumes in its construction and operation. Zoning ordinances frequently influence decisions on the construction, design, and siting of buildings and developments, and therefore the degree of likely human interaction. The casual contacts that create a sense of community are accomplished on foot or bicycle not when people are racing around in their cars. Efficient land use protects vulnerable environmental areas that provide important benefits to society. For example, undeveloped coastal areas, watersheds, and floodplains absorb the forces unleashed by

nature. In contrast, development in these areas exposes people and their investments to unnecessary risks and natural hazards. Preserved wetlands can filter water far more cheaply than expensive water treatment facilities.

Design, by definition, involves planning and making deliberate decisions. This occurs on different scales in the context of a community. The recommendations in this chapter are organized along these scales of design. The first scale relates to the design of buildings and other structures within the community. The second relates to the physical layout of streets, transit, residences, stores, and workplaces in the community. The third ties the community to others in the region.

Americans spend billions of dollars every year to heat, cool, and operate the buildings in which we spend the vast majority of our time; for example, in 1994 that amounted to \$220 billion.<sup>4</sup> Energy costs are a major business expenditure, a basic household expense for families, and a huge drain on the local economy. Studies show that in a typical community, 70 to 80 cents of every dollar spent on energy immediately leaves the local economy.<sup>5</sup> The United States now imports more oil than it produces, making oil imports a significant contributor to the national trade deficit.<sup>6</sup> Energy costs have direct equity impacts for low-income families who often live in the most inefficient, poorly-built homes and drive the most environmentally hazardous automobiles. Research has shown that high utility bills are cited as a primary reason for uprooting low-income families. Low income households spend almost three times the amount for utilities and fuel than the average American households.<sup>7</sup> In the United States, the average household spends 18 percent of its family budget on automobile expenses - in comparison to Europeans, who incur only 7 percent.

But through the use of mixed-use community design and energy efficiency technologies - such as daylighting, occupancy sensors, compact fluorescent light bulbs, high-efficiency gas appliances, insulation, and low-flow toilets and showers - energy costs can be lowered significantly. Not only do these designs and technologies save energy and transportation costs and keeps money in the local economy, studies have shown that they have multiple positive effects for the people who spend time in these neighborhoods, stores,

hospitals, and offices. Daylighting, the use of natural light through windows and skylights, is but one example. In a recent study, researchers at the Rocky Mountain Institute documented that sales were significantly higher in areas of a store that was daylit, and that employees were vying to work in those departments. Productivity increased in offices because absenteeism declined and efficient lighting improved the quality of work performed. Patients recovered more easily in hospital rooms that use natural light. These improvements go above and beyond the economic payback of efficiency retrofits. For example, after reducing its electricity use for lighting by up to 90 percent, the Boeing Company achieved a 53 percent return on its investment, and was also rewarded with reduced product defects in its facility near Seattle, Washington.<sup>8</sup>

Historic buildings give society an important sense of tradition and education about the past. Preservation of existing structures also offers a way to reuse and recycle materials and related infrastructure. By rehabilitating older buildings, communities can save energy and materials and establish a sense of historical continuity. Reuse of existing structures is the ultimate recycling. Through building rehabilitation, society captures the embodied energy of the bricks, mortar, and other materials. The National Trust for Historic Preservation estimates that the energy equivalent of one gallon of gasoline is wasted for every eight bricks destroyed and replaced. In addition, construction and demolition debris accounts for 24 percent of America's landfill volume. This debris is not combustible. Buildings that are designed for reuse are particularly important because the adaptability of structures can often dictate whether they are demolished or retrofitted.

Localities have used zoning and other ordinances to foster historical connections. For example, the beauty of Boston's Back Bay with its many bay windows is the result of a zoning code that allowed one-third of each building to extend over the street. Charleston, South Carolina and Savannah, Georgia, number among the many historic areas that have protected their architectural heritage, enhanced property values, and created tourist attractions by using similar design measures and by making historic preservation a priority. James Howard Kunstler writes that "physical surroundings worth caring about" are "dependent on connectedness, on continuities, on the relation of one thing to another..."<sup>9</sup> Unfortunately, instead of fostering connection, community design in the United States often advances the opposite. In the words of architect Peter Calthorpe, the usual landscape of America communities is one "of absolute segregation...not just in terms of income, age or ethnicity, but simple functional uses."

The segregation of land uses is exacerbated by the fact that most American communities have been designed with only one transportation option in mind: the automobile. Limited transportation choices restrict the mobility of those who cannot afford a car, and of those who are too young or too old to drive. This lack of mobility also affects the lives of adults who spend significant time acting as the family "chauffeur." In addition to the economic costs already discussed, stress from congested roads affect people's lives every day. The average American automobile commuter will spend two and one-half years of his or her life stuck in traffic. The environmental costs of a transportation system dependent on single-passenger motor vehicles are also spiraling. Pollution from automobile emissions is a major factor contributing to poor air quality. But until communities are designed to allow for or even encourage other forms of transportation, cars will prevail as the option of choice.

Location efficiency is an important component of sustainable design that connects housing with commercial and recreational areas. Zoning ordinances that allow for mixed-use development, such as having a store, apartment building, and school on the same block, can permit people easy access to a range of facilities and the ability to walk to obtain goods and services. This can result in decreased reliance on automobiles, which reduces congestion and air pollution, and provides access to these goods and services for those who cannot drive. Mixed-use, more accessible, transit-oriented neighborhoods and communities with strong focal points have several advantages over their sprawled and single-use counterparts. They require less infrastructure, and use that infrastructure more efficiently which translates into lower costs for municipal services. They also conserve valuable open space and promote human-scale environment. Mixed-use development also makes it easier to integrate affordable apartments and homes into neighborhoods instead of creating isolated tracts of subsidized housing for low-income families. By including a diversity of housing choices within close proximity, opportunities are created for low-income residents and elderly households that are increasingly living in multi-family dwellings. These efforts should go hand in hand with the enforcement of fair housing practices to prevent income, ethnic, and/or age discrimination.

Smart growth integrates the principles of sustainable design into development decisions that extend beyond the reach of one community's political jurisdiction. While some spatial expansion of communities may be necessary, it is the nature of that growth that makes the difference. Sprawl is defined as

low-density development that spreads out from the edges of cities and towns. It is poorly planned, and often situated without regard to the overall design of a community or a region. It often results in types of development - such as rambling, cookie-cutter subdivisions and strip malls - that perpetuate homogeneity, make inefficient use of land, and rely almost exclusively on automobiles for transportation. Abandonment and underutilization are the principles embodied in sprawl development. The United States has invested billions of dollars in the infrastructure of existing communities. Abandoning this infrastructure or allowing it to deteriorate and be wasted while spending additional money on new infrastructure for low-density sprawl is the exact antithesis of sustainability.

In addition to the fact that sprawl is inherently economically unsustainable, the environmental and social costs of sprawl are significant. The U.S. Department of Agriculture estimates that 4 million prime farmland acres were lost to development between 1982 and 1992.<sup>10</sup> In California, the population has grown by 40 percent in the last two decades while vehicle miles traveled has doubled.<sup>11</sup> Emissions from automobiles is a major source of the air pollution for which the state has become infamous. In addition, studies are increasingly uncovering the basic inequities of sprawl development. For example, a recent study by the Surface Transportation Policy Project shows that "on average, the nation's urbanized areas received 46% of fiscal year 1995 federal roadway dollars, while such areas represent 64% of the nation's population. Comparatively, rural areas which represent 28% of the population received 39% of FY 1995 roadway funds, and small towns and low-density suburbs which represent 9% of the population received 14% of roadway funds."<sup>12</sup> While they are being "left behind," cities are also subsidizing the costs of new development in the suburbs. Sprawl leads to urban decline and also destroys natural habitats and threatens the character of rural life and farming communities. Visionary planner Frederick Law Olmsted described urban parks as "the lungs of a city."<sup>13</sup> This also holds true for more rural regions. Forests, farmland, mountains, plains, deserts, and swamps give the nation vital breathing room.

Smart growth saves money by safeguarding society's investments. It promotes the reuse of existing neighborhoods and communities to capture the existing public infrastructure and private investment, and minimizes ongoing support costs. By implementing alternative patterns of growth, communities can accommodate their needs for development while preserving their environment, saving money, and reinvesting in existing neighborhoods. In New Jersey, a recent study

concluded that if implemented, growth management policies could save state taxpayers approximately 1.4 billion dollars in capital infrastructure costs, including \$699 million in road costs, \$561 million in water and sewer costs, and \$173 million in schools over a 20-year period.<sup>14</sup> While communities are beginning to recognize the economic, environmental, and social costs of sprawl, this inefficient style of development continues unabated in many places. It is important to recognize that sprawl is caused and perpetuated by a combination of incentives established by government policies and individual decisions made in response to a complex array of factors. Sprawl development provides immediate and direct benefits to the people who move there, but the costs are longer-term and borne by society at large. Benefits of developing open space are experienced one house or one business at a time. The benefits are tangible and immediate. The costs are harder to measure. In the absence of accurate accounting measures, market forces perpetuate sprawl.

Private decisions can be greatly influenced by government policies that are not always readily apparent. For example, federal tax policies provide incentives for people to move outward from urban areas by providing an exemption from taxes on capital gains if they move into a more expensive house. Research shows that because most higher-priced homes are located further from center cities, so most homesellers have little choice but to move further out to avoid incurring a tax penalty.<sup>15</sup>

Given the importance of development decisions, it is essential that communities work cooperatively to understand and evaluate the potential long-term consequences of decisions made and to adapt them for the long-term well-being of the community in its many dimensions. New development should also be based upon the carrying capacity of a region, which is the environment's finite ability to support human activity and continually renew itself. State and federal governments should work collaboratively with communities to devise ways to measure the consequences of different types of development to help local governments make these decisions. Some communities are working together to create regional strategies for transportation, land use, and economic growth. For example, in the Portland, Oregon, metropolitan area, communities are working together to plan for the explosive population growth that the area has experienced since the 1980s. By using coordinated decision-making and establishing an urban growth boundary, these communities are conserving open space and prime farmland to preserve the quality of life that has attracted so many people to Portland in the first place. Communities are also employing community impact analyses

to educate themselves on proposed development during the planning phase when adjustments can be more easily made. For example, in Albany, New York, the Capital District Transportation Committee is developing full-cost accounting measures that include aesthetics and the costs of sprawl development to help them evaluate the impact of transportation and subsequent land use decisions.

While smarter growth will help address a number of problems caused by sprawl development, it is important to recognize that many of the communities that have been neglected and left behind for years will need renewed attention. The cycle of disinvestment in many cities has resulted in safety concerns, inadequate schools, and city services that are considered subpar by many. To stem the exodus of people from cities, these problems must be effectively addressed and the quality of life improved.

### **Policy Recommendation 5**

**Action 1.** Builders, architects, and engineers should design new buildings and rehabilitate existing ones to be healthy, livable, resource-efficient, and adaptable to new uses. These buildings should feature energy efficiency, daylighting, non-toxic recycled and recyclable construction materials, and designs that promote human interaction. They should also recognize the importance of historic preservation -capturing the resource of the embodied energy of existing buildings - and promote zero-waste building practices. **Action 2.** Builders and landscape architects should encourage building design that recognizes the integration between the built and natural environments through landscaping techniques such as the use of native plants, which can reduce the need for fertilizers, pesticides, and water; and shade trees which can reduce energy use.

**Action 3.** Federal, state, and local governments should work with builders, architects, developers, contractors, materials manufacturers, service providers, community groups, and others to streamline regulations that allow builders and architects to implement the above-outlined sustainable building and construction practices. They should publish or otherwise make available information about model building codes, zoning ordinances, and flexibility for better building permit approval processes for residential and commercial buildings - so that local decisionmakers can adapt them to reflect local conditions and values.

**Action 4.** Lenders, community groups, and historic preservation groups can work together to identify financing

for retrofitting buildings to be energy-efficient and for rehabilitating historic buildings. Local governments can enact ordinances to preserve historic buildings, adapting them for new uses whenever possible, and removing incentives for demolishing them.

**Action 5.** Educational institutions at all levels, particularly technical and graduate schools, should provide interdisciplinary training to encourage engineers, architects, landscape artists, and other design professionals to integrate sustainable building and construction practices, as outlined above, into common use.

### **Policy Recommendation 6**

**Action 1.** Local jurisdictions should structure or revise local zoning regulations and permit approval processes to encourage mixed-used, mixed-income development co-located with diverse transportation options in areas that are already developed and especially where transit infrastructure is already in place.

**Action 2.** Federal and state governments and the private sector should form teams to help local jurisdictions reduce sprawl, and design developments that are resource-efficient and livable. Teams should include design and financing professionals, engineers, transportation specialists, land use experts, economic development and energy-efficiency experts, retailers, natural resource managers, and others.

**Action 3.** The federal government should change federal tax policy to provide the same tax treatment of employee parking benefits and employee benefits relating to the use of mass transit, walking, and bike riding. For example, employers currently receive a tax deduction for providing parking and most do not charge for employee parking. While a much smaller tax-free benefit (less than half the amount) is also available for transit, no such incentive exists for those who neither drive nor take transit.

**Action 4.** The federal government should give credit toward attainment of national Clean Air Act Amendment ambient air-quality standards to communities that lower traffic by adopting zoning, building code, and other changes that encourage more efficient land use patterns that reduce air pollution from motor vehicles.

## Policy Recommendation 7

**Action 1.** The federal government should redirect federal policies that encourage low-density sprawl to foster investment in existing communities. For example, it should encourage shifts in transportation spending toward transit, highway maintenance and repair, and expansion of transit options rather than new highway or beltway construction. It should also change the capital gain provision in section 1034 of the Internal Revenue Service code to allow homesellers to defer tax liability even if they purchase a new home of lesser value. Currently the code allows deferred tax liability on capital gain realized during ownership only if homesellers purchase another home priced at least equal to the one sold.

**Action 2.** Federal agencies should work with states and communities to develop ways to evaluate the costs of infrastructure in greenfield or relatively undeveloped areas to examine subsidies and to correct market incentives in the financing of capital costs of infrastructure, such as sewers and utilities, for development of land bordering metropolitan areas. In addition, local governments and counties can work together to use community impact analyses and other information on the environmental carrying capacity of a region as the foundation for land use planning and development decisions. Federal and state governments should also help local

governments develop a metropolitan or regional planning instrument to evaluate alternative modes of development, accounting for the present value and costs of infrastructure, transportation inefficiency, land consumption, provision of social services, environmental quality, congestion, and fiscal impacts, as well as the impact on access to jobs, services, open space, and social and cultural amenities.

**Action 3.** All levels of government, policy experts, residents, and community organizations can work together to conduct analyses of how public resources for infrastructure are spent to benefit different communities - for example, comparing the center city, outer suburbs, and rural areas. These analyses can be used to reorient priorities, if necessary, and direct future expenditures.

**Action 4.** Local governments and counties can create community partnerships to develop regional open space networks and urban growth boundaries as part of a regional framework to discourage sprawl development that threatens a region's environmental carrying capacity. These partnerships can conserve open space through acquisition of land and/or development rights. For example, public water departments can budget to acquire land necessary to protect public water supplies. Private land trusts can expand their acquisition of wetlands or other valuable open space.

# Chapter 4

## Economic Development and Jobs

Sustainable development is premised on improving how society meets human needs for all people in a manner consistent with protecting the natural environment. A strong local economy is fundamental to a sustainable community because economic development and the jobs it creates are the vehicles for meeting human needs. Before anything else, people must be able to provide for the basic necessities of food and shelter for themselves and their families.

The economy of the nation as a whole depends significantly on the success of its many interconnected local and regional economies. In recent years, dramatic changes in the global economy have resulted in major shifts in local economies as both national and local markets adjusted to the trends. In some ways, the nation became more competitive. In the process, however, many local economies lost jobs and/or income; for some, the future of their communities was endangered.

Strategies to create strong, diversified local economies are needed to weather “and even take advantage of” fundamental shifts in national and international economies. The communities that prosper will be those that develop strategies to create resilient local economies that make the unique strengths of their people and their place a source of competitive advantage. Local economic development proposals should fill a niche in the regional economy, and promote partnerships among the private sector, workers, educators, and government. Business is a powerful force in our society: the expertise and unique resources of the private sector should be tapped within a process that brings diverse stakeholders together to forge new solutions to local economic problems. These efforts can create an environment that promotes entrepreneurship, innovation, and small business growth to marshal resources within the community to fill local economic needs.

A key part of a community's economic development strategy is to increase the diversity of the local economic base and to retain wealth in the community. Many communities are promoting this diversity by supporting businesses and industries that are at the forefront of environmental economic development opportunities. Environmental technologies promise both cleaner traditional industries and an important opportunity for creating jobs for the future that are based on

cleaner and more efficient technologies. Strategies include investments in resource efficiency to improve the profitability of small businesses, mining the solid waste stream to develop community-based recycling businesses, supporting eco-industrial parks, and targeting the benefits of increased efficiency to create jobs and economic opportunity. A systems approach to community-wide economic development promotes maximum resource and energy efficiency of businesses, the community, and the region. Economic growth is achieved and human needs are met with improved efficiency and environmental performance. Pursuing such concepts requires imagination and effort. Initially, extra resources may be called for, but the rewards can be significant.

For example, due to rising demand for paper, New York City expects to earn tens of millions of dollars from selling newsprint collected through its municipal recycling programs. The city has turned its disposal expense of \$6 million a year into a new industry that is creating jobs and putting money into its coffers. Other communities are taking similar steps. For example, some cities “including Newark, Los Angeles, Oakland, Philadelphia, and even smaller municipalities like Maywood Village, Illinois” have established market redevelopment zones that help them save money on waste management and that promote new industries. These new manufacturing jobs add significant value because raw materials are worth more once they have been baled, pulped, and converted into new products. According to the Institute for Local Self-Reliance, manufacturing recyclables into new products adds significantly more jobs than processing recyclables (which, in turn, creates more jobs than disposing of municipal solid waste).<sup>16</sup>

The creation of an eco-industrial park is another example of a new form of development that pays both economic and environmental dividends. Eco-industrial parks are an environmentally efficient version of industrial parks. They follow a systems design in which one facility's waste becomes another facility's feedstock, and they ensure that raw materials are recycled or disposed of efficiently and safely. This is just one aspect of eco-industrial development. The benefits and savings that will accrue to society from more efficient use of existing resources can provide the basis for an economic

expansion that will increase economic prosperity for all. By preventing pollution, reusing and recycling materials, and conserving energy, new technologies can increase profits, protect and create jobs, and reduce threats to the environment.

The downsizing of the military is one example of external forces that change local economies. Military conversion is the process of reassigning military facilities, equipment, and personnel to new uses which help to mitigate the impacts of base closure. While the loss of a military installation is very disrupting in the short term, many communities are shifting their focus toward the future; and with persistence, creativity, and capital, they are creating positive outcomes that meet public and private needs. Conversion can catalyze sustainable development if appropriate resources are employed in the effort. By incorporating sustainable development principles into the federal dollars spent in the conversion process, including environmental cleanup, the federal government can serve as a catalyst for creating new industries that help these communities diversify their economic base.

Given that perhaps the only natural resource that can be considered unlimited is human intellectual capacity, training and lifelong learning are essential if communities are to develop a flexible, well-educated workforce. Education and training are arguably the most valuable pieces of any economic development strategy because they are the only way to build the intellectual capacity necessary for a trainable and employable workforce. This capacity, in turn, allows a community to adapt to the fundamental shifts in national and international economies that will continue in the years ahead. Partnerships that involve employers, unions, educators, and workers are key to ensuring that employees can take advantage of the opportunities offered by emerging industries.

Many countries and communities are investing in education and training to ensure that they can be competitive in the global economy. Of significant importance is the commitment to raise the skills of the least skilled. For example, policy experts have noted that Germany spends a much larger proportion of its education budget to raise the skills of the least skilled than the United States. They note that one result is that wages have been rising even at the bottom of the income ladder. Ensuring that the poor, inner-city, and rural students and potential workers, and women have access to quality education and training is critically important to increasing opportunity for all. Among these opportunities is the need to ensure that emerging technologies, particularly those connected to the use of computers, are available to as many people as possible.

Communities in the United States are demonstrating a renewed commitment to building more cooperative links among schools, job training providers, and businesses, as evidenced by the many public/private partnerships being established throughout the country. For example, the Chicago Manufacturing Center acts as a liaison between city colleges and employers to gather input for designing course work relevant to industry.

Many communities are also working to redevelop brownfield sites to improve public health and the economic competitiveness of these sites and surrounding neighborhoods. The issue of brownfields “abandoned, contaminated, and/or underused land that is often found in the inner city” is clearly linked to sprawl, land use, and regional decision-making as discussed in previous chapters, but brownfields also present important economic development and environmental cleanup opportunities as well. The term brownfields is used to describe a diverse array of sites. While some brownfields are essentially benign areas simply cluttered with litter, many of them may be complicated by real or perceived environmental contamination. Brownfields differ significantly from Superfund sites, however Superfund sites will require major environmental cleanup technologies and techniques before they are safe.

Cleveland, Detroit, and Chicago are a few of the many cities that are cleaning up brownfield sites as a strategy for revitalizing their local economies and improving the quality of life for their residents. By targeting economic development in otherwise wasted brownfield areas, these cities are planning to create jobs, generate tax revenue, and improve the environmental quality of the inner city. They are working to identify and eliminate barriers to redeveloping brownfield sites and to create partnerships among city, state, and federal environmental agencies, residents, local businesses, and lenders. They are also using incentives to attract and retain business activity. While the issues related to brownfields redevelopment are complicated and controversial “including appropriate cleanup standards, lender liability, and regulatory streamlining” many government agencies, municipalities, community groups, and environmentalists are working together to address them.

Many brownfield sites are located in neighborhoods that have endured extremely difficult economic, environmental, and social conditions for decades. In the spirit of sustainable development and environmental justice, brownfield redevelopment programs must involve local residents in

making decisions about how these sites will be cleaned up and reused. The participation of residents who live near these sites is crucial to the long-term success of these programs. In some cases, residents, developers, and others in the market may not consider these sites to be highly desirable for commercial activity. Brownfields will not be redeveloped for commerce or housing in every instance. In fact, many communities are redeveloping brownfield sites into parks, open space, and even community gardens. Communities including Chattanooga and Sioux City have redeveloped former brownfields into new riverfront developments that include trails, parks, and other recreational facilities “contributing to a better quality of life, revitalizing surrounding neighborhoods, and sparking the interest of businesses that are more willing to set up shop nearby”. It is important for governments to work together with residents, community groups, local government, developers, lenders, and others to identify people's needs and desires for these sites. By working in partnership, these groups can use brownfield redevelopment as one part of a larger strategy for revitalizing neighborhoods.

Access to financing for community initiatives is central to their existence. Funding not only enables community groups and others to implement their ideas, financial incentives also often dictate the choices made by individuals, companies, and institutions.

The task force heard the stories of communities that have been able to marshal an extraordinary amount of money to implement programs developed out of a planning and visioning process by bringing aboard a diverse array of primarily local funders. This diversity is key to fundraising, particularly in this age of constraints for government funding. In addition, emerging financing concepts are expanding opportunities. One example is the concept of a location-efficient mortgage. Such a mortgage would increase the borrowing power of potential homebuyers in high-density locations with easy access to mass transportation. A borrower would qualify for a larger loan based on expected higher disposable income from a reduction in or absence of automobile payments, insurance, and maintenance.

## **Policy Recommendation 8**

**Action 1.** Communities can conduct an assessment of their economic, natural, and human resources to identify their comparative advantages and niche in the larger regional, national, and global economies. Ideally, this inventory and assessment would be conducted as part of a public dialogue and planning process within the community and the region.

**Action 2.** Local governments, businesses, and nonprofit organizations with relevant expertise should work together to create recycling-related manufacturing in conjunction with community-based projects to collect and recycle municipal solid waste. All levels of government should support these efforts by providing information and incentives, and by supporting pilot projects and leveraging their funding with public-private partnerships.

**Action 3.** Federal and state agencies should assist communities that want to create eco-industrial parks that enhance economic efficiency and promote environmental responsibility. They can do so by reducing regulatory impediments to the siting of eco-industrial parks that produce low levels of pollution through a zero-waste strategy in areas with mixed-use zoning; sharing information on similar efforts; and funding pilot projects.

**Action 4.** National business associations, large corporations, environmental groups, and federal and state agencies can work together to promote best practices and techniques in the areas of pollution prevention, materials reuse, and energy efficiency to small- and medium-sized companies.

**Action 5.** Federal agencies should help communities with former military facilities to convert them to new uses using principles of sustainable development. They can do so by bringing together development experts from multiple agencies and providing information on the range of alternatives for redevelopment.

**Action 6.** The federal government and businesses should improve working conditions. Government, for example, should set an adequate minimum wage and proper health and safety standards; and businesses could provide greater flexibility to telecommute, set work schedules to provide more time for community participation and/or parenting, and provide assistance with day care.

**Action 7.** Federal, state, and local government should support job creation and minimize large disparities in the distribution of wealth through tax strategies, health and welfare programs, and other government policies.

## **Policy Recommendation 9**

**Action 1.** Businesses, teachers' unions, school officials, students, religious institutions, and local government within a community should develop training programs to ensure that

workers have the necessary skills to take advantage of current and future economic development opportunities. They should work together to integrate current training programs, and they should marshal funding from the private sector, schools, and government to fill gaps in these programs. In addition to school curriculum, the programs include school-to-work, community service, summer jobs programs, apprenticeships, and job corps opportunities.

**Action 2.** Community-based coalitions should work together to invest in education and to link education and the community by sponsoring youth, tutoring, and other programs; directly funding projects; and providing in-kind and volunteer support. These programs should also focus on the needs of local employers.

**Action 3.** Federal and state governments should help people pursue education and job training throughout their lives by providing tax deductions on tuition, low-interest student loans, and other kinds of financial assistance.

**Action 4.** Federal and state governments, the private sector, and local communities should promote widespread public access to computers and computer skills training.

### **Policy Recommendation 10**

**Action 1.** All levels of government should continue to encourage investment in brownfields redevelopment by eliminating barriers to and creating incentives for the cleanup and redevelopment of brownfield sites. Current efforts, such as the 1995 EPA Brownfields Initiative, need to continue evolving to work in partnership with diverse parties to clarify important issues and find shared solutions. These issues include: lender liability for cleanup; uncertainties for investors such as consistent and quantifiable cleanup standards, enforceable indemnity agreements, and covenants-not-to-sue; timely and conclusive efforts to detect contamination to allow cleanup and property sales to proceed; realistic cleanup standards appropriate to future uses of sites; and strengthening local workforce development.

**Action 2.** All levels of government should work with the mortgage bankers and other members of the financial community as well as with community groups to reexamine policies in light of the substantial progress that has been made by EPA and the Congress to respond to the lending community's concerns. Development of innovative financing tools that make inexpensive, renewable capital readily available for brownfields investment should be encouraged.

**Action 3.** State and local governments should be encouraged to develop revolving loan funds for cleanup activities at brownfield sites. Federal agencies should help provide seed money to capitalize a limited number of state or local revolving loan funds to further encourage their development and use. Federal agencies should continue to provide technical assistance to communities to assess what efforts are needed to inventory, assess, clean up, and redevelop brownfield sites.

**Action 4.** The federal government should assure that economic development programs that were in existence prior to the emergence of brownfields issues make brownfields projects eligible for those programs' funds.

### **Policy Recommendation 11**

**Action 1.** The federal government should work with the housing finance community and with transportation and land use experts to further study, develop, and test pilot a location-efficient mortgage program that will be refined and eventually implemented nationally.

**Action 2.** The federal government should lead a public/private sector initiative to identify and end barriers to financing mixed-use, transit-oriented development. Participants should include: developers, architects, planners, local government officials, and development finance experts (banks, pension and insurance investors, public corporations which provide secondary markets, and community development corporations).

**Action 3.** The federal government should expand the home mortgage tax deduction to apply to mixed-use, multifamily units. It should also expand low income housing finance programs to include these facilities.

**Action 4.** The financing community, policy experts, and all levels of government should work together to establish underwriting criteria and a broader secondary market for loans for buildings retrofitting, mixed-use development, and businesses that harness environmentally sound technologies.

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## Chapter 5

### Safe and Healthy Communities

Preserving a safe and healthy environment is perhaps the most significant legacy we can leave to future generations. Safe streets, clean air and water, innovative industrial processes that prevent pollution and communities that are built to withstand natural disasters are powerful resources on which to build strong communities.

Americans are increasingly concerned about public safety and fears of crime are diminishing the quality of life in many communities. Public safety is the top priority in many communities, but while prison building is one of the fastest-growing industries in the United States, funding for crime prevention pales in comparison. In some crime-ridden areas, neighborhoods have been economically and geographically isolated with a commensurate lack of economic, educational, social, and political opportunities. Public investments play a critical role. A Trust for Public Land survey found that parks were concentrated in affluent neighborhoods in two-thirds of the cities surveyed, leaving low-income, inner-city communities with inadequate and severely overcrowded parklands in 16 out of 23 cities. Recreation, particularly for youth, is important to quality of life, and also affects crime. Spending for incarceration of juveniles increased 35 percent from 1987 to 1993.<sup>17</sup> Some policy experts believe that recreational facilities should be considered an investment in our own security, and in the health and stability of our cities.

Fear of crime significantly limits people's freedom and behavior. Parents are afraid to let children play freely outside. People, particularly women, use public transportation less frequently if they are afraid to walk to the nearby transit stop. People spend less time outdoors in recreational areas. Proactive programs, such as community policing strategies that actively involve police officers in neighborhood life, are bringing a new spirit of partnership to crime prevention. Community policing is grounded in the partnerships forged among residents, neighborhood businesses, and local police. In New York City, significant reductions in the crime rate have been partially attributed to community policing strategies.

Resolving public safety concerns in a proactive fashion can also stem the tide of future problems as well. Research shows that the existence of graffiti, littering, and cracked windows

can be precursors to criminal activity. Visible signs of apathy about these so-called "small" problems make neighborhoods more likely targets for crimes. But as the community comes together to invest energy and resources to clean up these neighborhoods and institute community policing strategies, these types of programs can rebuild the human and financial capital in communities weakened by violence.

Our nation's goals for a clean and healthy environment can be met in a similar fashion: constantly encouraging policies and systems that are preventive, not reactive-that make community partnerships feasible and effective, and that ultimately reduce waste.

As we move into the next century of this nation's efforts to protect the environment, our goal is not only to hold on to the gains we have made, but to maintain the rapid pace of environmental progress achieved in the last 25 years. Environmental management and regulation must be driven by environmental quality goals, performance-based standards, accountability, and community involvement. New environmental management approaches that combine increased flexibility with greater accountability for achieving results, that promote collaboration over conflict, empower individuals and communities, and that create incentives for innovation, will allow us to deliver better, more equitable, and more cost-effective environmental performance.

One part of performance that - despite its significance to our nation's overall physical and economic health - is often omitted from environmentally sound planning is disaster reduction. In short, disaster reduction requires that we make it possible and attractive for people to stay out of harm's way. Accurate risk assessments can facilitate development of safe land use policies and management approaches, especially in coastal and riverine environments, near fault zones, and near other geologically active sites. Disasters can be reduced further through good mitigation practices such as improved building codes and enforcement, of same, careful attention to the design and maintenance of community infrastructure, and appropriate agriculture and forestry practices. Mitigation costs are almost always more than recovered during the aftermath of an event, since prevention is almost always cheaper than retrofitting systems.

In addition, the federal funding systems that have traditionally been the "saving grace" of disaster communities should encourage them to rebuild in safe physical spaces. Federal funding support should not promote rebuilding in areas that leave residents at risk of repeat disasters. Communities and business leaders should be encouraged to relocate outside of disaster-prone areas, and should better understand the adverse impact that risky development may have on their community's safety and the country's economy if a natural disaster does strike.

## **Policy Recommendation 12**

**Action 1.** Community-based coalitions - including residents, community groups, and businesses - should work with police to mobilize neighborhoods to prevent violence by initiating community meetings, finding and fixing violence hot spots, reclaiming public spaces, and adopting community policing strategies.

**Action 2.** All levels of government should work to implement gun control measures, including the use of background checks and mandatory waiting periods to help reduce violent gun uses.

**Action 3.** Community-based coalitions should work together to address disorder issues such as littering, graffiti, and loitering before they lead to criminal activities. Law enforcement officials and local governments should work with residents and businesses to identify opportunities to prevent potential problems such as improving lighting in specific areas, and cleaning up vacant lots.

## **Policy Recommendation 13**

**Action 1.** The EPA should encourage communities to develop pilot programs for attaining one or more environmental standards that are more stringent than those set by the agency. Participants in the programs - including but not limited to industry, government agencies, and community groups - would set the standards; and would work with regulators to ensure and verify that they are met.

**Action 2.** EPA and state environmental protection agencies should accelerate efforts to conduct a series of demonstration projects to assess the benefits and costs of alternative regulatory approaches.

For example, projects could demonstrate the cost-effectiveness

of setting more stringent standards while giving polluters longer time periods to achieve compliance. Another project could research and work to demonstrate the benefits (if any) of environmental performance of an entire facility rather than on separate air, water and soil requirements. Such a project might stipulate that environmental gains for an entire facility exceed what would have been achieved through source-by-source or media-specific regulations. Working with the private sector and nongovernmental organizations, the federal government should review and evaluate the lessons learned from these demonstration projects. Based on the success of the first round of demonstration projects, a second set of projects should be launched within two years.

## **Policy Recommendation 14**

**Action 1.** Regulators, businesses, labor unions, community groups, and policy experts can create partnerships to implement programs that encourage pollution prevention.

**Action 2.** Community-based coalitions can regularly gather data on pollution in a community and combine it with population data and relevant health statistics, including diet and lifestyle choices, to reach agreement on what programs are needed to lower local health risks.

## **Policy Recommendation 15**

**Action 1.** All levels of government should identify and eliminate government incentives, such as subsidized flood plain insurance and subsidized utilities, that encourage development in areas vulnerable to natural hazards.

**Action 2.** Accurate risk assessments can facilitate development of safe land use policies and management approaches, especially in coastal and riverine environments, and near fault zones and other geologically active sites.

**Action 3.** Community-based coalitions can develop improved building codes and related enforcement, and create strategic plans for design and maintenance of community infrastructure, and support appropriate agriculture and forestry practices. For example, local regulatory agencies can adopt more rigorous building codes, to ensure that new construction minimizes the impacts of floods, hurricanes, and other natural disasters.

**Action 4.** Federal agencies, perhaps through a specific interagency effort, should incorporate sustainable re-development principles into the federal disaster relief system. The interagency group should work closely with state, local,

and private organizations to create a unified approach within established disaster relief mechanisms. They can package technical assistance programs from existing federal, state, and

local programs, utilities, and other public and private resources.

# APPENDICES

## Appendix A

### Definitions and Principles of Sustainable Communities

This appendix includes examples of sustainable communities principles as adopted by organizations and groups and within municipalities of the United States. The purpose of their presentation in this report is for informational intent only and should not be construed as endorsement by the Sustainable Communities Task Force or the President's Council on Sustainable Development.

Elements of a Sustainable Community, Institute for Sustainable Communities

The Ahwahnee Principles, Local Government Commission

Principles of Environmental Justice, First National People of Color Environmental Leadership Summit

Principles of Sustainable Community Development, Burlington, Vermont

Charter of Sustainability, New Pattonsburg, Missouri

#### Elements of a Sustainable Community

##### Institute for Sustainable Communities

##### Ecological Integrity

1. Satisfaction of basic human needs for clean air and water and nutritious, uncontaminated food.
2. Protection and enhancement of local and regional ecosystems and biological diversity.
3. Conservation of water, land, energy, and nonrenewable resources, including maximum feasible reduction recovery, and reuse and recycling waste.
4. Utilization of prevention strategies and appropriate technology to minimize pollution emissions.
5. Use of renewable resources no further than their rate of renewal.

##### Economic Security

1. A diverse and financially viable economic base.
2. Reinvestment of resources in local economy.
3. Maximization of local ownership of businesses.
4. Meaningful employment opportunities for all citizens.
5. Provision of job training and education to help the

workforce adjust to future needs.

##### Empowerment and Responsibility

1. Equal opportunity for all individuals to participate in and influence decisions that affect each of their lives.
2. Adequate access to public information.
3. A viable, nongovernmental sector.
4. An atmosphere of respect and tolerance for diverse viewpoints, beliefs, and values.
5. Encourages individuals of all ages, gender, ethnicity, religions, and physical ability to take responsibility based upon a shared vision.
6. Political stability.
7. Does not compromise the sustainability of other communities.

##### Social Well-Being

1. A reliable food supply that optimizes local production.
2. Adequate health services, safe and healthy housing, and high quality education for all members of the community.
3. Maintains a place that is safe from crime and aggression.
4. Fosters a community spirit that creates a sense of belonging, a sense of place, and a sense of self-worth.
5. Stimulation of creative expression through the arts.
6. Protection and enhancement of public spaces and historic resources.
7. Provision for a healthy work environment.
8. Adaptability to changing circumstances and conditions.

This listing was developed by the board of the Institute for Sustainable Communities (ISC).

For more information, contact ISC, 56 College Street, Montpelier, VT 05602-3115, 802 229 2900, fx 802 229 2919, email <isc@iscvt.org>.

##### The Ahwahnee Principles

Preamble:

*Existing patterns of urban and suburban development seriously impair our quality of life. The symptoms are: more*

*congestion and air pollution resulting from our increased dependence on automobiles, the loss of precious open space, the need for costly improvements to roads and public services, the inequitable distribution of economic resources, and the loss of a sense of community. By drawing upon the best from the past and the present we can first, infill existing communities, and second, plan new communities that will more successfully serve the needs of those who live and work within them. Such planning should adhere to these fundamental principles.*

### **Community Principles:**

1. All planning should be in the form of complete and integrated communities containing housing, shops, work places, schools, parks and civic facilities essential to the daily life of the residents.
2. Community size should be designed so that housing, jobs, daily needs and other activities are within easy walking distance of each other.
3. As many activities as possible should be located within easy walking distance of transit stops.
4. A community should contain a diversity of housing types to enable citizens from a wide range of economic levels and age groups to live within its boundaries.
5. Businesses within the community should provide a range of job types for the community's residents.
6. The location and character of the community should be consistent with a larger network.
7. The community should have a center focus that combines commercial, civic, cultural and recreational uses.
8. The community should contain an ample supply of specialized open space in the form of squares, greens and parks whose frequent use is encouraged through placement and design.
9. Public spaces should be designed to encourage the attention and presence of people at all hours of the day and night.
10. Each community or cluster of communities should have a well-defined edge, such as agricultural greenbelts or wildlife corridors, permanently protected from development.
11. Streets, pedestrian paths and bike paths should contribute to a system of fully-connected and interesting routes to all destinations. Their design should encourage pedestrian and bicycle use by being small and spatially designed by buildings, trees and lighting; and by discouraging high speed traffic.
12. Wherever possible, the natural terrain, drainage, and vegetation of the community should be preserved with superior examples contained within parks or greenbelts.

13. The community design should help conserve resources and minimize waste.

14. Communities should provide for the efficient use of water through the use of natural drainage, drought tolerant landscaping and recycling.

15. The street orientation, the placement of buildings and the use of shading should contribute to the energy efficiency of the community.

### **Regional Principles:**

1. The regional land use planning structure should be integrated within a larger transportation network built around transit rather than freeways.
2. Regions should be bounded by and provide a continuous system of greenbelt/wildlife corridors to be determined by natural conditions.
3. Regional institutions and services (government, stadiums, museums, etc.) should be located in the urban core.
4. Materials and methods of construction should be specific to the region, exhibiting continuity of history and culture and compatibility with the climate to encourage the development of local character and community identity.

### **Implementation Strategies:**

1. The general plan should be updated to incorporate the above principles.
2. Rather than allowing developer-initiated, piecemeal development, local governments should take charge of the planning process. General plans should designate where new growth, infill or redevelopment will be allowed to occur.
3. Prior to any development, a specific plan should be prepared based on these planning principles. With the adoption of specific plans, complying projects could proceed with minimal delay.
4. Plans should be developed through an open process and participants in the process should be provided visual models of all planning proposals.

The Awahnee Principles were drafted by Peter Calthorpe, Michael Corbett, Andres Duany, Elizabeth Moule, Elizabeth Plater-Zyberk, and Stefanos Polyzoides, architects who have been leaders in developing new notions of land use planning.

For further information, contact: Center for Livable Communities c/o Local Government Commission, 1414 K Street, Suite 250, Sacramento, CA 95814, 916 448 1198, fx 916 448 8246.

## **Principles of Environmental Justice**

- 1.** Environmental justice affirms the sacredness of Mother Earth, ecological unity and the interdependence of all species, and the right to be free from ecological destruction.
- 2.** Environmental justice demands that public policy be based on mutual respect and justice for all peoples, free from any form of discrimination or bias.
- 3.** Environmental justice mandates the right to ethical, balanced and responsible uses of land and renewable resources in the interest of a sustainable planet for humans and other living things.
- 4.** Environmental justice calls for universal protection from nuclear testing and the extraction, production and disposal of toxic/hazardous wastes and poisons that threaten the fundamental right to clean air, land, water, and food.
- 5.** Environmental justice affirms the fundamental right to political, economic, cultural, and environmental self-determination of all peoples.
- 6.** Environmental justice demands the cessation of the production of all toxins, hazardous wastes, and radioactive materials, and that all past and current producers be held strictly accountable to the people for detoxification and the containment at the points of production.
- 7.** Environmental justice demands the right to participate as equal partners at every level of decision-making including needs assessment, planning, implementation, enforcement and evaluation.
- 8.** Environmental justice affirms the right of all workers to a safe and healthy work environment, without being forced to choose between an unsafe livelihood and unemployment. It also affirms the right of those who work at home to be free from environmental hazards.
- 9.** Environmental justice protects the right of victims of environmental injustice to receive full compensation and reparations for damages as well as quality health care.
- 10.** Environmental justice considers governmental acts of environmental injustice a violation of international law, the Universal Declaration On Human Rights, and the United Nations Convention on Genocide.
- 11.** Environmental justice must recognize a special legal and natural relationship of Native Peoples to the U.S. government

through treaties, agreements, compacts, and covenants affirming sovereignty and self-determination.

- 12.** Environmental justice affirms the need for urban and rural ecological policies to clean up and rebuild our cities and rural areas in balance with nature, honoring the cultural integrity of all our communities, and providing fair access for all to the full range of resources.
- 13.** Environmental justice calls for the strict enforcement of principles of informed consent, and a halt to the testing of experimental reproductive and medical procedures and vaccinations on people of color.
- 14.** Environmental justice opposes the destructive operations of multi-national corporations.
- 15.** Environmental justice opposes military occupation, repression and exploitation of lands, peoples and cultures, and other life forms.
- 16.** Environmental justice calls for the education of present and future generations which emphasizes social and environmental issues, based on our experience and an appreciation of our diverse cultural perspectives.

**17.** Environmental justice requires that we, as individuals, make personal and consumer choices to consume as little of Mother Earth's resources and to produce as little waste as possible; and make the conscious decision to challenge and reprioritize our lifestyles to insure the health of the natural world for present and future generations.

These principles were adopted by the delegates to the First National People of Color Environmental Leaderships Summit held in Washington, DC, on October 27, 1991.

## **Principles of Sustainable Community Development Burlington, Vermont**

In Burlington, decision-makers have embraced six principles of sustainable community development. They are:

- 1.** Encourage economic self-sufficiency through local ownership and the maximum use of local resources;
- 2.** Equalize the benefits and burdens of growth;
- 3.** Leverage and recycle scarce public funds;
- 4.** Protect and preserve fragile environmental resources;

5. Ensure full participation by populations normally excluded from the political and economic mainstream; and

6. Nurture a robust "third sector" of private, non-profit organizations capable of working in concert with government to deliver essential goods and services.

For further information, contact the Office of the Mayor, Peter Clavelle, City Hall, Room 34, Burlington, VT 05401, 802 865 7272, fx 802 865 7024.

### **Charter of Sustainability New Pattonsburg, Missouri**

In accord with the decision to ensure our community's future by its relocation from the flood plain, we, the elected officials and contracted development professionals of Pattonsburg, Missouri, agree to uphold the following principles of sustainability. In doing so, we recognize our responsibility to the plan for the needs of the present generation without compromising the ability of future generations to meet theirs. In good faith with the agencies and organizations supporting our relocation and redevelopment, we will strive to achieve these accepted objectives of sustainability in the areas of economics, ecology, and community process. Adopted December 8, 1994. Objectives for a Sustainable Economy

- Encourage local ownership by building skills and encouraging entrepreneurial innovation;  
In considering distant ownership, seek business people who have demonstrated good citizenship in their local communities;
- Build local capacity to support financing of sustainable economic activity;
- Consider the full environmental and social impacts of economic decisions;
- Encourage ecologically sensitive businesses;
- Encourage and give priority to businesses that add to the economic value of regional agricultural and other resources, instead of exporting unprocessed resources to be developed elsewhere;
- Capitalize on the economic opportunity presented by New Pattonsburg's proximity to an interstate highway, both as a connection to the transportation network and as a provider of access for new consumers to New Pattonsburg's marketplace.

### **Objectives for a Sustainable Ecology**

- To build a sustainable and sustaining ecological system, providing equitably for a thriving human and natural community for ourselves and for future generations, we agree to:
- Preserve the character and health of our natural environment, using and reusing the materials, energy and water we need as efficiently as possible and eliminating waste;
- Utilize clean, renewable resources extracted and processed within the community whenever possible;
- Preserve and expand the choices of present and future members of our community, providing information and design alternatives that encourage use of sustainable resources, technologies and methods suitable for our environment and culture.

### **Objectives for a Sustainable Community Process**

To build a sustainable and sustaining process that empowers all community members to participate in determining their present and future quality of life, we agree to:

- Provide full, accessible information and education on issues that affect the community to all members, including our children;
- Sponsor community gatherings, community based committees and other forums that solicit ideas and convictions of the people, encourage the exchange and development of new ideas and promote full and diverse participation in decision making;
- Seek consensus within the community to guide the work of leaders and professionals charged with the responsibility of implementing community decisions.

For more information, contact Christopher Kelsey, BNIM Architects, One Kansas City Place, 1200 Main Street, Suite 1515, Kansas City, MO 64105.

## Appendix B

### Case Studies

*This appendix includes examples of sustainable communities activities in municipalities throughout the United States. The task force learned much from the work of these communities; the presentation of these case studies in this report is for informational purposes only and should not be construed as endorsement by the Sustainable Communities Task Force or the President's Council on Sustainable Development.*

#### **Brownsville, Texas**

#### **Chattanooga, Tennessee**

#### **Cleveland, Ohio**

#### **Denver, Colorado**

#### **New Bedford, Massachusetts**

#### **Northampton County / Cape Charles, Virginia**

#### **Pattonsburg, Missouri**

#### **Piney River, Virginia**

#### **Sarasota, Florida**

#### **Seattle, Washington**

#### **CASE STUDY DEVELOPMENT AND FACTCHECKING.**

Each case study was written and fact-checked by representatives of the focus community. The task force requested that each community work with a diverse group of individuals representing different sectors to reflect a broad-based comprehensive understanding of the lessons they had learned in their efforts to implement sustainable development locally.

#### **Brownsville, Texas**

Brownsville is located at the southern-most tip of Texas on the Rio Grande River. It has a rich culture, which arises from a mixture of Mexican and American traditions, and an exciting historical past. The city's semitropical climate, scenic oxbow lakes, and proximity to Mexico and South Padre Island draw thousands of visitors each year.

While Brownsville enjoys these cultural and natural advantages, it labors under some negative economic, social, and other trends that are highlighted by five major problems. First, the city has insufficient supplies of basic public facilities and of health and human services. With Brownsville's population expected to grow from 117,000 in 1995 to 150,000 in the year 2000, the demand for these facilities and services is expected to rise. Second, many of the city's residents live in substandard housing. Population growth has outstripped the construction of housing units, and according to the U.S. Census, 2,093 single-family dwellings or 15.1 percent of all such dwellings in the city in 1990 were substandard; another 1,154 dwellings were dilapidated, making almost 25 percent of the single-family housing stock below standard. Third, 70 percent of Brownsville's population is living at or below the poverty line. The per capita annual income is \$8,316; the median household income is \$15,890. Fourth, the city's unemployment rate is high. According to the U.S. Department of Labor, unemployment in the Brownsville area averages 12.8 percent versus 6.3 percent for the state and 6.0 percent for the nation. And fifth, the city has higher-than-average school drop-out rates. More than one-third of Brownsville students quit school before the 5th grade, and nearly one-quarter of local high school students drop out before graduation. Lack of education, poverty, and unemployment combine to increase pressure on Brownsville's already-overburdened health and human services.

To overcome these problems and attain sustainable development, Brownsville will have to work with its sister city, Matamoros, Mexico, with which it has many characteristics in common, including a majority population of Mexican descent, bilingual communications, large numbers of migrant farm workers, and extreme poverty. Because the cities share some of the same economic, environmental, and social assets and liabilities, realization of their economic, environmental, and social goals depends on their mutual cooperation. For example, efforts in Brownsville to improve water quality and prevent water-borne diseases must be implemented with reference to Matamoros and the other U.S.-Mexican border towns with which Brownsville shares water supplies. Brownsville and Matamoros already cooperate on the development of transportation infrastructure and policy. Plans are under way for the construction of international bridges that would bypass Brownsville's downtown area, drastically reducing truck traffic on its main streets. More

recently, the shared economic development needs of Brownsville and Matamoros have prompted Brownsville's development council to recognize the advantages of actively promoting the construction of maquiladora plants in Matamoros, providing economic gains for both cities.

Brownsville's economic and environmental challenges and sustainable development initiatives are summarized below.

### **Economic challenges**

Brownsville faces several economic challenges: capitalizing on the North American Free Trade Agreement (NAFTA) and reducing unemployment.

NAFTA is expected to accelerate economic growth by increasing trade between the United States and Mexico. Because Brownsville is the only border city that has the facilities to handle water, air, rail, and road traffic, it can take full advantage of the formal relaxation of trade restrictions. But the current devaluation of the peso is expected to decrease significantly Brownsville's commerce over the short term.

While the Texas Employment Commission ranks Brownsville as the most economically disadvantaged city in the state, many believe that, based on very recent growth, the city's economic outlook is good. In the period 1994-95, Brownsville's commercial trade increased 11 percent, retail trade by 7.1 percent, wholesale trade by 1.5 percent, and service-related sales by 11 percent. Local industry, however, appears to be experiencing a downward spiral. Sales for manufacturing concerns have decreased 77 percent since 1990.

Despite increases in trade and some types of sales, unemployment remains a serious problem. The average unemployment rate in the city already is nearly double that in the state as a whole, and two phenomena are cause for concern. First, manufacturing industries, which have been one of the city's largest employers, are not doing well. Second, because of increasing demands for social services, the city government has become an even larger employer than manufacturing industries. Obviously, increases in the provision of social services strain city finances.

### **Environmental challenges**

Attention to Brownsville's environmental challenges was heightened by a spike in the incidence of neural tube birth defects from 1989 to 1991. Some of the city's worst pollution problems have been mitigated somewhat since that time. But use and protection of the environment is a growing concern.

One of the most critical environmental issues for Brownsville is water. Almost all of the city's water comes from the Rio Grande River. While demand for this water is growing, access to it is limited. Water rights from the Texas share of Rio Grande water have been completely allocated, and no new water rights will be offered. Moreover, the two million acre-feet allocated for the entire Rio Grande Valley exceeds the river's current, firm annual yield of 1.3 million acre-feet.

To meet the growing demand for water, Brownsville's Public Utilities Board has proposed that a dam be built to capture Rio Grande water that flows past the city into the Gulf of Mexico. The local Audubon Society is worried, however, that increasing the amount of water that is already impounded would disrupt the ecological balance. The society has suggested that the city focus on expanding water conservation efforts and improving water management practices.

In 1993, the American Rivers Association voted the Rio Grande the most endangered river in the United States. This distinction owes to high levels of water withdrawals and to municipal, industrial, and agricultural contamination. A study conducted in 1993 revealed that the Rio Grande contained 5 chemicals in amounts exceeding health-screening levels and that its tributaries contained 17 chemicals in amounts exceeding these levels. River water contained chemicals such as toluene, copper, lead, arsenic, chromium, mercury, and nickel, while fish tissue contained heavy metals and pesticides.

Other studies have found high levels of fecal contamination in the Rio Grande. The contamination comes from the million gallons of untreated, or partially treated, wastewater that enters the river from U.S.-Mexican border cities. Matamoros, which has no municipal sewage treatment plant, discharges around 15 million gallons of untreated wastewater a day into open canals. This sewage eventually flows into the Rio Grande.

Protecting the underground water table and the oxbow lakes ("resacas") is also of paramount importance for Brownsville. To mitigate threats to these water bodies, the city must reduce oil, agricultural, chemical, and toxic waste.

Unregulated growth of Brownsville's "colonias" - residential areas that are not incorporated in Brownsville but lay just outside its city limits, contribute to other environmental problems. These neighborhoods usually lack trash collection services and sewage treatment facilities. They often are in areas prone to flooding and poor drainage, and when heavy rains occur, septic tanks often overflow, leaving families at

risk of contracting water-borne diseases, such as hepatitis, diarrhea, typhoid, and parasitic infection.

## **Vision 2000**

In April 1989, the city initiated a process called Vision 2000 to articulate its goals for the future. Following a series of public meeting and hearings, a committee representing educational, economic, health and human service, and community concerns drafted "Brownsville Vision 2000," a plan for making Brownsville a place where people can prosper.

The plan appeals for efforts to meet increasing demands for facilities and services. For example, it calls for new and expanded transportation systems and parking facilities, enhanced police and fire department services, and an increase in the number of Emergency Medical Service stations and personnel. The plan also calls for businesses to restore and preserve existing buildings to protect the historic character of the city and to attract economic development there. In addition, it urges improvements in city management through the development of a capital improvement program, the creation of new partnerships between the private sector and the city to fund public improvements, and the promotion of sustainable development through tax credits and other incentives.

A steering committee and five citizen task forces have been formed to find ways of implementing the plan. The steering committee acts as a liaison between the city and the five task forces: education, economic development, basic public services, health and human services, and community spirit. Despite the efforts of these task forces, the level of public involvement in the Vision 2000 process has not yet reached the critical mass necessary for significant progress.

## **Major sustainable development projects**

Sustainable development initiatives are not lacking in Brownsville. Three local institutions are working toward economic development goals. And various local projects have been undertaken to meet environmental and social goals.

The Brownsville Economic Development Council attracts industry to both Brownsville and Matamoros. Working with local banks, the council created the Brownsville Community Development Corporation (BCDC) to create a pool of funds that can be reinvested into community development initiatives to support projects like affordable housing. The BCDC

recently created "Project Casa" to provide vocational training for low-income teenagers.

Greater Brownsville Incentive Corporation (GBIC) provides incentives for industries to create and maintain jobs. In addition, it provides majority loans and guaranteed loans for small business and industry. It gave the University of Texas-Brownsville a \$2 million grant to develop a technology school to reach the unskilled.

The Development Service Center is a new project created by the city. The center will provide the business community with easy access to local government, as well as financing, permitting, business counseling, and other services.

Environmental and social goals are being pursued through several local projects. One of the environmental goals is effective waste management. The city promotes recycling through work with schools and civic groups and through the provision of a recycling center and several drop-off locations for glass, paper, and used oil. About 17 percent of the city's solid waste is thought to be recycled. (Other waste management activities are described below.)

Another environmental goal is effective responses to accidents involving hazardous materials. Since its formation in 1987, the Local Emergency Planning Committee (LEPC), which is active in Cameron County, has been providing emergency planning for accidents involving the transport of hazardous materials through Brownsville's port, an industrial park with Foreign Trade Zone status. Indeed, LEPC has become an international leader in emergency planning and a primary source for information on environmental issues that arise along the U.S.-Mexico border. In 1990, LEPC hosted the first full-scale, international, hazardous materials training exercise in which more than 200 emergency preparedness experts from the United States and Mexico participate. LEPC and its Matamoros counterpart are recognized among the 14 border cites as leaders in international chemical training exercise programs.

Both environmental quality and quality of life are the focus of a recent effort to deal with Brownsville's traffic problems. In partnership with the Texas Department of Transportation and the general public, the city developed a 20-year transportation plan. In anticipation of the transportation needs of a growing population, the city also developed a public bus system. Among other benefits, the system will mitigate the adverse environmental effects of reliance on cars and trucks.

Progress toward meeting social goals often depends on education. To lower its school drop-out rate, the Brownsville Independent School District (BISD) created an alternative middle school for academically-at-risk students. The school features computer-based instruction and work-study programs.

A vocational project, the Pharr Vocational School (PVS), illustrates how local businesses can help their community fight social ills. Once constructed, the school will house job skills training and placement services, retail operations, household goods, and a food bank for the homeless and indigent. WalMart, Levi Strauss, Texas Surplus Agency, and the Cameron County Extension Service (through the auspices of Texas A & M) will donate food and provide nutritional and health counseling. They also will administer the school's sewing establishment and provide supplies for sewing and arts and crafts. Volunteers from the University of Texas-Brownsville and BISD counselors will develop classes in the building trade and printing operations as well as provide business counseling.

### **Other sustainable development projects**

Three other projects that have been implemented, at least in part, by organizations outside Brownsville will contribute to sustainable development in the city. One has been undertaken by the National Audubon Society, one by the one by the Center for Entrepreneurship and Economic Development, and one by the Texas Natural Resource Conservation Commission.

The National Audubon Society raises awareness about the natural world and its importance to human well-being by promoting environmental education and activism. In 1992, the society founded the International Youth Alliance (IYA) to engage high school students in Brownsville and Matamoros in investigations and discussions of environmental problems and solutions with local health experts, natural resource managers, and environmental activists. The students learn about the relationships among habitat protection, natural resource consumption, and development. Some of the IYA students have had their work aired on local public television. Others have developed environmental education projects for classmates and younger children.

The Center for Entrepreneurship and Economic Development supports economic development activities in low-income communities. The center developed a community empowerment project that helps colonias residents locate employment opportunities and gives them technical and other assistance in creating small businesses. The project is being implemented through a public-private partnership of county

government, universities, and local community organizations and is being financed through local banks and a combination of federal HUD funding and foundation grants. The Texas Natural Resource Conservation Commission has made both economic development and environmental protection the focus of another project. The commission is working on a proposal to create an eco-industrial park. The park would house an oil refinery and an asphalt plant that is designed to recycle products such as used tires and used oil. By focusing on pollution prevention rather than end-of-the-pipe pollution control and cleanup, the park could mitigate industrial pollution in the Brownsville-Matamoros area, support jobs in the recycling industry, and augment workers' technological skills. The goals of the proposed park are to provide a forum for developing innovative, cost-effective ways to meet mandated environmental standards and to improve local capacity to design and manage environmental protection programs according to industrial ecology and pollution prevention principles.

### **Binational sustainable development efforts**

The Border Information and Solutions Network (BISN) was chartered on December 6, 1994, in response to the need for more community involvement in the planning and implementation of sustainable development projects along the U.S.-Mexican border. The network seeks to promote a pattern of economic development that protects natural ecosystems along this border and that improves the quality of life of people residing in border communities. BISN applied for the 1995 EPA Environmental Justice/Sustainable Communities (EJ/SC) Grant and requested funding for a project that will support the development of the above-noted eco-industrial park. This project will build a network of Brownsville and Matamoros residents to participate in important decisions about municipal solid waste management.

BISN will accomplish its goals by providing:

- leadership in involving local volunteers in sustainable development efforts,
- resource development via assistance in taking advantage of grant opportunities,
- research for the analysis and implementation of sustainable development policy,
- on-the-job training for individuals who wish to become sustainable development professionals,

- education on sustainable development and industrial ecology concepts and strategies for leaders and managers in the public and private sectors and students in the Brownsville area.

*For more information about sustainable communities activities in Brownsville, please contact Rick Luna at the Brownsville Economic Development Council, 1205 North Expressway, Brownsville, TX 78520, 210 541 1183.*

## **Chattanooga**

Chattanooga's commitment to sustainable development has emerged from the lessons of its past. Suburban development since World War II drained the city's downtown area of much of its retail and almost all of its residential development. The economic base collapsed as traditional manufacturing jobs moved overseas and many local companies laid off workers or closed down. Racial conflicts, poor schools, and an eroding infrastructure were all reflections of general urban decline. In addition, the city faced an environmental crisis. In 1969, Chattanooga was named the "worst polluted city" in America.

In recent years, the city has rebuilt its economy and reduced its air pollution, demonstrating that economic development and environmental stewardship can be achieved simultaneously. In 1990, the U.S. Environmental Protection Agency (EPA) recognized Chattanooga for attaining clean air standards. An article in Sports Illustrated featured the city as the nation's best example of environmental improvement, which it described as a "nuts-and-bolts model of how tough government, cooperative businessmen, and a very alarmed public can make a dirty world clean again."

The collaboration among manufacturers, government agencies, and citizens that enabled Chattanooga to clean up its air has become part of the community culture. Public-private partnerships have become the norm. Numerous collaborative efforts have generated the capital resources, the political commitment, and the civic momentum to tackle complex problems, such as lack of affordable housing, substandard public education, few transportation alternatives, and the need to preserve parks and greenways.

### **Community involvement**

Community involvement in planning efforts has been a key factor in Chattanooga's revitalization. In 1983, a study by Battelle Corporation revealed that Chattanooga was a city in which many people felt socially isolated and powerless. The following year, the city invited every citizen to participate in

shaping a new vision for the community. More than 1,700 people accepted the invitation, participating in a series of community visioning meetings called Vision 2000, which resulted in a "commitment portfolio" of 40 goals for the year 2000. These goals inspired many initiatives as well as the establishment of Chattanooga Venture, an organization to support the citizen task forces and public-private partnerships that emerged in response to Vision 2000.

By 1992, approximately 85 percent of the Vision 2000 goals had been fully or partially met through 220 programs. Along the way, 1,300 jobs and much needed social and educational programs had been created, and \$793 million had been invested in the community. Chief accomplishments included the creation of a river park, an aquarium, a performing arts hall, a shelter for battered women, and a human relations commission, as well as the renovation of a theater, an auditorium, and a bridge.

In 1993, ReVision 2000 resulted in 27 new goals, the chief of which was the establishment of Chattanooga as a center for environmental initiatives. In 1994, the Vision Committee, which was made up of representatives of civic, neighborhood, political, and business groups, was formed to ensure citizen involvement in the meeting of ReVision 2000 goals.

### **Riverfront development**

The first major community project to result from the visioning process was the development of Chattanooga's riverfront development. The Tennessee Riverpark Master Plan called for mixed use development, with a park and trail system to parallel the river for a 20-mile stretch. Since opening in 1986, the Tennessee Riverpark has exceeded all expectations as a community gathering place and money generator. By 1994, eight miles of river walk had been completed, \$316.7 million had been invested in developments along the river, and one million people were visiting the park each year.

Ross's Landing Park links the Riverpark to the urban landscape. Built on the former site of abandoned buildings and dilapidated warehouses, the park surrounds the Tennessee Aquarium, which opened in 1992. Built with \$45 million in private funds, the aquarium generated \$133 million in documented economic activity in its first year alone and has attracted nearly 3.8 million visitors since its opening. Highlighting the region's freshwater creatures and river system, the aquarium is not only the cornerstone of Chattanooga's riverfront and economic development but also is an educational center, communicating the community's interconnectedness and interdependencies with the natural

systems of a richly diverse bioregion.

### **Affordable housing**

A Vision 2000 goal to rehabilitate substandard housing and revitalize neighborhoods led to the creation of Chattanooga Neighborhood Enterprise (CNE), which brings together the necessary public and private resources for affordable housing. CNE uses market-sector strategies to restore deteriorated, inner city, residential areas and to create new home ownership opportunities for low- to moderate-income families through lending programs. Using funding from all levels of government, as well as private contributions as leverage, CNE has been able to access the large amounts of capital needed for this scale of housing rehabilitation and neighborhood revitalization from conventional lenders.

CNE has become a model for innovative community financing for affordable housing. Its flexible lending programs allow even very low-income families to obtain better housing. Loan repayments and proceeds from the sale of loans on the secondary market provide a sustainable pool of funds for helping other families in the future.

Between 1987 and 1994, CNE rehabilitated more than 4,200 family housing units, representing an investment of \$65.5 million. In the process, it has involved local residents in planning restoration efforts and supported them in projects that enhance their neighborhood's appearance and safety. The educational and participatory nature of the program help increase the probability that residents and neighborhood associations will maintain these improvements.

### **Educational Reform**

High-quality education is at the core of Chattanooga's vision of sustainable development. Public-private initiatives have given schools greater resources and resulted in the development of new organizational practices, curricula, and methods of instruction and training.

The Public Education Foundation brings private resources to public schools. The foundation emphasizes teachers' professional development and supports their efforts to have a voice in the setting of schools' priorities and practices. It also assists principals in developing a more collegial atmosphere and helps faculties better understand the challenges of cultural diversity.

Innovative educational organizations include a growing

network of Paideia schools (now numbering six) that endorse the philosophy in Mortimer Adler's Paideia Proposal, which advocates the elimination of tracking and stresses critical thinking skills in grades K-12; the Challenger Center, which provides advanced training in science and technology to teachers and students; and the Center for Arts Education at UTC, which is helping local schools embrace discipline-based arts education by encouraging the integration of the performing, visual, and literary arts into the core curriculum. The Middle Schools Project, which has received a national foundation grant, attempts to ensure that every student finishes the eighth grade on track for post-secondary education.

In a recent public referendum, the citizens of Chattanooga voted to merge the now separate city and county schools. The transition period will give the community an opportunity to set forth its vision of education in a bold new way.

### **Environmental education**

Community-oriented, nonformal education programs have been essential to building broad-based public involvement and support in sustainable development initiatives. The Chattanooga Environmental Education Alliance, a network of educators, is one of the most action-oriented groups in the community. Alliance members including the Nature Center, Chattanooga Audubon, the Challenger Center, Greenway Farm, Tennessee Aquarium, and the Tennessee Valley Authority (TVA) have provided high quality educational programs for the public and training for teachers in schools.

### **Recycling and job training**

Recycling initiatives are providing vocational training while helping protect the environment and conserve resources. One such initiative is the product of a partnership between the city of Chattanooga and Orange Grove Center, a nonprofit workshop for individuals with disabilities.

The facility provides jobs and job training for more than 100 mentally-challenged adults, who hand sort recyclable material from approximately 55,000 Chattanooga homes as well as from municipal, community, and corporate drop-off centers located in the area. The sorted material is purchased by local businesses and made into products that are used regionally. By recovering materials from the community waste stream and returning them to the manufacturing stream, this process diverts millions of tons from the waste stream.

## **Electric bus technology**

In less than two years, Chattanooga has put itself on the map as a world leader in electric vehicle technology. A local effort to find a transportation system that would boost the downtown area's struggling retail economy led to the gradual replacement of old diesel buses with nonpolluting electric buses. The electric buses are manufactured in Chattanooga and sold to other cities, creating 35 new jobs.

There are two other components in Chattanooga's electric vehicle story: Electrotek, an electric vehicle test facility previously owned by the Tennessee Valley Authority and privatized in 1988, and the Electric Vehicle Transit Institute, which was established in Chattanooga to promote the use and development of electric transit vehicles throughout the nation. Chattanooga's electric vehicle program has led to the city's involvement in more than a dozen technology development projects, including work with the U.S. Department of Defense, the Delco Remy/Allison Division of General Motors, and the 1996 Olympic Committee. These projects are helping remove the barriers to the broad commercial availability of electric vehicles. Purchase prices for the buses manufactured in Chattanooga are now comparable to those of diesel buses, and their life-cycle costs are substantially lower.

## **Parks and greenways**

The citizens of Chattanooga have identified waterways, forested mountains, and lush valleys as some of the community's most valuable resources. Protecting these resources is more than environmental stewardship; it's an economic necessity.

In 1986, a group of Chattanooga citizens created the Tennessee River Gorge Trust in partnership with the Tennessee Nature Conservancy. Their intent was to protect a 25,000-acre area in the Tennessee River Gorge, the largest river gorge east of the Mississippi and home to more than 1,000 different plants and animals, including many threatened or endangered species. To date, the trust has protected more than half the targeted area.

The Chattanooga Greenways Program has established a countywide network of linear parks linked to the Riverpark. Its purpose is to protect critical natural areas along creek corridors and provide recreational opportunities in the wooded watershed. With the help of the Trust for Public Land and the National Park Service, this grassroots effort has already protected more than 1,500 acres of land within Hamilton

County.

Greenway Farm, which is located within the city limits, Reflection Riding, and the Chattanooga Nature Center provide environmental educational programs. Maclellan Island, which is located within downtown Chattanooga, and other areas are designated nature preserves.

Together, these parks and greenways offer community residents and visitors an unparalleled opportunity to enjoy the natural beauty of the region and to develop a better understanding and appreciation of our natural resources.

## **Natural resources**

Abundant forest and water resources enhance tourism and provide a manufacturing and industrial base for the regional economy. Chattanooga would like to manage the use of these resources for emerging environmental businesses while maintaining the current and future job base associated with manufacturing and forestry. But such management is complicated by the fact that large tracts of land on which the resources are found are privately or federally owned.

A recent request for the Tennessee Valley Authority to permit chip mill operations along the Tennessee River brought into focus the tug of war between federal regulatory responsibility and local government power as well as the relationship of private property rights and the social good. In Chattanooga, a coalition of city and county government, the chamber of commerce, the state legislative delegation, a congressional delegation, the Convention and Visitors Bureau, the Tennessee Valley Hardwood Alliance, and an array of environmental organizations asked that the request be denied. In this instance, the coalition prevailed. But the economic pressures in the global marketplace for forest products, especially hardwoods, remain high.

## **Chattanooga Creek cleanup**

The cleanup of Chattanooga Creek, which was designated as a Superfund site in 1994, offers Chattanooga the greatest opportunity to implement the principles of sustainable development. Local residents would like to form a partnership with government agencies, industries, universities, schools, health centers, and environmental organizations to create a cleanup plan that goes well beyond remediation of contamination.

Industries and businesses, along with government agencies,

already have worked with South Chattanooga neighborhoods on cleanup-related community advisory panels, community safety panels, park projects, greenway development, and educational and health programs. Local industries have reduced hazardous waste discharges and cleaned up some sites where such wastes were stored. Recently, the Mead Corporation incorporated vocational training and job creation for local residents into its pollution remediation efforts.

But progress is slow. EPA has not approved local initiatives to clean up the creek using bio-remediation methods. And liability issues threaten to undermine the kind of development that local residents would like to promote. Under current federal Superfund law, a new owner of any of the contaminated property in question can become liable for existing contamination and face open-ended cleanup costs should cleanup standards change at any time in the future. These possibilities promote the development of so-called greenfields at a high cost to the local tax base and discourage the development of brownfields, which ideally would complement local efforts to revitalize neighborhoods.

### **Eco-industrial parks**

The Chattanooga metropolitan area is in the middle of an aggressive economic development effort that includes several eco-industrial parks, including one in the south central business district and one at a former Army munitions plant site.

The South Central Business District was formerly the site of metal foundries, mixed industries, warehouses, railroad tracks, and worker housing. Today it is dotted with abandoned and dilapidated structures, vacant buildings, and surface parking lots. Reclaiming this valuable land near the heart of the city for economically productive and environmentally sound activities has inspired the most ambitious and creative plan that the city has undertaken. The plan calls for the transformation of the South Central Business District into a zero-emissions zone, where the wastes of one business become the fuel for another. The district would host an ecological center, which would serve as a biological remediation, educational resource, and visitors center. It also would host an environmental conference and training center, a sports stadium with street parking, greenways, and businesses all connected with the downtown area through electric bus transit.

The South Central Environmental Technology Complex showcases sustainable development practices on formerly

industrial sites, fosters the use of environmental technologies, leverages public and private investments, and attracts environmentally sound businesses and services. The Tennessee Valley Authority, the state of Tennessee, city and county governments, the University of Tennessee-Chattanooga, and the Carter Street Corporation are partners in the complex.

The eco-industrial park at the Volunteer Army Ammunition Plant has been designated as the strategic defense environmental center for the U.S. Army. This 6,500-acre site is intended for environmental research, recycling industries, and integrated municipal and commercial waste remediation and reuse. A \$500,000 planning grant and a \$2.5 million initial development grant have been committed to the project.

### **Integrated strategic plan**

In 1991, years of environmental, economic, and educational efforts became the foundation for the plan to establish Chattanooga as a laboratory and model for sustainable development. Chattanooga's mayor and the county executive appointed a task force that was broadly representative of the community; Partners for Economic Progress appointed an environmental director; and the chamber of commerce helped support the initiative to develop policy recommendations.

The initial plan, called "Target 96", was made up of 94 recommendations, encompassing ecological, economic, educational, and community strategies. The timetable included short-range goals to be accomplished by 1996, mid-range goals to be accomplished by the year 2000, and long-range goals to be accomplished by 2005.

Target 96 has resulted in many initiatives and partnerships. For instance, RiverValley Partners has integrated public and private forces for strategic economic development and in 1994 set forth an aggressive economic strategic plan with environmental protection as a central theme. The Chamber of Commerce has adopted "the business of the environment" as its operational theme and become the communication center for sustainable development activities. The Urban Design Studio has managed the overall development of these activities and provided a place where ideas can be turned into realities. And the Convention and Visitors Bureau has sought to promote tourism and conventions consistent with the environmental theme. Plans are in the works for an environmental convention center as part of the expansion of the South Central Business District Eco-Industrial Park.

All these activities are based on the recognition that Chattanooga's economy, its social institutions, and the quality of its environment are closely intertwined. Without paying careful attention to each of these important elements, the decline of one has the potential to affect the vitality of the others. In the words of Mayor Gene Roberts, "Chattanooga is embracing a new civic attitude . . . our businesses, our industries, and all our citizens are doing what they can to . . . achieve economic growth and to respect the resources that make growth possible. Copies of the full text of the Chattanooga case study can be obtained from the Chamber of Commerce, 1001 Market Street, Chattanooga, TN 37402, 423 756 2515, fx 423 267 7242.

## **Cleveland, Ohio**

### **Background**

The City of Cleveland is located on the Southern edge of Lake Erie in Cuyahoga County, Ohio. The 1990 Census reports Cleveland's population at 505,616, a total which has declined steadily since its 1950 population of approximately 900,000 residents. At the same time the suburbs around Cleveland have expanded dramatically; suburban Cuyahoga County grew 96% from 1950 to 1970. Now, Cuyahoga County is also losing population and adjacent counties are gaining. Where Greater Cleveland used to be completely contained within Cuyahoga County, it now extends into portions of 6 additional counties.

Historically, Cleveland's economy has been industrial and manufacturing based. The economy grew from the 1950's to the early 1970's. In 1979, Cleveland entered a recession and a period of economic restructuring. From 1979 to 1983, 90,000 jobs were lost in the Greater Cleveland area, mostly in the manufacturing sector. While the region gradually regained these jobs over the next 7 years, their character had changed. Most new jobs were white collar service jobs located in the suburbs. Cleveland's economy continues to shift away from a goods-producing towards a services-producing economy.

In addition to Cleveland's economic and demographic challenges, the city also witnessed the default of its government in 1978; and the burning of the Cuyahoga river in 1970- the result of uncontrolled pollution. Changes were needed, changes have occurred. Cleveland advocates adopted the name "the comeback city" and now though daunting problems remain, Cleveland appears to have turned a corner.

At the request of the Sustainable Communities Task Force, the

US EPA's Urban and Economic Development Division talked with Clevelanders to find out which issues are critical to sustainability, how they have addressed them, and what can be learned from Cleveland's experience. The product of this effort, is based on studies of the Cleveland area and interviews with residents of Greater Cleveland from a variety of fields including businesses, communities, non-profits, environmental groups, community development corporations, county government, academics and the Chamber of Commerce.

### **Sustainable development issues**

Interviewees identified eight issues that Cleveland must address to become a more sustainable community: urban sprawl, concentration of poverty, brownfields education, crime, environment, regional cooperation, and economic development. Cleveland's Relation to Surrounding Areas and Urban Sprawl

Interviewees cited the continued movement of people and industries out of Cleveland to increasingly distant suburbs as unsustainable for the Greater Cleveland area. Their reasons included the increased infrastructure cost required to support sprawl, abandonment of current investments, consumption of rural lands, increased tax burden for remaining city residents, and degradation of the center city's economic viability. Many interviewees cited this as a primary problem and believe that the region will suffer without a strong center city.

Contaminated urban sites, or "brownfields", were identified as a major barrier to Cleveland's ability to draw businesses. Patterns of infrastructure spending were also identified as promoting migration out of Cleveland by making suburban areas more accessible and diverting resources from needed infrastructure improvements in Cleveland. Other reasons cited for out-migration include crime, quality of education, increased regulatory burden of development in Cleveland, and politics.

### **Concentration of Poverty**

Concentration of poverty was named as a barrier to sustainability almost unanimously by those interviewed. There was also agreement that current programs are not sufficiently targeted, flexible or comprehensive. Nor do they provide dignity or respect for program participants. Census data indicate that Clevelanders living in poverty rose from 17.1% in 1970 to 29.33% in 1990. A study by the Center for Urban Poverty and Social Change showed that 46% of poor people live in areas of high poverty.

## **Brownfields**

Contaminated industrial sites, known as “brownfields”, were a concern to businesses, community development corporations and county officials. The increased cost and uncertainties of cost, liability, cleanup standards, regulatory burdens, and future actions, were identified by one business representative as the single largest barrier to redeveloping Cleveland. Vacant parcels in Cleveland increased from 9% of all parcels in 1977 to 12.5% in 1987 (Center for Urban Poverty and Social Change).

## **Education**

Community leaders indicated a need for improved education in schools, and business representatives discussed an ongoing mismatch between job requirements and skills in the labor force. Interviewees indicated that schools are not preparing students for the workforce and job training programs are also failing in this role. In a 1990 survey of Clevelanders, the Citizens League Research Institute found that 38% of respondents named education as an important problem facing Cleveland (the largest percent for any subject).

## **Crime**

Crime was sighted as a driver of population migration as well as business location decisions. Twenty percent of those surveyed in the Citizens League Research Institute research on general attitudes of Greater Clevelanders named crime as a major problem facing the area. Significant differences of opinion emerged between city residents and suburban residents. Clevelanders felt less safe in the streets of their neighborhood alone at night than their suburban counterparts by a 34% margin. Clevelanders are 13% more likely to report that someone in their house was the victim of crime during the past year.

## **Environment**

In addition to brownfields, open space, air quality, solid waste and water quality were sighted as barriers to sustainability by some interviewees. Air quality is a concern because Cleveland is a non-attainment area for ozone under the Clean Air Act. Open spaces for recreation in urban areas was sited as an important focus for building communities. County landfill space is projected to run out in the next five years leading to increased disposal costs. Pollutant releases into Greater Cleveland waterways amounted to roughly 1,400,000 pounds in 1991, according to the US EPA. Some interviewees said

regulations are too inflexible and fail to address the greatest environmental risks, thus diverting industry resources which could be used more effectively. According to the Citizens League Research Institute, Clevelanders believe the environment has improved over the last 5 years, 80% believe protection laws still have not gone far enough, and 48% believe that the environment should not improve at the expense of employment.

## **Regional Cooperation**

Many of those interviewed stressed that urban sprawl, environmental protection, population movement, job location and economic development are regional issues that require regional coordination and planning. Competition for resources and redundant production of services and amenities was identified as ultimately destructive for the region. A Citizens League Research Institute study showed that 75% of Greater Clevelanders believe that local elected officials should make decisions based upon what is good for the Greater Cleveland area. Seventy-one percent of respondents also supported cooperative efforts between local governments to solve problems.

## **Economic Development/Internationalization of Economy**

Economic development was identified as a key to sustainability. In the Marshfield, WI, News-Herald article of October 8, 1994 “is all well in Cleveland?” Cleveland Mayor Michael White is quoted as saying “Take care of economic problems, and two-thirds of social problems go away.” Cleveland Tomorrow, a committee of more than 50 chief executive officers from the region's largest companies, states that “a stronger economy boosts the community's ability to cope with its problems and government's capacity to respond to emerging needs.” Interviewees stressed that any effort to address economic development and sustainability must account for the increasing role of the international marketplace. Over 1,600 Greater Cleveland companies are engaged in international trade. Exports account for approximately 80,000 jobs and 175 area companies are foreign-owned (The New Cleveland Campaign).

## **Cleveland Sustainability Initiatives**

Cleveland has a large number of ongoing initiatives addressing the issues discussed above, some of these are described below.

## **Brownfields Redevelopment**

The County's focus on reuse of brownfields is "one effort by the Cuyahoga County Planning Commission to counteract the sprawl of our urban region." The Brownfields Working Group, a multi-stakeholder group, was convened to follow up on the work begun in the 1992 Brownfields Symposium Conference. The Working Group analyzed the brownfields problem and made recommendations to the County Commissioners in July of 1993. Since then, a voluntary cleanup law has been enacted in Ohio, and Cleveland received funding from the US EPA to do two demonstration projects. Working Group members have been involved in the voluntary cleanup laws' rulemaking and in efforts to create a County revolving loan fund.

- **The North Cuyahoga Valley Corridor**

The North Cuyahoga Valley is a river valley running north from the Cuyahoga National Recreation area to Lake Erie. The area offers riverside recreational opportunities but also has a rich history of economic activity. The County Planning Commission has proposed to develop this area in a way that highlights its history of mixed use development and provides multiple benefits. The plan calls for:

- maintaining and expanding the valley's mix of heavy and light industry
- development of heritage education facilities and interpretive river walk paths
- preservation of approximately 150 acres of natural habitat
- development of new recreation-based economic opportunities.

Access to these areas will be provided by an extensive network of bike trails, a trolley system, and existing towpaths. These forms of access will have low impact upon the environment, enhance the aesthetic appeal of the area and serve as attractions themselves. By basing development of the river valley on its multiple roles as heritage touchstone, economic center, recreational area, and distinct feature of the Cleveland landscape the valley can create a sense of "place" and "community" in Greater Cleveland.

## **Solid Waste Management Planning**

In 1994, Cuyahoga County reached the state's 25% recycling goal. The County's Solid Waste Management District recognized the "importance of continuing to increase the diversion of waste from

landfills in order to reduce our reliance on landfills and to cost-effectively manage waste and conserve natural resources." (Plan summary) The District set an ambitious 46% recycling goal for the year 2002. This goal has the support of the community and recycling has increased 145% over the past two years. To bolster the program's success the recycling plan calls for community outreach, education in the schools, expansion of a cooperative marketing program, provision of on-site technical assistance for business waste reduction/recycling initiatives, development of public recognition of innovative initiatives, establishment of a waste exchange, and cooperative recycling and recycled product procurement plans for small businesses. The plan anticipates using the large volume of recyclables to attract recycling firms and promote economic development. Funding for the District's plan will come from a fee levied on all waste delivered to landfills, transfer stations, and waste to energy facilities. There will be no fee at recycling or composting facilities.

## **Midtown Corridor**

Established in 1983, MidTown Corridor is a "non-profit economic development organization which assists in all aspects of neighborhood revitalization, including marketing, real estate development, visual quality, security and employment." MidTown was formed by local businesses in response to security concerns and deterioration of the "midtown" corridor between downtown and University Circle. MidTown has been successful by many measures. Through its marketing efforts and provision of technical assistance over 275 new businesses and \$275 million dollars have been brought to the corridor since 1983. With crime reduction efforts that stressed vigilance, prevention, and coordination with police, crime in Midtown has been reduced 40% since 1983. To improve the neighborhood's appearance, MidTown sends letters to landowners to request voluntary upkeep, offers a Design Review Committee to assure appropriate and attractive exterior improvements, and works with the City to enforce housing codes. MidTown and Vocational Guidance Services partnership "Jobs: Neighborhood-By-Neighborhood" sums up MidTown's dual commitment to MidTown businesses and the local community. The program surveys business employment needs and matches potential employees to these needs. One hundred people have been placed, virtually all Cleveland residents and 50% of which live in the Central neighborhood.

## **Time Shares Exchange**

Begun in 1993, Time Shares is a non-profit organization founded in Cleveland's Broadway neighborhood and in West Boulevard Estates. Time Shares provide a way for people to meet their basic needs while giving something in return. Workers earn credits through performance of community service. Every hour of service is equal to one credit or "Timeshare." The credits can be exchanged for services, (baby-sitting, yard work, etc.) or goods (fresh vegetables, diapers, mattresses, etc.).

To date, the organization has over 300 members, has logged 30,000 hours of direct community service and connected neighbor to neighbor. In addition, there has been a sizable benefit to the community's sense of place which is best captured in Time Shares members' quotes "*When others see you working and out there and being useful, it's going to rub off on people*", "*I just love helping people. It's fulfilling.*" Build Up Greater Cleveland (BUGC) is a public-private partnership coordinated in conjunction with the Greater Cleveland Growth Association- Cleveland's Chamber of Commerce. Established in 1983 by local leaders, BUGC's mission has three components: (1) to identify the infrastructure rehabilitation and expansion needs of Greater Cleveland, (2) to secure the financing necessary to meet those needs, and (3) to expedite implementation of infrastructure projects.

Public infrastructure was deteriorating rapidly in 1983 when public and private sector leaders teamed up. The partnership resulted in cooperation from officials throughout Cuyahoga County, helped influence the Cleveland City Council to address the decay of the water distribution system, significantly reduced the time necessary to fund infrastructure projects, and opened up new funding sources. From 1983 to 1990, BUGC generated \$694 million dollars which would not have been available otherwise. The resulting rehabilitation of infrastructure enables the community to focus on the sound infrastructure management that is essential to community well-being.

## **Broadway Area Housing Coalition (BAHC)**

The BAHC is a non-profit housing organization in the Broadway Area of Cleveland, an inner-city, integrated low-income and working class neighborhood just south of downtown Cleveland. The BAHC is working to revitalize the neighborhood and restore a sense of community by

revitalizing the communities' housing. One such project is the Mill Creek redevelopment. Located on 100 acres of contaminated property, the BAHC is cleaning and redeveloping the Mill Creek site into 219 single and double family homes and a neighborhood park. The redevelopment will retain the character of the neighborhood by echoing the area's housing style. The project's 35 acres of new parkland will be a focal point for the community, providing a hiking and biking trail leading to a 45 foot waterfall. BAHC's Bobbi Reichtell, attributes their success to the cooperation of the State, City, public and private sectors, and work of the neighborhood residents. Reichtell said "It is an honor to work with the folks in the neighborhood. . . . They weren't willing to write it off but had a vision for the future."

## **Earth Day Coalition**

The mission of The Earth Day Coalition is to build a healthy, safe, and sustainable Earth by developing and promoting a common regional environmental agenda with the people of Northeast Ohio. Established in 1990 to organize the EARTHfest commemorating the 20th anniversary of Earth Day, the Coalition serviced crowds as high as 40,000 people in 1990 and over 20,000 people for EARTHfest 1993. The Earth Day Coalition has worked providing information, educational materials and forums on recycling, and a variety of other environmental issues through a Town Meeting Series presenting reduce/reuse/recycle information at inner city town meetings and other presentations at area schools. Recycling was also the focus of The Blue Bag Drop-off Program which served as a forerunner to curbside recycling and introduced Cleveland residents to the Blue Bag concept of curbside recycling. The program has served over 2100 Clevelanders and collected over 64,000 pounds of recyclables. Other coalition activities include the Environmental Health Neighborhood Network and The Energy R.A.C.E. The first program works with contaminated communities and neighborhoods facing new and existing sources of toxic, hazardous or radioactive pollution to empower their residents through advocacy and education. The latter, a new program, advocates the use of Renewable and Alternative energy resources along with energy Conservation and Efficiency to reduce dependence on less environmentally friendly sources of energy.

## **EcoCity Cleveland**

EcoCity Cleveland is a nonprofit, educational organization. Its mission is to stimulate ecological thinking about the Northeast Ohio Region (Cuyahoga Bioregion), nurture an

EcoCity Network among local groups working on urban environmental issues, and promote sustainable ways to meet basic human needs for food, shelter, productive work and stable communities. To accomplish its mission EcoCity Cleveland publishes a monthly newsletter and sponsors events to promote information exchange and connect people and groups working for a sustainable bioregion. David Beach, EcoCity Cleveland's Editor, believes that systemic changes in the region's economy are needed to achieve sustainability. Starting points would include internalizing environmental costs and realigning incentives to coincide with environmental protection as has been done with demand-side management in the utilities industry.

### **The Lake Erie Alliance**

The Lake Erie Alliance is a consortium of organizations in existence around the shores of Lake Erie in the United States and Canada. The mission of the Lake Erie Alliance is to act as a coordinating and facilitating international network for communication among non-governmental organizations in the Lake Erie watershed to identify and address common issues impacting environmental integrity in the Lake Erie bioregion. Implementation efforts include educational talks, a newsletter, conferences and articles. Issues of primary concern for the group include maintaining public access to Lake Erie (which is 80-85% privately developed), wetlands protection, and ensuring that the State complies with the Great Lakes Initiative.

### **Cleveland Tomorrow**

Cleveland Tomorrow is a committee of more than 50 chief executive officers from the region's largest companies. It was formed in 1982 and is committed to focused initiatives that improve the region's economic vitality. Cleveland Tomorrow recognizes "the deeply rooted social concerns facing Cleveland and the region and believes that social and community strength grows only through creating economic strength." At the same time there is recognition that "over the long run, quality of life determines much about a region's ability to compete." Some of Cleveland Tomorrow's specific strategic initiatives are discussed below.

Increase management and technology assistance to the region's manufacturing base. Specific initiatives include enhancement of the region's technology base through the Technology Leadership Council, with emphasis on increased biomedical research, and emerging environmental technologies. In addition, this strategy calls for creation of a manufacturing

learning center to: prepare a more practically trained workforce, educate companies in employee involvement, and partner with the Cleveland Advanced Manufacturing Campaign (CAMP) for provision of technical assistance (to groups such as MidTown Corridor) in pollution prevention and advanced manufacturing technologies. Foster additional efforts to stimulate new businesses.

This strategy employs a multi-faceted approach. It seeks to stimulate entrepreneurship through Enterprise Development Inc., by building public awareness, capital formation, technical assistance and, in particular, technology transfer, stimulate minority capital formation with emphasis on minority entrepreneurs and where possible emphasizing opportunities in Cleveland, help launch the Neighborhood Economy Initiative which aims to create jobs by recycling a million square feet of industrial buildings in Cleveland neighborhoods as economic incubators.

The incubators would recruit neighborhood entrepreneurs, hire neighborhood residents through a job training and recruiting network, and assist in mobilizing growth capital for these young neighborhood ventures.

### **Stimulate Market Driven Neighborhoods**

This strategy is premised upon the fact that patchwork progress leaves too much of the community behind and that everyone has a stake in improving neighborhoods. To address this Cleveland Tomorrow will continue support for Neighborhood Progress Inc., a partnership of neighborhood organizations, corporations, banks, foundations and government, which Cleveland Tomorrow helped found. In addition, the strategy intends to explore creation of a large scale land assembly and environmental remediation system. This may include a public-private fund to address land assembly issues. To date, over \$30 million dollars have been invested.

### **Gateway Sports Complex Development and Inner Harbor Redevelopment**

The city of Cleveland and Cuyahoga County have supported the development of aggressive, visible economic development in downtown Cleveland in the form of a new baseball park, a new arena for basketball and hockey, and the Rock and Roll Hall of Fame. The county guaranteed the bonds for the development of these facilities and they have leveraged investment and redevelopment in adjacent downtown areas. Traditionally, this type of development is seen as strictly

economic development; however, there are other important benefits which should not be overlooked. Its downtown location reduces sprawl, makes it accessible to area residents who do not own cars, attracts suburban residents, and serves as a focal point for the community. Equally important, the size of the development has made it a very visible project. In 1990, 72% of Greater Clevelanders identified downtown development as the best thing happening in Cleveland (CLRI). The success of these projects has become a source of community pride and serves as evidence of their “comeback” for many area residents.

### **Learning From Cleveland's Initiatives**

There appear to be two primary factors driving sustainability activity in the Greater Cleveland area. The first is the broad consensus, expressed by the interviewees, on the nature of the problem. Non-profits, business representatives, environmental groups and government representatives consistently identified a core set of issues as critical to making Greater Cleveland a desirable place to live and conduct business (e.g. the city's relationship to surrounding areas, brownfields, etc.). The second factor is the belief that individual businesses and residents of the Greater Cleveland area (not just the City) have a direct self-interest in correcting these problems; referred to by Cleveland Tomorrow's Joe Roman as “enlightened self-interest.” This belief makes the link between individual, corporate and regional health. Agreement on Greater Cleveland's problems and “enlightened self-interest” create an environment in which a diverse set of groups act towards common goals.

In this environment, individual initiatives were leveraged and made more effective through cooperation, partnerships, and the creation of synergistic benefits. The Mill Creek project required cooperation between the Broadway Area Housing Coalition, MetroParks, the community, the city, and the state; MidTown corridor partnered with Vocational Guidance Services to more effectively match employers and employees. Synergistic benefits have resulted from geographically targeted efforts. For instance, by targeting Midtown for crime prevention, job creation and building restoration, each initiative benefited from the impacts of the others. Increased safety meant a better climate for business and more jobs. In turn, job matching increased the income of city residents giving them access to more resources.

### **Implications for the Sustainable Communities Task Force**

Though this case study has been limited in scope and largely

anecdotal, Greater Cleveland's experience with sustainability initiatives offer valuable insights to the Sustainable Communities Task Force. The Task Force should attempt to build community consensus on the nature of the problems they face and the stake community members have in solving them. In Cleveland, it is likely this consensus resulted from a variety of factors: the severity of the economic problems Greater Cleveland faced in the early 1980s, the massive population outflow of the past four decades, the dramatic concentration of poverty in the last two decades and the documentation of this information by local academic institutions. In addition, information has been disseminated in the context of supporting specific initiatives and actions. The Task Force could attempt to build similar consensus through documentation of experiences such as Cleveland's, community visioning processes, creation of tools to compare different development patterns, and by supporting specific initiatives with contextual sustainability information.

Cleveland's experience also identifies opportunities for the Task Force to remove barriers to community action. Regional task forces, groups, coalitions and authority's have coalesced to address some of the regional problems facing Cleveland but interviewees indicated that many issues requiring regional coordination still receive too little attention. Brownfields, due in some degree to perverse outcomes of environmental regulations, are neither cleaned nor redeveloped. Other environmental regulations are overly prescriptive and do not allow businesses to make the changes which maximize benefits. Education and job training programs focus on numbers of participants moved through the system rather than results. The Cleveland community has initiatives addressing these issues but better incentive systems and increased flexibility would make these more effective

The Task Force can make action easier by recommending changes, such as providing more incentives/opportunities for regional action, removing brownfields barriers, making closer links between educational system/jobs training and the business world, and providing greater flexibility in meeting environmental goals. If these changes are made, and communities can agree and act upon their problems, they will be increasingly successful in enhancing their sustainability.

For more information about sustainable development activities in Cleveland, contact Paul Alsenas, Director; Cuyahoga County Planning Commission; 323 Lakeside Avenue, West Suite 400, Cleveland, OH 44113; (216) 443-3700, fax (216) 443 3737 website [www.en.com/users/ccswd](http://www.en.com/users/ccswd).

## Appendix C

### Community Profiles in the Fifty States

This compendium of initiatives, a few of the many outstanding efforts around the country, is intended to address these questions. They demonstrate the diversity and breadth of approaches that communities are using to promote economic health, environmental quality, and social equity. Collectively they illustrate the varying dimensions of sustainability and the interrelatedness of community issues. They offer new perspectives that are participatory, long-term, and often driven by a common community vision.

These 51 reviews, from each state and the District of Columbia, provide examples of solutions at work in communities around the country. Where the problems or issues are similar, often the approach is vastly different. Many, however, contain common elements such as comprehensive and participatory planning, visioning processes, integrative approaches, and collaborations among citizens, businesses, public agencies, and nonprofit organizations. The stories are rural and urban, local and regional. They encompass a variety of issues from job creation to community democracy. Project sponsors vary from nonprofits to businesses to local governments. Many of the initiatives have sustainable development as a stated goal while others do not use the term explicitly.

Though these profiles can serve as valuable sources of information for other communities, they are also a compilation of success stories and therefore should serve as inspiration for all readers. From the South Bronx in New York to the mountains of Montana these stories are a message that citizens are exploring new ways of doing business and opening up exciting possibilities — often well in advance of political leadership. Unusual partnerships are coalescing between businesses, governments and nonprofits to step up pollution prevention and save money; developers are reducing costs by designing for the environment; neighborhoods are adding value to their property by creating green spaces; and low-income farmers are staying on their land by connecting with organic foods consumers in the city. Together these examples

tell a story of a new wave of American ingenuity and know-how, of citizens solving problems from a new perspective.

These profiles have been arranged alphabetically. Though there is something to learn from each study, we realize that most readers will not have the time to read them all. Each profile therefore begins with summary information including the Project Type, Methods Used, Participants, Scope, and Lessons Learned. We hope this will help to identify which examples will be of interest to you, and we think there is something here for everyone.

This appendix has also been published as a stand alone document by the EPA. Reproduction is encouraged. The following form may be used for attribution: Sustainability in Action: Profiles of Community Initiatives Across the United States, September, 1995. Urban and Economic Policy Division, US EPA; CONCERN, Inc.; Community Sustainability Resource Institute; Jobs & Environment Campaign. For additional copies, call 202 260 2750; fax requests to 202 260 0174 or write to the US EPA, Urban and Economic Development Policy Division, Mail Code 2125, 401 M Street, SW, Washington, DC 20460. Although this project was funded by the U.S. Environmental Protection Agency, it may not reflect the views of the US EPA. No official endorsement should be inferred.

We thank the following individuals for their contributions to this report: Susan Boyd, Burks Lapham, and Chris Larsen (CONCERN, Inc.); Susanna MacKenzie Euston, Ondine Wilhelm, Dr. Michael Murtha, and Marilyn Christiano (CSRI); and Judith Shapiro, Robert Inerfeld, and Benjamin A. Goldman (JEC).

#### Organizational descriptions

##### Concern, Inc.

CONCERN, Inc., founded in 1970, is a national non-profit environmental education organization. Its mission is to build public understanding of and support for programs, policies,

and practices that are environmentally, economically, and socially sound. CONCERN disseminates examples of successful initiatives and offers resources and guidelines for action. It employs an integrative approach to issues ranging from energy efficiency and safe pest management to waste reduction and water resource management. Its community action guides are being used in all 50 states and over 60 other countries. Through its Sustainable Communities Program it seeks to increase public understanding of and participation in community sustainability. It has identified and profiled examples of community-wide and issue-specific programs and projects, created a national database of sustainability resources, published informational materials, facilitated the exchange of information on sustainability, and is developing, in partnership with other groups, a model community sustainability network to serve as a single point of access to resources on sustainability on the Internet.

For more information

Contact: CONCERN, Inc., 1794 Columbia Road, NW, Washington, DC 20009. Tel.: 202 328 8160 Fax: 202 387 3378 e-mail: <concern@igc.apc.org>.

### **Community Sustainability Resource Institute**

The Community Sustainability Resource Institute (CSRI) was founded in 1989. A national, non-profit organization, its mission is to promote and support the advancement of sustainable development at the local, regional, and national levels. Originally based in the Washington, D.C., area, CSRI's inaugural program (1990 to 1995) was designed to network sustainability practitioners and to encourage the development of sustainability theory and action. It featured: publications (Community Sustainability Exchange, inaugurated in 1991 as S.U.R. Exchange); three annual national conferences (1992, 1993, 1994) which drew over 700 practitioners from around the United States; and, two annual speakers series programs held at the National Building Museum. At its new headquarters in the Asheville, NC area, CSRI is developing the Suburban Sustainability Center, designed to provide information on innovative sustainable living technologies,

including agriculture, energy, and health, to people living in suburban settings. Its publications and its extensive database of information on initiatives around the United States will be accessible at its new Internet Web site mid-summer 1996. It will publish a comprehensive handbook on sustainable community development, *New Life for Our Communities*, in late 1996, which will supplement its technical assistance to communities.

For more information

Contact: Community Sustainability Resource Institute, P.O. Box 981, Arden, NC 28704, Tel: 704 681 1955, Fax: 704 687 0441, e-mail: <sustain@primeline.com> or <csri@igc.apc.org>.

### **Jobs & Environment Campaign**

The Jobs & Environment Campaign (JEC) was founded in 1993 to defeat the no-win rhetoric that quality jobs and a quality environment are somehow incompatible. JEC's mission is to create jobs that are good for people and the environment. In pursuit of its mission, JEC offers technical assistance, leadership training, policy research, and organizational support. Currently JEC is working with communities in Roxbury, MA, Oakland, CA, the Merrimack Valley region of Massachusetts, Louisiana's "chemical corridor", and others. Its services include analytical testing services for at-risk communities, leadership workshops, a business incubator for environmental ventures, and assistance in establishing new non-profits. Research efforts include a report for the U.S. Department of Commerce that evaluates sustainable policy options, as well as a report on how to create thousands of new "green" jobs in Massachusetts that will benefit residents and the environment.

For more information:

Contact: Jobs & Environment Campaign  
160 Second Street, 2nd floor  
Cambridge, MA 02142-1502.  
Tel.: 617 547 5321 ext.: x207  
Fax: 617 876 6903  
e-mail: shapiroj@world.std.com

# Appendix C-1

## Alabama - Maine

### Land Assistance Fund

#### Epes, Alabama

**Contact:** Gus Townes, Director; Rural Training and Research Center; P.O. Box 95; Epes, AL 35460; Tel: (205) 652-9676

**Scope:** Statewide.

**Inception Date:** 1971

**Participants:** Cooperatives, individuals, farmers

**Project Type:** Environmental justice/equity, sustainable agriculture, community economic development

**Methods Used:** Training, cooperative development

**Lessons Learned:** It is difficult for organizations to conduct long term planning when the funding available to them may change considerably from year to year. Family farmers can make a living if they have access to the right skills and resources.

Since 1967, the Federation of Southern Cooperatives/Land Assistance Fund has organized a multi-racial, community-based cooperative economic movement among 25,000 low income families in over 100 communities throughout the rural South. Through its efforts, the Federation and its 125 member cooperatives and credit unions have worked to generate new income, jobs, services, training, awareness and a spirit of self-help and change for people in some of the most persistently poverty-stricken rural counties in the United States.

#### The cooperative movement

The Federation itself is a cooperative that is composed of both organizational and individual members. Nearly all of the member cooperatives were originally founded by the Federation and then spun off as separate organizations. Cooperative members in Alabama include the Freedom Quilting Bee, the Tuskegee Panola Land Buying Association, the Prichard Claiborne Catfish Cooperative, and the York Marengo County Farmers Association.

The mission of the Federation of Southern Cooperatives is two-fold: One, to help poor people help themselves. Two, to adapt the classic cooperative principles: "membership, one

person-one vote, benefits returned according to use and participation, limited returns on investment, constant education and constant expansion" to solving the problems of poor black farmers and rural communities.

#### Helping black farmers stay on the land

The Federation is the leading group in the nation actively involved with the problems of land loss and displacement of family farmers of color. Black farmers are still losing land at an alarming rate in the South, although in the counties where the Federation is active they have significantly reduced the rate of loss.

According to the Federation, land retention is the key to rural economic development, especially for African-Americans. There are few other viable options for residents, especially young people, in the rural south. Furthermore, when land is lost by farmers and developed for other uses the results often include negative environmental impacts.

In 1993-94, the Federation provided direct land retention assistance to over two hundred landowners who owned a combined total of over 24,000 acres of land. Of that amount, they were able to save nearly 17,500 acres that have a conservative value of \$8.75 million. The Federation also held over 400 community meetings and workshops across the rural South for more than 5,000 small family farmers who collectively own over 300,000 acres.

#### Strengthening and connecting rural and urban communities

The Rural/Urban Market Program helps black farmers retain their land by providing them with a source of consistent income. The program connects rural farmers lacking access to markets with residents in inner cities where quality, fresh, nutritious produce is not always available for a reasonable price.

In 1994, approximately 800 family farmers from throughout the South and 200 farmers in Alabama participated in the Rural to Urban Direct Marketing Project. Participating farmers sold over \$300,000 in produce through Rural/Urban markets throughout the south. In addition, many of the markets provided part-time jobs for youths and other community residents.

The Federation also organizes farmers to participate in selling to commercial markets. In 1994, over \$1.4 million in produce was sold to commercial markets. Many of the farmers that the Federation works with have been organic farmers for years but did not know that they could make more money by marketing their crops as organic. The Federation is showing farmers how to shift from chemical-based to sustainable farming and how to market organic agricultural products.

### **Community owned and controlled banking**

The Federation's five credit unions in Alabama have combined assets of over \$700,000, over 2,200 members and have made nearly \$6 million in loans. During 1994, a new community development credit union, the Stillman Community Federal Credit Union in Tuscaloosa County, Alabama was chartered by the National Credit Union Administration. During its first week of operation, \$60,000 was deposited by new members. The Federation is currently applying for charters for five more credit unions in Alabama.

Unlike conventional banks, credit unions are controlled by their members. Depositors elect the members of the board and the different committees that govern the credit unions. The Federation's credit unions make loans to people in the community who often cannot get loans from other sources. According to Gus Townes, Director of the Federation's Rural Training and Research Center, "The credit unions are not only financial institutions but also are vehicles to pull people together and force them to plan about community issues and organize around other issues."

### **Cooperative training and leadership development**

In 1971, the Federation established the Rural Training Center on almost 1,000 acres near Epes in Sumter County, Alabama. The Center provides training to individual and cooperative members in the following areas:

- Cooperative Economic Development,
- Operation and Management of Credit Unions,
- Specific skill areas for Agricultural, Handicraft and Consumer Cooperatives,
- Housing production, development, rehabilitation and weatherization,
- Youth development and leadership,
- Business development and loan packaging,
- Community organizing and development,
- Agricultural marketing.

Approximately 30 people each month and 350 to 400 people each year will be trained at the Center when renovations are completed in late 1995.

### **Rural Enterprise Community (EC)**

Greene and Sumter Counties in Alabama were among 30 rural areas designated as federal Enterprise Communities based on a proposal submitted earlier in the year by the Federation of Southern Cooperatives on behalf of the county governments and community groups.

The Federation will serve as the lead agency in administering approximately three million dollars in EC funds. Three flexible funds will be established with \$2.6 million: a Revolving Loan and Equity Investment Fund (\$1.5 million), an Infrastructure Investment Fund (\$500,000) and an Education, Training and Supportive Services Fund (\$600,000) to facilitate moving the EC area forward in a positive direction.

The primary purpose of the Enterprise Community is to provide business opportunities and create 1,000 jobs over 10 years in Sumter and Greene Counties, as well as to provide infrastructure funds to rural towns in the two county area.

### **Consistent funding a problem**

According to Gus Townes, the biggest barrier to the Federation's success is consistent funding. "Getting people to understand exactly what our mission is and getting funding on a consistent basis, those are our challenges. We never have been able to get a substantial amount of funding for five or ten years. If we knew we would have funding for the next five or ten years, we wouldn't have to cut corners and we could hire sufficient staff." The Federation is attempting to overcome this problem by moving toward greater reliance on self-generated resources from its membership and from the communities it serves.

### **Showing farmers how to be successful**

The Federation has a history of showing small family farmers how they can make a living and stay on their land.

"The challenge is how to take a farmer and move him from point a to point b," says Gus Townes. "We've been doing the same thing for almost thirty years. What we have done demonstrates the need for this kind of thing and that if a person really wants to do something they can "with the right resources. If a farmer really wants to farm and make money and hold onto his land, there's a way to do that."

## **Alaska Citizen Initiatives Sitka and Wrangell, Alaska**

**Contacts:** Sitka- Larry Edwards; P.O. Box 6000; Sitka, Alaska 99835; Tel.: (907) 747-8996

Wrangell- Bob Gorman, District Agent; Alaska Cooperative Extension Service; 1297 Seward Avenue; Sitka, Alaska 99835; Tel.: (907) 747-6065

**Scope:** Town/rural;

**Inception Date:** Sitka -1993 Wrangell - 1991;

**Participants:** Townspeople, fishermen, loggers, Native Americans;

**Project Type:** Citizen-led initiatives, natural resource conservation, local business development;

**Methods Used:** Public education, local organizing and planning, collaboration with other jurisdictions;

**Lessons Learned:** Public processes need to be inclusive. Anticipatory planning works best. Participatory processes help citizens develop new perspectives.

### **Sitka**

The town of Sitka, located in southeast Alaska on the coast of Baranof Island, was the first capital of Alaska. This deep water port of 8500 residents is set against a backdrop of mountains to the east and Sitka Sound to the west. Many on this island and neighboring islands rely on the bay and the forests for their subsistence. Other residents depended on employment at a local pulp mill. For years, it was the town's largest single employer of 400 people.

Two years ago, the Alaska Pulp plant was closed down. Local officials and residents alike feared the worst, anticipating economic collapse and high unemployment. The city administration took a traditional route in devising an economic recovery plan. It formed a task force and held meetings to decide what the future of the community might be and to develop a set of recommendations, which included attracting another large employer.

In contrast, the reaction of many citizens proved to be quite different. Initially they too were concerned about the loss of the mill on their jobs and Sitka's economic future. As time went on, they became more interested in developing an economy that was more diverse as well as environmentally

sound. They wanted more small businesses employing a few employees rather than large single businesses that might have an adverse effect on the environment.

### **Recent economic trends**

Despite the initial gloomy predictions from local officials after the mill closed, the town has continued to prosper - tax revenues are \$85,000 higher than expected, housing starts are up, business revenues and startups have increased, land values are higher, and job creation is strong as evidenced by the public health hospital planned expansion with new jobs for 160 people. Although the timber industry is declining, other economic areas are expanding. Tourism is now a billion dollar per year industry in Alaska and an important part of Sitka's economy. Small businesses, health care and especially construction are growing. Since the plant was closed, air and water quality have improved substantially.

### **Citizen initiatives**

In early 1994 a citizen's comprehensive plan was developed to help citizens envision their future and make recommendations to the City Council. It has informally prompted a series of citizen action steps.

Many citizens are seeking a diversified economy that produces jobs while protecting the environment. They emphasize the need for:

are looking at examples of businesses that are, according to Kathie Wasserman, the director of a new marketing alliance for value-added products, "forest-related, not timber-dependent." It would correspond to the work of WoodNet, located in Washington state, which supports a collaborative effort among artists, artisans and timber interests. Other examples of value-added enterprises would include a company in Vancouver that produces wooden outdoor furniture and has created 20 jobs using as little as 500,000 board feet per year.

One of the grassroots organizations, Friends of Southeast's Future, is taking steps to insure that sustainable logging practices are employed. They have drafted, circulated and presented the town's first citizens' initiative, scheduled for inclusion on the ballot this fall, which will call for a change in timber extraction practices. Specifically, it calls for an end to clearcutting and to all comparable logging methods in the "Sitka Local Use Area" in order to prevent habitat destruction.

Maintaining ecosystems and protecting habitat is especially important for natives and non-natives alike who subsist on game and fish. The livelihood of commercial fishermen is at

stake as well. They catch as much as 800,000 pounds of salmon each year and are equally dependent on maintaining a clean environment. Any major impact, such as deforestation, affects their survival.

This wholly grassroots effort has taken this initiative directly to the people of Sitka and has been effective in publicizing it in the local paper, on radio and television spots, and through word of mouth. They are persuaded that this effort is critical to assuring a sustainable future for their community.

Citizens from all walks of life have gathered signatures from their neighbors, in stores, at schools and even from fellow fishermen on the water, in numbers far more numerous than required by law. If the initiative receives a majority of votes, it will have legal authority.

This initiative and the process citizens are employing is proving to be an inspiration for other small communities in Southeast Alaska such as Craig, Elfin Cove, Gustavus, Hoonah, Kiawock, Kupreanof, Pelican, Tenakee Springs, Yakutat, and the Haida Tribe/Hydaburg Cooperative Association. They are also developing resolutions, with similar emphasis, for adoption in their jurisdictions.

### **Wrangell 2001**

The potential loss of a saw mill, which in fact closed in 1994, also prompted this fishing and timbering town of 2,300 located at the middle of the Panhandle in Southeast Alaska to reexamine its future. Local townspeople came together to address their needs and to develop a plan that was different from their traditional reliance on logging.

Beginning in 1991, a series of strategic planning meetings were held involving a broad cross-section of the townspeople from business, government, fishing, health care facilities, schools, the former mill, and from native tribes. This effort was coordinated by Bob Gorman, district agent for the Alaskan Cooperative Extension Service and Keene Kohrt, Wrangell district Ranger for the US Forest Service.

The goal of these meetings was to encourage the expression of the vision and ideas of the stakeholders. They attracted a large number of residents with diverse points of view. After the first year of meetings, in order to gather a wider input of opinions, the organizers solicited views through a community survey on economic, infrastructure, and socio-economic issues.

Some of the issues the respondents considered as priorities were ways to enhance the fishing industry, maintain timber interests, provide education for all, expand the visitors' center,

and improve the infrastructure. The discussion ground rules were clearly presented to insure respect and full consideration of all views. The main recommendations include:

- opportunities for small businesses engaged in value-added specialty products;
- a unified approach to dealing with natural resource issues;
- support services for the fishing industry to encourage fishermen and fish processors to stay in Wrangell.

Apart from developing the action plan of economic diversification focusing on timber, fishing, tourism, and a strengthened infrastructure for fisheries, they convinced the City Council to hire an economic development planner to help implement the plan. Another benefit for the community was a generation trained in leadership and facilitating skills. They learned the importance of working together, developing consensus, and thinking long-term. Bob Gorman stated the most important aspect of this effort, and that of Sitka, has been the process.

### **Challenges**

The residents of both Sitka and Wrangell have chosen to take an active part in rebuilding their economy in ways that look at the long-term health of their communities. These are new concepts and ones that require the participation of all the stakeholders. Perhaps the greatest challenge in Sitka is finding consensus on its economic future. Wrangell faces a similar situation but rebuilding a solid economic base may take more time. As a result of both these planning processes the future will reflect the vision of many rather than a few.

### **Civano-Tucson solar village Tucson, Arizona**

**Contact:** John Laswick, Project Manager; City of Tucson; Tel.: (520) 791-5093; Fax: (520) 791-5413; Office of Economic Development; P.O. Box 27210; Tucson, AZ 85726-7210

**Scope:** Local, urban

**Inception Date:** 1989

**Participants:** Local, county, state and federal government agencies, key utilities, citizens groups and individuals, and a university

**Project Type:** Community design, energy efficiency, green building

**Methods Used:** Multi-stakeholder process with extensive involvement of public and private agencies and organizations in an innovative planning process; preparation of master development plan and zoning ordinance revisions, preparation of performance targets, selection of master developer, provision for community monitoring of performance.

**Lessons Learned:** The lack of a full-time advocate for the project has slowed down its progress.

### Summary of Project

The Civano Tucson Solar Village (Civano) is a major real estate development that will be built using the principles of sustainable development and traditional neighborhood design. Planned for 820 acres (owned by the Arizona State Land Department within the southeastern city limits of Tucson, Arizona), Civano is intended to be an exemplary demonstration of cost-effective, resource-efficient development practices, where energy use and waste will be reduced while economic efficiency is increased. The overarching goal of the Civano project is to demonstrate the marketability of sustainable community design, on a large scale at affordable prices. Specific objectives are to:

- build a model sustainable community for an arid climate;
- use sun energy, conserve water, use land efficiently, reduce waste products and conserve time;
- promote a sense of community and place; and
- demonstrate that conservation can be both economically viable and socially relevant.

The village is planned around a compact core with a full mix of employment opportunities, shops, services and recreational activities. Both homes and multi-family dwellings will be built and will accommodate persons with a wide range of incomes.

### Broad Public / Private Partnership Creates Civano

Civano was originally a joint project of the Tucson-Pima County Metropolitan Energy Commission and the State of Arizona Energy Office. The project is currently being managed by the City of Tucson Office of Economic Development. Active planning for the project began in 1989 and involved the creation of a Master Development Plan presented in February 1992. It is expected that the state land will be sold during the Fall of 1995 to a private master

developer, who will agree to the designated performance standards. Zoning is approved for the project. Civano was planned in a highly cooperative framework of public, private, and community interests at the local, state and national levels. Organizations involved in the process, past and present, include: City of Tucson (key agencies), Civano Advisory Committee (composed of 16 community advocates and business people), citizens groups and representatives of Metropolitan Tucson, the U.S. Department of Energy's Urban Consortium Task Force, Arizona State Land Department, Arizona Solar Energy Advisory Council, Environmental Research Lab, Greater Tucson Economic Council, National Research Center, National Association of Home Builders, Pima County, P&D Technologies, Community Design Associates, The Planning Center, Public Technologies Inc., Sandia National Labs, Southern Arizona Home Builders Association, Tucson Local Development Corporation, Tucson Electric Power, University of Arizona, Greater Tucson Economic Council, County Wastewater Management, Sun Tran, Pima Association of Government, and Southwest Gas.

### Performance Targets

Key to the Civano Village concept are the performance targets developed for the village. The original targets, as expressed in the 1992 Master Plan, are to:

- reduce energy consumption by 75%;
- reduce the consumption of water by 65%;
- reduce the production of solid waste by 90%;
- reduce air pollution by 40%;
- provide one job for every two residential units built;
- limit auto access by developing an internal transportation circulation pattern that encourages pedestrian and bicycle, or (with permit) electric golf cart; and
- provide affordable housing within the village.

In 1994, updated performance targets and the requirements/guidelines for meeting them were developed for the city by a team of leading U.S. environmental specialists, Criterion Planners/ Engineers and McKeever/Morris, Inc. of Portland, Ore., and their subcontractor, the Center for Maximum Potential Building Systems of Austin, Texas. The teams approach is referred to as the IMPACT system (Integrated Method of Performance and Contribution Tracking), which is a means of organizing resource efficiency goals and stakeholder cooperation for sustainable community development, and for measuring progress toward those goals over time. The general goals for the targets are presented, for

the most part, in terms of "reducing (energy, water, etc.) demands beneath Metropolitan Tucson baseline levels." Specific detail is presented for each. In the case of energy, targets are broken down according to building type. The goals and targets will be updated every two years.

Each goal is accompanied by building requirements designed to help achieve the performance target. A sampling of requirements (as worded) in the plan, includes:

- Street and lots are to be designed so that all structures can be oriented to optimize solar exposure;
- Landscape and hardscape coloration and vegetation is to be used to reduce microclimate temperatures adjacent to buildings. The average reflectivity of all major exterior surfaces must be 0.5 or greater on the albedo scale;
- Consideration will be given to district heating and cooling of the Villages high-density core areas; and
- All landscape irrigation will be accomplished with non-potable water and / or rain harvesting.

In summary, the guidelines also require the:

- use of solar technologies in building construction, including the use of shading, daylighting, and high performance windows.
- layout of the village and the design of individual buildings that anticipates the future economic use of photovoltaic energy generation; a land set-aside for a photovoltaic field and using building designs that can accommodate solar equipment in the future.
- use of city xeriscaping standards in the village to save water; the use of high-efficiency irrigation systems, normally located below grade, and the use of water conservation standards for fixtures and appliances.
- developers to contribute to the reduction of solid waste by providing land that is set-aside for a Recycling Center and community composting facility; builders to provide recycling separation areas and hazardous material storage in private homes; and the use of recycled building materials and recycled materials in roadway and pathway construction wherever possible.
- limited use of automobiles to reduce air pollution by: using through streets rather than cul-de-sacs; requiring all streets to have either sidewalks or parallel bike or multi-purpose paths; locating retail services and employment areas near residences; creating residential and commercial areas that are

pedestrian-friendly, with tree canopies, benches, and signage; the use of bicycles and electric carts; siting recharging stations for electric vehicles within the village; and, providing a shuttle service from the village to the nearest transit stop or park and ride lot.

- emphasis on local employment, with the requirement that a percentage of commercial space be constructed for every residential unit (the goal is that the local business district employ a minimum of 1200 people). Builders are encouraged to provide home office spaces in residential units with appropriate space, daylighting, and electrical connections.
- wide mix of housing types, including multi-family housing, in the core area closest to the central commercial area, with the overall requirement is that 20% of the units be priced for low-income households.

### **Compliance**

The methods that have been developed to achieve the environmental performance goals are the most innovative aspect of this ambitious program. The Civano Community Association (CCA), to be composed of future village residents, and its CCA Development Review Committee, will share the responsibility with the City of Tucson for monitoring and approving builder performance in meeting the standards. The "Performance Target Compliance Workbook," based upon the "Measurement and Implementation Plan," is intended to help land developers and builders achieve the goals and targets of Civano. It will also be used by the City of Tucson and the Civano Community Association to check compliance and determine whether land development and building permits should be granted. The city is working with educational institutions, utility companies and industry associations to develop an educational program that will be used as part of a process to certify builders and designers for work on Civano and to meet its performance standards. The city also plans to make this program available to other construction projects anywhere in the Tucson area, on a voluntary basis, as soon as possible.

### **Making Vision a Reality**

The development of this visionary project has spanned six years, and is going into its seventh. The plan called for the sale of the land to a master developer a year ago, which did not materialize: The states goal to get top dollar for the land may be a barrier to finding a buyer. The project, which hit a lull as a result, is moving forward once again. The city's Office of

Economic Development has ordered a new marketing study, is developing a high quality advertising brochure to meet the needs of potential master developers, builders, and consumers, and is completing the review and approval of the performance standards, with the goal of finding a buyer/master developer in the Fall of 1995.

## **Meadowcreek local food project Fox, Arkansas**

**Contact:** Gary Valen, Executive Director; Meadowcreek, Inc.;  
1 Meadowcreek Lane; P.O. Box 100; Fox, AK 72051; Tel.:  
(501) 363-4500; Fax: (501) 363-4578

**Scope:** Local/county, urban/rural

**Inception Date:** 1986

**Participants:** Farmers, gardeners, livestock producers, food service operators, local consumers, transportation operators, canning kitchen and restaurant workers, local governments, service clubs, non-profits and Chambers of Commerce

**Project Type:** Economic development, food production, value added business, local marketing

**Methods Used:** Demonstration projects, education, training

**Lessons Learned:** The need for cooperation among producers and consumers to overcome institutional barriers; inflexible bidding requirements keep state school from participating.

### **Summary of Project**

The Meadowcreek Local Food Project links institutional food services (such as cafeterias or restaurants) to local sources of food. It utilizes a holistic and comprehensive approach, based on sustainable community development principles. The overarching objectives of the program are rural community revival and the reestablishment of food production as a meaningful, profitable, and desirable occupation. Goals of the program are to:

- provide occupations for rural people
- connect consumers with persons who grow food in the local community;
- promote agricultural methods that are healthy to the consumer, environmentally-sensitive, and humane to farm animals and wildlife;
- empower institutions with food service operations to support community development through the purchase of food items from local sources; and

- feature local food items in area supermarkets, food outlets, and eating establishments.

The benefits derived from Local Food Projects include:

- fresher, healthier sources of food for food-service patrons;
- new markets for farmers, which help sustain the small- farm way of life;
- new partnerships among groups within the community; and
- an infusion of money into the local economy, money that can be reinvested in the community many times over.

### **Project Sponsor**

The project sponsor, Meadowcreek, Inc., is a 501(c)(3) organization. Its outreach programs focus on sustainable community development, environmental concepts and practices, and alternative energy strategies and implementation. Headquartered in the Ozark Mountains, its facilities serve as an education and conference center. On its 1500 acres, Meadowcreek also demonstrates local food production, environmentally sensitive lifestyles, alternative energy methods, and rural community development. Meadowcreek, Inc., derives most of its income from the use of its facilities for conferences, retreats, and youth programs. The use of its own food products provides an income from the garden as well as from the food operation. It received major financial support (which is currently winding down) for three years from the Kerr Center for Sustainable Agriculture in Oklahoma. A portion of the Local Food Project is sustained by the everyday activities at Meadowcreek. The projects described below “Hendrix College and the Leslie community project” received, or are receiving initial sponsorship from private foundations, the Rural Economic and Community Development Services of USDA, and private donations. The Hendrix project is self-sustaining. The Leslie project is designed to be so within three years.

### **College Supports Local Economic Development**

In 1986, Meadowcreek, in cooperation with Hendrix College in Conway, Ark., began a collaboration that led the college to establish the Hendrix Local Food Project. Students, as part of a campus wellness program, focused on student nutrition and conducted a study that gathered information on the sources of the food served at Hendrix. They discovered that wholesalers filled campus food orders with products obtained from across the United States and Mexico, with only seven percent of the

cafeterias meal items coming from Arkansas. Meat, vegetables, and dairy products came from long distances, even though such commodities were produced within a few miles of the campus. Hendrix, a private, four-year liberal arts college, is "committed to encouraging not only the intellectual development of the state's young people, but also the economic development of its home community and the state as a whole."

So the administration took the position that commodities produced locally were preferred to those produced outside the state and, in June 1987, directed the food service to buy its food supplies as close to home as possible.

### **Challenges Met With a Variety of Strategies**

Following through on this good intention presented some immediate challenges, including a kitchen that was organized and equipped to use mainly processed foods, and farmers that weren't prepared to supply products in the form and amounts needed by an institutional food service. Local foods were actually more expensive, especially if they carried the "organic" label. Students raised on fast foods (common meal choices in the modern era of working families, shopping malls, and large institutional foods operations) had to readjust their tastes. These barriers required strategies to educate the producers, consumers, and meal preparers. New systems and procedures had to be developed to facilitate the use of local commodities. The Hendrix Local Food Project was successfully created to meet those needs. The project was directed by a coordinator and a small advisory group so that problems could be addressed and new ideas incorporated. Strategies implemented included:

- preparing menu plans that utilized food from local producers;
- preparing a list of menu items at the beginning of the season so the farmers could adjust their production to a known market;
- designating one farmer as the delivery person so that the local produce arrived on one day each week at the food service; and
- labeling menu items so the students would know what came from local sources, as well as nutritional information.

The college, with the advice and help of Meadowcreek, was able to bring its utilization of local food from seven percent to thirty percent in three years. As a result, over \$200,000 in food-generated revenues were spent in the local community each year. The yield would have been higher if permanent

distribution systems and more farmers could have been added. The Hendrix Local Food Project, while it is still in effect, is challenged by the lack of a community-based supply system and the failure, as of yet, to gain support from other institutions in the same area. A state school in the same community is unable to utilize local produce due to a complicated bid structure mandated by state government. Although the Hendrix Local Food Project experienced success, projects at several other colleges have remained less successful at overcoming the barriers of food service personnel resistance, distribution problems, and the lack of producers who can supply commodities at the times and in the ways that are useful to institutional dining operations. College administrators tend to view their dining halls as auxiliary services that have little relationship with educational missions. Most institutions hire outside vendors who have special relationships with large food distribution companies. Local farmers seldom gain access to these nationally organized markets. To be successful, local food projects require an interdisciplinary/cross-sectoral team approach. In the case of Hendrix, the team included the college's administration, the food-service's administration, kitchen staff, patrons (students, faculty, staff), funding agencies, rural development leaders, agricultural extension service agents and farmers and farmer groups. Students were integral to the success of the Hendrix project. The project provided a vehicle for hands-on experience in research, market analysis, agricultural production techniques, reporting, institutional food systems, and community development.

### **Next Steps**

The Meadowcreek Local Food Project is now entering its next stage of development through a community-based project that will link producers and consumers in a three county area of the Ozark Mountain region of Arkansas. The area, the location of Meadowcreek, qualifies as an economically distressed region by almost every criteria. The new project will begin with a restaurant and organic canning kitchen combination in the small tourist town of Leslie. The restaurant will feature menu items that utilize locally raised or grown organic foods. Patrons will be area residents and tourists who frequent the Ozark region. During the late evening or slow times the kitchen of the restaurant will be used to can organic food items for marketing and distribution to other outlets such as schools, grocery stores, hospitals, and industrial plants. Additional food operations will be located in other areas of the three county region. Several school districts plan to operate gardens on the school grounds as a learning device for students and a source of menu items for their cafeterias. Already, the increased

production of local foods has stimulated new farmers markets and the potential of a community supported agricultural (CSA) project. Meanwhile, Meadowcreek has joined forces with another non-profit organization to work on the Leslie component of the Local Food Project. Six VISTA Volunteers are working on the project to promote the concept in the region and to implement the various stages of development for the restaurant and canning kitchen. The VISTA Volunteers have found high levels of support for the local food concept among leaders and other residents of the region. The list of farmers interested in supplying food products to the initiative continues to grow. Meadowcreek will be able to ease the Leslie process with the lessons learned from its experience with the Hendrix College Local Food Project and its own kitchen/food operation. The Leslie project will in turn serve as a model for other communities. The Meadowcreek Local Food Projects manual "Local Food Production for Local Needs: a Manual for the Analysis of a College or University Food Service" will be available early Fall 1995. Other materials specifically on the Hendrix experience are also available through Meadowcreek.

## **Santa Monica Sustainable City Program Santa Monica, California**

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Dean Kubani, Administrative Analyst; Tel.: (310) 458-8972; Fax: (310) 393-1279

**Scope:** Local, urban

**Inception Date:** August 1991

**Participants:** Volunteer Citizen Task Force, City Departments, City Council, Santa Monica citizens

**Project Type:** Sustainable indicators, natural resource conservation, public education

**Methods Used:** Task Force with diverse fields of expertise, public survey, neighborhood presentations on program and community participation in revisions/recommendations, draft report for public comment, defining benchmarks and indicators of sustainability

**Lessons Learned:** Through a multi-stakeholder process and strong local government leadership and example, much can be done without changing laws.

## **Summary of Project**

In August 1991, the City Council of Santa Monica established the Santa Monica Task Force on the Environment as a working group comprised of seven volunteer citizens. They were nominated by city staff and City Council members based upon their specific expertise in environmental issues. Working with staff from the city's Department of Environmental and Public Works Management, Environmental Programs Division, the Task Force identified sustainability as a fundamental vision to guide the city's environmental policies and programs. The Task Force then worked to create the Santa Monica Sustainable City Program, with the purpose of providing the city with a coordinated, proactive approach to implementing the city's existing and planned environmental programs.

## **Developing Community Consensus**

Over a year and a half, the Task Force sponsored an extensive period of public review, community outreach, and consensus-building related to the Sustainable City Program. The draft of the proposed program was initially distributed to City Council, city departments, Housing and Planning Commissioners, Chamber of Commerce Environment Committee members, and interested citizens. A formal survey process, designed to identify areas of consensus, was conducted through a mailed questionnaire. A larger community-based public participation process was conducted with the assistance of the Neighborhood Support Center. A community-wide meeting held on June 2, 1994 generated participation from over 100 Santa Monica citizens. Task Force members also made presentations at annual and/or board meetings of most of the city's neighborhood associations. The revised program document was made available for public comment. Final revisions to the document incorporated and addressed the several hundred responses received. On September 20, 1994, the City Council officially adopted the Santa Monica Sustainable City Program founded on eight guiding principles:

- The concept of sustainability guides city policy;
- Protection, preservation and restoration of the natural environment is a high priority of the city;
- Environmental quality and economic health are mutually dependent;
- All decisions have environmental implications;
- Community awareness, responsibility, involvement and education are key elements of successful programs/ policies;

- Santa Monica recognizes its linkage with the regional, national, and global community;
- Those environmental issues most important to the community, should be addressed first, and the most cost-effective programs and policies should be selected; and
- The city is committed to procurement decisions that minimize negative environmental and social impacts.

The Sustainable City Program is carried out in four major policy areas, representing the focus of both current and future city programs that adhere to the guiding principles and strive to attain specific targets established for each area. The policy areas include:

- Community and Economic Development;
- Transportation;
- Pollution Prevention and Public Health Protection; and,
- Resource Conservation.

### **Program Development**

One of the first successes of the Sustainable City Program was establishing the Household Hazardous Waste Consumer Awareness Ordinance, also called the "Labeling Ordinance." To discourage dumping of hazardous waste, the Sustainable City Program brought retailers, city officials, and community members together to develop the Labeling Ordinance. It requires retailers to display labels that educate consumers on hazardous waste and encourages the use of non-hazardous substitutes. The Sustainable City Program will conduct public surveys to determine the success of the labeling. Other programs that are in progress include a comprehensive energy retrofitting of all city facilities and a sustainable schools project. A working group of the Sustainable City Program is defining sustainable construction guidelines for the civic center redevelopment project. These regulations will then be applied to all future city construction. Other projects include an environmental awards program for businesses and an environmental audit (including water, energy, recycling and waste evaluations) of businesses that is provided by the city for free.

### **Indicators of Effectiveness**

To assess the programs effectiveness, benchmarks and quantifiable targets for measuring progress were established. Sixteen specific targets, or sustainability indicators, were selected. Each indicator has a base year value in 1990, a 1993 value and an assigned target for the year 2000. For example in

1990, water use was 14.3 million gallons per day (gpd), in 1993 it was 12 million gpd and the year 2000 target is 11.4 million gpd. As work continues on the Sustainable City Program, it is envisioned that new indicators will be added and existing indicators will need to be revised or replaced.

The Task Force on the Environment and the city staff will prepare an Annual Sustainable City Report for the City Council that will assess progress made during the past year, evaluate overall program effectiveness, and recommend any program modifications that might be necessary. The Sustainable City Program is presently collecting data and developing measures of achievement for the first Annual Report to be submitted September 20, 1995.

### **City to Set Example**

The Task Force on the Environment and many others in the community believe that city operations themselves should be the first to take the practical steps toward sustainability. The city will serve as a model for other institutions and organizations in the community as well as for other cities in the region and nation. In its first year of implementation, the Sustainable City Programs Procurement Working Group has developed a checklist to be utilized by all city departments to ensure that broad environmental implications of decisions are considered, and that decision-making occurs in conjunction with its goals. The checklist targets three areas that encompass sustainability issues in the city decision-making process: purchasing, construction and development, and programs and services.

Within each area, a decision tree categorizes the type of decisions and subcategories with a list of specific considerations important to the process. For purchasing durable and consumable goods, for example, the list of considerations includes cost, effectiveness, durability, recyclability, material source (virgin or recycled), resources used during manufacturing, local economic benefits and existing city purchasing guidelines. Once complete, the checklist will be supported by two databases. The first will provide city departments with information on environmentally acceptable products, suppliers, consultants, sustainable policy options, best available technologies and best management practices. The second database will include existing and proposed city regulations, and policies as well as environmental and sustainability considerations.

## A Volunteer Effort

Up to this point, the Santa Monica Sustainable City Program has operated without a formal budget. Task Force members work as volunteers and administrative overhead has been absorbed by the Environmental Programs Division of the City of Santa Monica. Because the program designs new policies for existing city programs, the costs of implementation are being covered by each individual department. The projects implemented under the program, such as water usage reduction and waste reduction have already resulted in an overall savings for the city.

Funding for non-city projects is being secured from foundations and other forms of grant support. For instance, the Santa Monica Bay Restoration Project will fund an educational project on urban runoff and bay contamination.

The lack of a formal budget has restricted the number of personnel who can work directly on the program. To alleviate this problem, the program has developed a working group with individuals from all city departments who will assist with data collection and evaluation of progress for the annual report.

Key to the continued success of this project has been the support and active involvement of all key players in the program. Including the City Council, city departments, businesses, and citizens in the decision-making process has allowed the Sustainable City Program to move as quickly as it has.

## Next Steps

The first year of the Santa Monica Sustainable City Program has been primarily organizational - defining the priorities of the program and how those will be implemented. With a number of programs underway, such as the Procurement Working Group and the Labeling Ordinance, the Sustainable City Program envisions that this next year will focus on programming. The Sustainable City Program already serves as an umbrella organization for existing city departments and is working to strengthen its relationships with community groups and businesses.

A 21 minute video, "Sustainable City: A city meeting its current needs without compromising the ability of future generations to do the same" that features citizen activism in sustainability, is available from the city for a nominal charge.

## Boulder County Healthy Communities Initiative Boulder, Colorado

**Contact:** Susan Q. Foster, Project Administrator; c/o The Walter Orr Roberts Institute; University Corporation for Atmospheric Research; P.O. Box 3000; Boulder, CO 80307; Tel: (303) 497-2108; Fax: (303) 497-2100

**Scope:** Countywide

**Inception Date:** 1995

**Participants:** Coalition of county residents from public and private organizations representing business, government, the media, education, environment, arts, health and human services, and religious institutions

**Project Type:** Community-wide visioning, sustainable indicators, comprehensive community development

**Methods Used:** Community-wide collaborative problem-solving process: public meetings; information sharing; research

**Lessons Learned:** Importance of strong leadership from the beginning. Difficulties of keeping the focus on issues of sustainability and of increasing participant diversity.

"To develop and implement an inclusive action plan that, by integrating common evolving values, honoring diversity and creating a shared vision of a healthy and vital community, sustains such a regional community for generations to come."

## Initiative Mission Statement

### Background

Boulder County, Colorado is located along the foothills of the Rocky Mountains 30 miles northwest of Denver. Its spectacular scenery, encompassing peaks on the Continental Divide to rolling eastern plains, and high standard of living has lured an increasing number of new residents. Between 1980 and 1990 the county's population grew by 36,000 people. Between 1990 and 1995 another 16,000 people were added along with 13,810 new jobs.

In the late 1950's the city of Boulder foresaw the pressures uncontrolled growth might bring on its natural environment and quality of life, the very resources that brought people there in the first place. In 1959 it enacted a "blue line" - an elevation line across the foothills above which development could not

occur. Eight years later the city voters approved a special sales tax to fund the purchase of eventually 26,000 acres of open space, many of which were outside city limits in unincorporated areas. In 1976, based on a task force's projection that Boulder's population could grow to 300,000 - 400,000 in 20 years, voters approved an annual growth cap of two percent for the city to be enforced through a limitation on building permits.

These measures have kept the city's population to under 100,000, but have caused housing costs to skyrocket, making living in the city unaffordable to many, and have had a profound impact on the surrounding jurisdictions. Boulder's residential building restrictions and the rise in housing costs have forced many who work there to live in the neighboring communities of Lafayette, Longmont, Louisville, and Broomfield.

Forty-three percent of the work force now commutes, creating traffic congestion and air pollution and spreading sprawl development to the outer edges of the county. Boulder's open space purchases have insulated the city from the rest of the county but, at the same time, removed land from the market that other jurisdictions might have bought for retail space to enhance their tax base.

Recognizing that some form of regional planning was necessary if the quality of life was to be sustained for all county residents, a group of 38 county leaders formed a committee in 1994 to apply for a planning grant from the Colorado Healthy Communities Initiative (CHCI). In order to be considered, a community must demonstrate broad-based community support and prove that it is a community as defined by the CHCI: " a geographically delineated area defined by the shared interests of all its inhabitants." The proposal was approved in November 1994 and the Boulder County Healthy Communities Initiative was launched in January 1995.

### **The Colorado Healthy Communities Initiative**

The Colorado Healthy Communities Initiative is a statewide, five-year \$6.8 million program sponsored by the Colorado Trust and designed and directed by the Denver-based National Civic League. It gives technical and financial support to up to 30 Colorado communities to establish community-based approaches to health and quality of life issues. Health is defined broadly to include issues that address the underlying factors that affect the quality of life beyond the absence of disease: a clean, safe physical environment and sustainable

ecosystem, the provision of basic needs, quality education, and a diverse, vital and innovative economy.

Collaboration and consensus-based decision-making are key elements that characterize this work. Communities are encouraged to find new ways of doing things, of providing services, sharing information, and operating local governments. They are encouraged to develop indicators of performance and benchmark goals on a wide variety of community issues such as: air and water quality, educational performance, population density, green space, and economic criteria.

Once selected, the community follows a specific community-wide collaborative problem-solving process developed by the National Civic League that takes the community through a 12-14 month planning phase and a two-year implementation phase. Each community can adapt this process to reflect its own character - its geography, resources, culture, values, and visions. It is also expected to raise matching grants. To date the Boulder Initiative has raised support from foundations, municipalities, hospitals, the media and the county government.

### **The Boulder Plan**

In January 1995 an Initiating Committee of community leaders from business, government and non-profit sectors began to design the framework for the initial planning phase. Following the National Civic League's guidelines, one of its first tasks was to select "stakeholders", a core group of approximately 120 people representing every sector of the County. This group was charged with the overall task of defining a vision for the county, beginning the process of finding a set of regional indicators of long-term health, and developing a plan of action to achieve these goals. The Initiating Committee dissolved in April.

Monthly meetings began in May and will continue until April 1996. They will be held in different parts of the county and the public is encouraged to attend. A plan of action and implementation strategies will be completed by the final session.

The first meeting was held in May 1995. Participants were asked to express the values and visions they felt are necessary and important for a healthier future for the county. After the meeting, the comments were compiled by theme: social values; neighborhoods; environment; education; economy and business; children, youth, elders, and family; transportation; leadership/government; health care/human services; housing;

arts and culture. These were then summarized and assimilated in a draft vision paper for review and discussion at the next monthly meeting. As an integral part of the process the Initiating Committee hired Neal Peirce, a nationally-syndicated columnist and urban affairs reporter, to interview Boulder County residents and assess the county's problems, strengths, and options for action. The report served as a springboard for discussion. It was published in its entirety by The Boulder Daily Camera and the Longmont Times-Call, the county's two leading newspapers, distributed to participants present at the June meeting, and discussed further at neighborhood pizza parties hosted by volunteers during the months of July and August.

The media has played an important role in publicizing the progress of the Initiative and keeping the public informed. Members of the press have attended meetings and reported on the discussions. The Daily Camera and the Times-Call carry announcements of the meetings and report extensively on each one.

The August session focused on the selection of priority areas and on a draft community profile entitled "Roadmap for Collaboration". Within the overarching themes of sustainability, diversity and communication six primary issue areas have emerged from the meetings: education; children, youth, elders, and families (38% of the county's population is under 24); civic discourse; regional governance; community design, land use and accommodation; and materials allocation and energy use.

In the draft report the Research Subcommittee presented possible indicators, based on research into current, available, reliable data, in each initial theme category. The final set of indicators, to be chosen once the community's vision and goals have been established, will be used to measure progress and success in achieving these goals. This list might also include additional indicators that address linkages between the vision categories, indicators for which original research will be necessary. Subsequent monthly meetings will refine the list of priorities, form committees to develop actions to achieve these goals, and, finally, develop and reach consensus on an action and funding plan.

## Challenges

The critical challenge is to continue to frame the process in the context of sustainability and long-term health, keeping the participants focused on what is best for the county as a whole rather than for each individual. Although several hundred people have been involved to date, the Initiative is still seeking ways to increase participant diversity. They want to involve youth, who have a great deal at stake, and plan to hold youth focus groups. Another challenge will be to strike a balance between a regional vision and the desire for strong, independent local communities - an issue much on the minds of many of the county residents.

For an area the size of Boulder County the Healthy Communities Initiative process provides a valuable framework for residents to envision and create a sustainable future. It gives the many communities within the county a structured opportunity to work together on a regional vision rather than working independently of each other or in ad hoc collaborations as they have done in the past. It comes at a time when people are beginning to realize how interdependent their neighborhoods have become and that a comprehensive regional plan may be a necessity in order to preserve their environment and quality of life for future generations.

## Vision for a Greater New Haven New Haven, Connecticut

**Contact:** Heather Samson Calabrese, Director; 195 Church Street, 15th Floor; New Haven, CT 06510; Tel.: (203) 782-4310/80; Fax: (203) 782-4329

**Scope:** Greater New Haven area

**Inception Date:** 1993

**Participants:** Local citizens, agencies, businesses

**Project Type:** Community-wide visioning, citizen-led initiatives

**Methods Used:** Visioning process, community organizing

**Lessons Learned:** Maintaining an open and representative process is critical to success. It is equally important to balance this process with concrete, visible achievements.

Vision for a Greater New Haven is a community-wide, citizen-driven process for developing and implementing shared community goals. The process consists of three phases: generating ideas for a citizen's agenda; developing short-

medium- and long-term objectives; and implementing the plans, all with continued participation from local citizens.

The New Haven effort is based on the citizens' vision concept that began in Chattanooga in 1984 and has been successful in a number of cities throughout the United States. Chattanooga, for example, estimates that its vision process over nine years produced \$793 million invested in the city through 223 projects generating 1,500 permanent jobs, 7,000 temporary jobs, and providing services for 1.4 million people.

### **A Broad Concept of Citizenship**

Vision for a Greater New Haven began in the spring of 1993. Members of the religious community and the Chamber of Commerce organized a group of area leaders to think about an alternative planning process. The initial informal group formed the core of the current steering committee, 22 people representing business, government, the arts, religious organizations, grassroots organizing efforts and individual citizens.

Nearly 2,500 people from the greater New Haven area participated in the initial stage, the visioning process. Ten community meetings were held in February and March of 1994; seven meetings were held in neighborhood schools, two in senior citizens complexes, and one meeting brought together 85 high school students.

The meetings were preceded by three months of aggressive outreach based on two months of planning. The goal of the outreach efforts was and is to involve the broadest range of citizens in Vision, including those with the most power and those with the least power in the community. Vision's Director, Heather Calabrese, recounts that "at one of the early meetings at a neighborhood high school, we literally had a major utility president sitting with an ex-gang member, talking together about their vision for this city."

### **Early Achievements**

The ideas generated at the community meetings were divided into 33 categories ranging from drugs and crime to transportation, economic development and the arts. Over 500 people met to discuss specific topics of interest and develop concrete goals and recommendations. In June 1994, the results were presented on the New Haven Green; citizens were asked to "vote" for the goals they thought most urgent for the city and the region and to sign up for citizen action groups to work on achieving those goals.

The citizen action groups developed short-, medium- and long-term objectives, the second phase of the process, while continuing to work on outreach and seek opportunities for collaboration with efforts already underway in the city. Early in the implementation process, citizen action groups have also accomplished a number of concrete successes.

The most visible achievement to date is the mile-long pedestrian pathway to connect downtown with the Long Wharf waterfront created by Vision's Waterfront citizen action group. The group forged an alliance with the U.S. Post Office, the office of Mayor John DeStefano, Jr., Congresswoman Rosa DeLauro's office and the Special Olympics World Games to create the wheelchair-accessible walkway in time for the Special Olympics in the summer of 1995. The next steps will be interim goals of creating signage, lighting and recognition for the "Vision Trail"; long term goals are to create access along all waterfronts, including rivers, and to enrich these areas with recreational and cultural activities.

The Image citizen action group created a Council on Public Relations that produced a press kit distributed during the Special Olympics and an Internet site with New Haven information. The Youth citizen action group implemented a short term goal of a roller skate donation drive with drop off at local libraries and organized roller skating parties at school gyms. The Economic Development citizen action group is building a coalition of groups interested in establishing a summer camp for youth entrepreneurs in 1996.

### **Priorities for the Next Nine Months**

The citizen action groups continue to forge ahead in specific areas, with support from Vision staff. Meanwhile, a strategic planning process in the summer of 1995 brought together steering committee members and citizen action group leaders to decide on Vision's priorities for implementation in the next six to nine months. The Vision Trail is one of four priorities; the others are:

#### **Housing: The Homestead Act for New Haven**

Vision's long-term goal is the rehabilitation of 600 units of blighted housing in New Haven. In the next year, Vision will create a formal consortium with city agencies, nonprofit housing developers, banks and intermediaries. The consortium will develop a plan for rehabilitation, ownership and residence and will also rehabilitate 25 units of housing this year.

## Transportation

A regional transportation authority is the project's long-term goal. In the next year, Vision will develop and implement a transportation action plan that demonstrates visual progress. Examples include placing bike racks downtown and on buses.

## The International Festival of Arts and Ideas

Vision's long-term goal is to support the creation of an international arts festival in New Haven, linking it with the New Haven Register's Waterfront Festival. In the next year, Vision will work with city schools to develop curriculum relating to the festival. Vision will also develop a plan with city artists and neighborhood organizers for local economic and performance opportunities related to the festival.

## Promoting Understanding Among Current and Future Leaders

Vision is working with the Anti-Defamation League's World of Difference program to create and implement a 6-hour training for 150 leaders in the community who represent diversity in experience, culture and race. This training will launch an ongoing dialogue to contribute to cultural understanding and respect in the community, and thus to increase diversity within Vision efforts.

## Maintaining integrity and trust

Heather Calabrese believes Vision has worked hard to move from a leadership model of planning into a "true citizen's model that strives to give every participant an equal voice." The challenge is to keep moving in that direction. She notes that the two ways that Vision might lose its integrity and fail would be if it does not stay an open process and if it does not continue to reflect the way the community looks. Calabrese recalls a conversation with an outreach worker in the African-American community, a long-time activist who told her "I'm involved in Vision because I trust that you won't just pick my brain, say thank you, and go away and do whatever you want." Calabrese feels that Vision has been successful so far in demonstrating that "this is not a white, middle class, warm and fuzzy effort. In New Haven, people who have been involved in social change for a long time feel really used and abused. Vision will not just use them for legitimacy without allowing them to remain in the decision-making process." Vision's biggest challenge, however, remains the struggle to keep the process as diverse as possible as it moves to a focus on implementation.

## Measuring Success

Calabrese emphasizes: "This process is not touchy-feely. It is very strategic, with clear short-term, long-term and intermediate goals. But it moves slowly to allow open participation. The challenge is how to communicate that to the community and to funders." Participants and funders both expect to see concrete, visible results quickly, and neither group is used to this kind of alternative, participatory process. Vision must balance the need to show successes, like the Vision Trail, while continuing education about the process.

## Northern Delaware greenway council Wilmington, Delaware

**Contact:** Edith Carlson, Executive Director; Northern Delaware Greenway Council, Inc.; P.O. Box 2095; Wilmington, DE 19899; Tel: (302) 762-7237; Fax: (302) 762-7907

**Scope:** Local, urban

**Inception Date:** 1990

**Participants:** Volunteer staff, government agencies, county and state park agencies, citizen groups

**Project Type:** Greenways, land use planning, community design

**Methods Used:** Educate citizens through civic groups and park groups; speak at planning board hearings; work with public agencies, develop public-private partnerships between businesses, citizens groups and government agencies

**Lessons Learned:** Persistence of a staunch volunteer core and cooperation of and between government agencies, political leadership, and business sector creates success.

## Summary of Project

In 1987, the Presidents Commission on American Outdoors called for the establishment of greenways - human and animal accessible corridors that connect larger natural areas. Greenways provide a solution not only to the problem of limited recreation in urban areas, but also a means of protecting water supplies vital for public health and economic growth; a means of preserving the environment for future use and enjoyment; and a fundamental planning tool to create more livable communities. Recognizing the need for a massive grassroots effort, the Commission called for a "prairie fire of

Community action" to create a network of greenways across the USA.

The Northern Delaware Greenway Council, Inc. (NDGC) responded to that challenge and is, today working to build a Greenway network in Delaware. Founded in 1990, the NDGC is a non-profit organization with over 400 members, an Honorary Board that includes former and current political representatives, an Advisory Board, and a core volunteer staff. The Northern Delaware Greenway Council brings together federal, state and local agencies; elected officials; private foundations; businesses and corporations; and private individuals to create greenways.

At present there are over five miles of completed greenway trails. The NDGC is now working on Phase One of the Northern Delaware Greenway connecting over a dozen city, county and state parks from the Delaware River to the Brandywine River.

### **Greenway Benefits**

Greenways are multi-objective, resulting in a wide range of benefits, incorporating all facets of sustainability. They:

- are attractive tourist destinations;
- add value to nearby homes and offices;
- create a "quality-of-life" that attracts relocating and new businesses;
- add new opportunities for recreation close to homes, schools, and offices;
- encourage new recreation-related businesses;
- link important cultural and historic sites;
- foster local pride and unify communities;
- provide refuge and safe migration routes for wildlife;
- help preserve the biological diversity of plant and animal species by connecting isolated natural areas;
- improve water quality by buffering streams and trapping pollutants;
- reduce flood damage and help recharge under-ground water supplies;
- serve as car-free routes to and from schools, shops, workplaces and parks; and
- help improve air-quality.

### **Connecting Community**

Designed to support an improved quality of life: social, economic and environmental, the Northern Delaware Greenway, when complete, will be a ribbon of green that ties together the natural, cultural, and historical resources of

Wilmington. State, county and city parks will be linked to museums (such as Rockwood, Hagley and the Delaware Art Museum), schools, cultural institutions (such as the Wilmington Drama League and Wilmington Music School), churches, synagogues and workplaces. The greenway will protect vital watersheds along the Brandywine River and the Delaware River north of Wilmington. When the Cross County greenway connections are made, the regional greenway system will serve over 440,000 residents of Northern Delaware.

To serve recreational, transportation and preservation purposes, greenways can be either paved or unpaved depending on the location. All trails are pedestrian and bicycle accessible. In accordance with the American Disability Act, many of the trails are built for handicap accessibility.

The purpose of a greenway is to connect all aspects of a community through a land corridor that will also serve as a social, economic, and environmental corridor. The NDGC has found citizen involvement critical in the development of greenways. The NDGC speaks to neighborhood civic groups, educating them on the purpose of greenways and encouraging their involvement in the development process. The NDGC also talks to "friends of" park groups, environmental groups, planning boards and various public and private agencies. NDGC maintains an on-going public presence, reaching individuals on a personal level, and larger audiences through mass media.

### **Public and Private Partnerships**

Currently, all greenway trails are built on public property including a combination of park land, transportation land, and public works land. One advantage of utilizing public property is that the NDGC can piggyback government projects. For instance, construction of a new sewer line provides ideal conditions for a greenway - a cleared, levelled area that connects major urban centers. A finished sewer line needs only a trail surface to become a working greenway corridor.

The use of public lands has enabled the NDGC to leverage funding from government sources more easily. In 1990, NDGC encouraged the City of Wilmington, New Castle County and the State of Delaware to establish Greenway programs and policies. In June 1990, the General Assembly slated \$500,000 for a state-wide Greenway program as part of open space legislation. In 1991, public agencies were awarded a \$98,000 planning grant for the Northern Delaware Greenway Project from the State of Delaware's newly instituted Statewide Greenway Program. In 1992, the first segment of

the Northern Delaware Green opened. This 2+ mile trail that was a cooperative effort of the Division of Parks and Recreation, Woodlawn Trustees and the NDGC.

The NDGC worked cooperatively with state and county parks departments to obtain \$650,000 in funds under the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1990. Under the provisions of the act, a certain percentage of transportation money must be spent on enhancement of bicycle and pedestrian pathways. In this case, the money is being applied to enhancing those features within the greenways. Offering alternative forms of transportation to and from work and other destinations not only cuts down on traffic congestion and air pollution, but enhances the health of people who use them.

In addition to benefiting the environment and the social well-being of the Wilmington community, the greenways are capturing the support of local businesses and developers. The construction of a greenway increases the real estate values of bordering lands and, therefore, their marketability for future development. In 1995, NDGC began working with the New Castle County Board of Realtors to encourage incorporation of greenways into development projects. And the NDGC has received sponsorship from local companies for trail amenities such as benches and kiosks.

### **Bridges Through Cooperation**

The NDGC realizes that there is an overarching purpose of greenways: to ensure the quality of life of citizens through both growth and preservation. Only by striking a balance between these two has NDGC succeeded. The economic value of NDGCs work has been proven through the support of the business community in the creation of greenways. Likewise, the greenways protect the areas water supply, thereby benefiting the entire community. Working in a cooperative, non-adversarial way toward common goals, the NDGC has succeeded in building a unique and very strong bridge linking the environment, business and government sectors.

Because NDGC works with the concerns and motivations of both the environmental and business sectors, it has maintained a positive working relationship with the political leadership. The greenways are working to connect not only sections of land, but create interconnections between the social and economic elements of the state.

Meeting the Challenges

The interconnected nature of NDGC, while one of its greatest assets, has presented the organization with its toughest challenges. The creation of a greenway demands cooperation between not only citizen and business groups but also cooperative efforts between a multitude of government agencies. For instance metropolitan planning agencies mandate the integration of the transportation departments with land-use planning. While agency cooperation should result in a more constructive process, there are often questions such as which agency has the prerogative in a particular issue. To facilitate the coordination of efforts, NDGC created the Technical Advisory Committee (TAC) in 1994 to coordinate greenway construction between state, county and municipal agencies. Finding the means to develop partnerships between government agencies in an efficient manner has been the greatest challenge for the NDGC.

### **Present Status**

The Northern Delaware Greenway Council was recently one of 10 recipients, out of 2,000 participating groups, selected to receive the "Trails for Tomorrow Award," sponsored by DuPont Cordura® Nylon. As part of the National Trails day event, this award has helped build the confidence of the business community in the work of NDGC.

The NDGC is presently in transition from an all volunteer organization into a staffed non-profit. At this time the NDGC has a part-time development person as well as 14 board members who contribute substantially to the volunteer efforts. For special event projects, the NDGC generally pulls in an additional 30-40 volunteers. In 1994, the NDGC received a \$20,000 grant from the Laffey-McHugh Foundation as seed money to further the organizations goals for expansion.

The NDGC is also changing its focus from a locally-driven organization to one with a state focus. Goals include creating a "Cross County" greenway system that links to the White Clay Creek, the C&D Canal, Delaware's Coastal Heritage Greenway and to greenways being formed in Pennsylvania and Maryland. In June 1995, NDGC received \$6,000 from the State Legislation Grant & Aid Program to expand its work to a state-wide level.

### **Marshall Heights Community Development Organization, Washington, DC**

**Contact:** Lloyd D. Smith, President and CEO; Marshall Heights Community Development Association, Inc.; 3917 Minnesota Avenue, NE; Washington, DC 20019; Tel: (202) 396-1200; Fax: (202) 396-4106

**Scope:** Communitywide

**Inception Date:** 1978

**Participants:** Civic organizations, residents, businesses, religious institutions

**Project Type:** Economic redevelopment, job creation/training, comprehensive community development

**Methods Used:** Developing strategic plans, demonstration projects, public education campaigns, provides training, use of for profit corporations

**Lessons Learned:** Value of comprehensive approaches in all activities. Importance of collaboration with public and private institutions and neighborhood organizations. Restraint in not undertaking projects if there is a lack of expertise or experience.

"MHCDO's mission is to build hope, people, neighborhoods, homes, businesses, jobs, and expand the economic opportunity for the citizens of Ward 7 of the District of Columbia."

## **Mission Statement**

### **Background**

The Marshall Heights Community Development Organization, Inc. (MHCDO) was founded in 1978 with the philosophy that residents could define and control the quality of their community. Since that time it has worked to reverse the decline of a deteriorating neighborhood through a comprehensive approach to economic, human and community development.

MHCDO is located in southeast Washington, in an area that, although historically the poorest of Ward 7, nonetheless has had a history of civic activism. In the mid-1970s, however, its stabilizing middle class population and retail businesses began to leave and the neighborhood began to decline. In 1976 a group of concerned citizens came together to address such issues as housing rehabilitation and deteriorating infrastructure and, in 1978, formed MHCDO.

Since that time MHCDO has employed an integrated approach to community building through a series of initiatives based on collaborations, partnerships and joint ventures.

### **The Organization**

MHCDO's goals are threefold: to create new and diverse economic opportunities; to ensure that all residents have

access to affordable housing; and to help area residents overcome barriers to self sufficiency. Its 72-member Board of Directors represents community members from civic associations, the faith community, businesses, public housing and many others. This inclusive mix of board members ensures a strong attention to the needs and desires of the community.

According to its President, Lloyd Smith, "MHCDO's most significant function is to act as a facilitator in bringing its disadvantaged community into the mainstream of U.S. economic activity through marketable projects that bridge the gap between capitalism and community development." Its activities are funded through government contracts and grants, foundation grants, and profits from its economic activities carried out through three wholly-owned, for-profit subsidiaries: East River Park, the Citizens' Housing Development Corporation, and the Burroughs Development Corporation.

East River Park, Inc. is a commercial real estate development corporation which co-owns and manages a shopping center. The center began with a \$25,000 venture capital grant from the D.C. Department of Housing and Community Development, and is now worth more than \$10 million. The Citizens Housing Development Corporation (CHDC) develops rental and for-sale housing. The Burroughs Development Corporation (BDC) focuses on industrial development and has recently begun work on the Kenilworth Light Industrial Park and is planning development of an office complex. These three corporations are involved in the various other projects and all their profits are fully reinvested into MHCDO.

### **Four-pronged plan**

MHCDO's various projects are organized under the areas of housing, economic development, human development, and drug and alcohol abuse programs. Within each a wide range of processes and strategies have been used.

### **Housing**

Since the inception of its HomeSight Housing Development, the CHDC has renovated and sold 69 units totaling over \$4 million. These have included renovated single family homes, new modular houses, and condominiums. The CHDC also owns units which it rents. The Transitional Housing Program gives homeless individuals and families a place to stay while MHCDO provides job counseling and placement services. In another effort to make housing affordable, MHCDO has initiated its Single Room Occupancy (SRO) housing project, a

building where individuals have private bedrooms while sharing common rooms and kitchen and bathroom facilities with other residents.

### **Economic**

MHCDO's Business Development Services (BDS) program, established in 1994 and funded by the city, works to expand business development and job creation in order to increase and diversify the local economic base. As a full-service business incubator, BDS offers not only a location for businesses but also consulting services and seminars on subjects as the different kinds of insurance businesses need. The BDS includes a micro-loan program for local businesses which otherwise may have difficulty raising capital. The loans range from \$1,000 to \$5,000 and are made in conjunction with local banks.

The MHCDO is undertaking other business ventures aimed at community economic development through East River Park, Inc. One such project is the construction of a new bank branch. It has also established several funds aimed at attracting new businesses to the area and providing affordable housing. As a result of MHCDO's economic development efforts, residents now spend 50% of their disposable income within the community, up from 20% previously.

### **Human Development**

The mission of the MHCDO's Human Development Division is to help people overcome barriers and move toward self-sufficiency. Its strategy includes employment counseling, crisis intervention, housing and financial counseling, education, senior day care, telecommunications training and an integrated service delivery model using a telecommunications system to bring services to low and moderate income residents of Ward 7. This past year the Human Development Division provided services to the equivalent of 24,250 clients. Moving into the forefront of human services delivery, the Division is spearheading initiatives regarding family services, sustainable community education opportunities and job development.

This holistic approach to social change is not only helping residents improve their quality of life, but in some cases is helping residents rebuild their lives. One story illustrates the range of services residents can receive. One resident, the mother of two young children, decided to confront her addiction to crack cocaine and after receiving medical treatment turned to MHCDO's John Wilson Center where a counselor helped her organize her life. She received help in

finding food, an apartment, and furniture. She also received job training, help in locating a job and one-on-one training in dealing with her personal finances. Today she is working toward self-sufficiency and her children, who had been in the juvenile system, will shortly be returned to her.

### **Drug and Alcohol Abuse Programs**

The Fight Back Initiative is MHCDO's campaign to improve the health of Ward 7 residents. To raise public awareness it has sponsored a number of events from seminars to walk-athons. Its prevention, intervention and early identification component includes curriculum development for seventh and eighth graders and the annual Shoot Hoops! Not Guns! three-on-three basketball tournament.

The environmental improvement component motivates and empowers residents to better use the resources available to them and improve their community's quality of life. MHCDO acts as a conduit for environmental activities: its staff and board members along with community residents have participated in cleanups of the Anacostia River, the Richardson elementary school and Ladybird Park.

Treatment is another focus of the Fight Back Initiative. In partnership with the D.C. Department of Human Services, this program provides services from counseling and child care to HIV/AIDS testing.

### **Rebuilding Communities Initiative**

In the fall of 1995, with a planning grant from the Annie E. Casey Foundation, MHCDO began its new Rebuilding Communities Initiative. This initiative is a process in which all the community's stakeholders "businesses, residents, organizations" are actively involved in developing a comprehensive approach to improve the neighborhoods in which they live. Beyond the tangible results, the ultimate goal of the initiative is to further strengthen the network of bonds between community organizations and the individuals who reside in the community. The initiative is guided by an 88-person steering committee and four working groups. It has five components: 1) Education, 2) Jobs and Training, 3) Health and Community Wellness, 4) Housing, and 5) Systems Reform and Resource Development.

### **Challenges**

Many parts of Ward 7, however, remain underdeveloped and disadvantaged. Crime and drug use continue and the infrastructure is still inadequate. The community needs to attract a greater proportion of city funding given its population

and would benefit from greater community recognition of its needs. It would also benefit from a strong economic base that can encourage middle class residency and leverage other business activity.

MHCDO is distinctive in its holistic approach to community planning and development. It has been extraordinarily successful in simultaneously addressing a broad array of issues. MHCDO's most important role has been in attracting new businesses, programs and services to the community.

## **Quality Indicators for Progress Jacksonville, Florida**

**Contact:** Lois Chepenik, Executive Director; Jacksonville Community Council; 2434 Atlantic Boulevard; Jacksonville, FL 32207; Tel.: (904) 396-3052; Fax: (904) 398-1469

**Scope:** County, urban

**Inception Date:** 1985

**Participants:** Jacksonville Community Council Inc., Jacksonville Chamber of Commerce, City of Jacksonville (City Council, Mayor, government agencies), other small municipalities in the county, local citizens

**Project Type:** Sustainable indicators, public education

**Methods Used:** Multi-stakeholder cooperation; coordination by non-profit organization; citizen participation in committees and task forces; assembly and presentation of data from standard reference sources and a special telephone survey

**Lessons Learned:** The broad-based interest in indicators, including that of the Chamber of Commerce and a local non-profit, has led to diverse support and funding for the indicators project.

### **Summary of Project**

Each year, since 1985, a report on Life in Jacksonville: Quality Indicators for Progress (QIP) has been produced in the community of Jacksonville, Fla. The report contains current and historic values for a set of statistical measures that have been selected to reflect changes in the city's quality of life. The information is used to monitor community performance in a number of key areas including: education, the economy, public safety, natural environment, health, social environment, government/ politics, culture/recreation and mobility. The indicators report is specifically intended as a tool to help in building a sustainable future for the community.

The reports features include:

- data that shows both where the community has been as well as the progress that has been made in moving toward target values for each statistical measure;
- priorities among the statistical measures;
- text that includes explanatory information concerning the significance and the source of data for each measure;
- graphic charts showing trends over time;
- "gold star" indicators for significant progress;
- "red flags" for current or emerging problems; and
- recommended community actions for achieving target levels.

Specific objectives of the Jacksonville QIP report include:

- producing an annual report card on community progress;
- highlighting community success stories and giving credit for work well done;
- identifying areas of decline or concern where community action is needed;
- educating residents about their community and the factors that citizens consider important to their quality of life; and
- encouraging citizens to take an active part in addressing community problems.

The target audience for the indicators is broadly defined and its information is used in a variety of ways:

- Citizens use the report card to gain knowledge about their community;
- Elected and appointed officials use the information for planning, legislative and budgeting activities;
- Professional planners, both in government and private institutions, use the data as reference material to guide their decision-making;
- Journalists and media representatives use the community information in research, reporting, and editorials;
- Business and community organizations use the information for strategic planning and developing annual work plans;
- Foundations use the data to gain understanding of the community needs and to guide grant-making decisions; and
- Local governments and Chambers of Commerce use the data as an economic development tool.

## **Citizen Involvement in QIP**

The QIP project was initiated by the Jacksonville Community Council Inc. (JCCI), a non-profit organization of citizens concerned about the future of their community. At the beginning of the project, the President of JCCI sought and obtained initial funding from the local Chamber of Commerce. A 10-member steering committee was selected whose participants served as the chairs for subcommittees organized to develop indicators in specific topic areas. Participation on the subcommittees was open to members of the JCCI and the Chamber of Commerce, as well as to other interested citizens. Each subcommittee met four times on a weekly or biweekly basis. Subcommittee members had access to background information obtained and organized by the JCCI staff. This included responses to a questionnaire published in the local newspaper as well as suggestions sent in by community members in response to public interest announcements on the local television stations. The subcommittees selected specific indicators that conformed to agreed upon criteria. Initially, background data for each indicator was collected from the mid 1970s through 1984 or 1985. Once the project was initiated, the data was gathered on an annual basis. Data on personal perceptions was obtained in telephone surveys. The surveys were conducted by AT&T American Transtech from 1985 through 1992. In 1993 and 1994, the surveys were conducted by Populus Research. Both survey groups donated the costs for these surveys.

## **Indicator Development Process**

In 1991 an additional 140 citizens were organized into task forces to review and enhance the indicators used in the project. This followed a process similar to that used in 1985. The task forces eliminated several indicators because of questionable validity or unavailable data. For purposes of clarity, several other indicators were revised. New indicators were added, including four new telephone survey questions.

The task forces identified target values for each of the indicators. The JCCI collected and summarized research and reference data on generally accepted standards and goals for each data category supported by Community Development grant funding provided by the Jacksonville Department of Housing and Urban Development. This data was then used in selecting target goals for the year 2000. Task forces prioritized each of the nine subject categories, selecting a key indicator within each category for reference purposes.

In addition to the planning groups, the annual compilation of indicators is generally overseen by a citizen Quality of Life

Committee. Its members are selected to represent a range of interests and expertise, including members with specific background in demographics and statistics. The Committee helps oversee the data collection process and provides comments and recommendations on the specific results. Currently, the compilation of the annual report and the work of the committee are being supported by funds from the City of Jacksonville.

## **What the Community Learns**

A total of 74 indicators in nine categories are included in the most recent November 1994 report. The main categories, the key indicator for each, and examples of the other indicators in the category are listed below:

### **Education**

Public High School Graduation Rate - achievement-test scores, expenditures per student, and participation in higher-education programs.

### **Economy**

Net Job Growth - black unemployment, effective buying income and retail sales, taxable real-estate value, new housing starts, students in free/reduced lunch program, tourism/bed tax revenues.

### **Public Safety**

People Feeling Safe Walking Alone At Night -violent and nonviolent crime rate, people reporting being victims of crime, response times for rescue, fire, and police calls, motor vehicle and other accident deaths.

### **Natural Environment**

Days of Air Quality Index in the Good Range river and stream compliance with water quality standards, water level in aquifer, septic tank permits, tons of solid waste.

### **Health**

Infant Deaths Per 1,000 Live Births and deaths from heart disease and lung cancer, number of packs of cigarettes sold, new AIDS cases, student fitness test scores, rating of local health-care system.

### **Social Environment**

People Believing Racism Is A Local Problem - substance-exposed newborns, child abuse/neglect reports, births to

females under 18, city human services expenditures, contributions to charities.

### **Government/Politics**

People Rating Local Government Leadership Good/Excellent - percent 18 and older registered to vote, percent registered who vote, percent of elected officials nonwhite and female, rating of local public services effectiveness.

### **Culture/Recreation**

City Financial Support of Arts Organizations - parks and recreation expenditures, public park acreage, public library materials and circulation rate, attendance at museum, symphony, and zoo.

### **Mobility**

People Reporting Commuting Time of 25 Minutes or Less - commercial flights and destinations with direct flights, bus ridership, miles of bus service, bus headways.

The fact that the Quality Indicators of Progress reports have continued to be produced annually for ten years confirms their usefulness for Jacksonville citizens, government and business. As mentioned earlier, the reports can be used by a wide variety of individuals and groups for different purposes. Two specific examples of successful applications are cited here: A continuing decline in water quality indicators from 1983 to 1987 resulted in a city-wide campaign and the establishment of a group, Stewards of the St. John's River, which worked with local jurisdictions and private citizens to improve water quality; similarly, a decline in high school graduation rates from 1984 to 1989, led to the development of a very successful "Cities in Schools" program in which local citizens and businesses worked with school personnel, students, and parents to improve educational performance.

Today, the Quality of Life Indicators program can be adapted by other communities. The Jacksonville Community Council Inc. offers a replication package for sale, complete with educational video tapes, instructional and guidance materials, and support services. Although this package is not inexpensive, it could prove to be of significant value to communities who want a head start in developing similar programs for themselves.

## **Carver Hills Neighborhood Project Atlanta, Georgia**

**Contact:** Arnold Weathersby, President; Carver Hills Neighborhood Association; 1586 Mary George Avenue, NW; Atlanta, GA 30318; Tel.: (404) 799-5382

Olin Ivey, Executive Director; Georgia Environmental Organization; 6750 Peachtree Industrial Blvd., Suite 802; Atlanta, GA 30360-2218; Tel: (770) 447-4367; Fax: (770) 447-5668; E-mail: 75773.3340@compuserv.com

**Scope:** Neighborhood, Urban

**Inception Date:** 1964; Carver Hills Civic League formed; revitalized as Carver Hills Neighborhood Assoc., Inc. in 1989

**Participants:** Neighborhood residents, non-profit organizations, public agencies, businesses

**Project Type:** Leadership development, redevelopment, urban forestry

**Methods Used:** Citizen empowerment and participation through monthly meetings, door-to-door canvassing, civic participation, community events and fund-raisers, annual events, clean up campaigns

**Lessons Learned:** Strong leadership, tenacious and active community participation, and assistance from local and national grassroots organizations are important.

### **Summary of Project**

Carver Hills is a low-income, African-American subdivision of single-dwelling units enveloped by several government and subsidized apartment complexes in the Northwest, inner-city section of Atlanta. The residents have for the most part maintained their homes in good condition with attractive, though simple yards.

In 1964, residents formed the Carver Hills Civic League. In 1989 the community revitalized itself in the face of mounting environmental and social injustices resulting from the neighboring, city-owned Gun Club Landfill. The landfills blowing trash and lumbering trucks were a constant presence in the community, creating unsanitary conditions and pollution that is thought to have contributed to an increase in health problems in the community. Discouraged by seemingly insurmountable challenges, apathy settled in among the Carver Hills residents. In response to this, and with hopes of mobilizing community residents as well as improving poor

environmental conditions, the Carver Hills Neighborhood Association, Inc. (CHNA) emerged.

The overarching goals of the Carver Hills Neighborhood Association are to:

- empower community residents;
- increase the awareness of the city government and its citizens regarding problems of health and environment as they impact on the community;
- train the citizens of the community in the process of critical thinking and analysis so they are able to identify problems and the means to solve them;
- create new and stronger organizations within the neighborhood as well as strengthen existing ones so that the goals of CHNA can be more effectively realized and a stronger interlinking bond can be established among the people;
- expand awareness concerning the environment and plan action programs to bring about a cleaner, greener, and healthier community;
- be alert to the manner in which any of the issues confronted can be solved not only through community involvement but also by entrepreneurial solutions within the community.

To achieve these goals, the Carver Hills Neighborhood Association and the Georgia Environmental Organization, Inc. (GEO), a non-profit, statewide organization headquartered in Atlanta, established a partnership in Summer 1992. GEO provided strategizing assistance to the community, and was able to make available its local, state, and national contacts, which provided additional support to the community. One of those, the Highlander Educational Research Center in Tennessee, helped increase national awareness of the Gun Club Landfill problems by publicizing the story. The publicity bolstered the interest of the Carver Hills residents, letting them know that outside support did exist. GEO and Highlander have also provided leadership training to neighborhood residents throughout the process to close the landfill and turn the residents energies to improving their community.

### **Closing the Landfill**

The Gun Club Landfill lies on the opposite side of Procter Creek from the Carver Hills neighborhood. Dumping first began in 1965, and in 1974 it became a licensed municipal landfill. It is situated on 179 acres, of which 106 acres were licensed for dumping. It received up to 890 tons of trash a day to reach a height of 23 stories of layered household solid waste

(garbage, trash, leaves, paper, and yard waste) and soil. The Department of Public Works resisted closing the Gun Club Landfill because it served as one of Atlanta's largest receptacles of garbage. The ultimate closure would mean finding new means of dealing with vast amounts of garbage.

Despite the resistance of the Dept. of Public Works, the Carver Hills Neighborhood Association was able to catalyze a strong campaign for the closing of the landfill through monthly neighborhood meetings, flyers, door-to-door educational canvassing and neighborhood events. Residents of Carver Hills and the nearby Gun Club community (residing on the other side of the landfill) attended City Council committee meetings and testified about the poor environmental and economic conditions of the community due to the landfills existence. After several unsuccessful attempts to close the landfill, the City Council passed an ordinance to do so in December 1992.

### **Creating a Community Vision**

Once the landfill was closed, the CHNA led residents to search for ways that the resources of the community "both natural and human" could be improved to make the area a more livable one. Carver Hills is a neighborhood of approximately 2,000 people. The Carver Hills Neighborhood Association meets the first Monday evening of each month with between 30-50 residents attending at any one time. All members of the neighborhood have both voice and vote. Activities for the whole neighborhood and for the various age-groups occur regularly.

The CHNA set out to find a means of improving Carver Hills. The abandoned Finch Elementary School site offered the ideal location for community life and activities that could also enrich the ecology of the area. The property, comprising 13 1/2 acres of land, had lain fallow ever since the school was closed and torn down. It has four naturally tiered levels, the lowest of which is a wilderness area that borders Procter Creek. The Gun Club landfill is on the creeks opposite bank.

Carver Hills purchased the 13 1/2 acres of land for \$6,000: \$1,500 in earnest money was provided to the community to secure the property by the Georgia Environmental Organization; the remainder was raised through a combination of community donations, special event fund-raisers such as "Fish Fries" and money from city and foundation grants.

With the acquired land, Carver Hills residents plan to transform the entire neighborhood into a "Natural Space/Urban Forest Community" that will include:

## **A Community Center**

- Within the parameters of the budget, the neighborhood center will be designed with community needs and ideas in mind and will be built with donated environmentally friendly materials and equipment;

## **Natural Areas**

- Two wilderness areas with a total of four and a half acres and a connecting trail;
- The park will be ringed by trees, about one third of which are already standing and two-thirds of which will be planted. Trees will be planted in conjunction with Trees Atlanta, Georgia Trees Coalition, U.S. Forestry Service, American Forests, and Trees Working for Tomorrow Foundation;

## **Stream/Stream Bank Restoration**

- Proctor Creek, a tributary of the Chattahoochee River, has little life left in it. Working with the city, with Roy F. Weston Company, and with an arm of Americorps, the neighborhood will clean the Creek and develop streambank stabilization;
- GEO, working with the stakeholders who live or own businesses along Proctor Creek, will develop a Protection and Management Plan for the whole of the waterway;
- Working with the Environmental Forum and the student environmental organization from Georgia Tech, the neighborhood will establish monitoring stations for Proctor Creek;

## **Neighborhood Design**

- Each block in the neighborhood, working with students from the School of Environmental Design from the University of Georgia, will design its own sidewalks and the public spaces in the block;
- Each household will be taught how to compost. For those who do not wish to have their own compost bin, two central composting sites will be provided and maintained by the Neighborhood Association;
- All playground equipment and the park benches will be made from recycled material. A neighborhood recycling program will collect materials to be recycled into the equipment;
- Other programs to train households in how they can be sustainable are in the planning stage.

A board has been formed to oversee the project. Fourteen leaders from many sectors of Atlanta's leadership have joined with members from the community to direct the project. The board has been meeting for over a year to lay the plans and to gather wide-spread support for the overall project and its many components.

## **Making the Vision a Reality**

One of the larger barriers to the project lies in the procurement of funds for a full-time staff person. The community has been able to obtain volunteer assistance from a landscape architect, an architect designing the community center, and nearby universities, as well as representatives from organizations such as the president of Safeplay Systems. Once plans are in place, two week-ends will be set aside to bring everyone together to do an old fashioned "barn-raising" in which the majority of work on the community center will be completed. The goal is to finish the project, including the trails and planting of the trees, by the Summer of 1996.

## **Wai'anae Backyard Aquaculture Project Wai'anae coast, Hawaii**

**Contact:** Puanani Burgess; Wai'anae Coast Community Alternative Development Corporation; 86-649 Puuhulu Road; Wai'anae, HI 96792; Tel.: (808) 696-4629; Fax: (808) 696-7774

**Scope:** Local, rural

**Inception Date:** 1987

**Participants:** Families and community residents

**Project Type:** Community development, economic development, cultural preservation, food production

**Methods Used:** Fish farming tank technology; family scale enterprise as a condition; subsidy at start-up with trainings; revolving loan aspect.

**Lessons Learned:** The "family-run" requirement gives powerful benefit to eroding traditional social structures; new home-based venture encourages other options to emerge. Initiatives based in community culture and values, gains supporters and participants; single initiatives lead to expanded opportunities.

## Summary of Project

The Wai'anae Backyard Aquaculture Project provides support to families interested in the small-scale production of Wai'anae sunfish as part of a community economic development project. Under a formal agreement, the project provides financial assistance to families for initial capital expenditures and first-year operating costs. It supports the development of a local market for sunfish and the formation of a family-run association of aquaculture producers.

The goals of the Backyard Aquaculture Project are:

- self-reliance in food production;
- the strengthening of social relationships;
- home-based income opportunities for Wai'anae Coast families; and
- improvement of the community's nutritional standards.

### The project:

- selects, trains and provides technical support to families interested in backyard-scale fish production;
- arranges financial assistance for tank construction and first-year operating costs;
- coordinates a common marketing system for all participating families;
- develops local and external markets for the Wai'anae sunfish; and
- conducts research to improve the productive efficiency of the backyard aquaculture system.

### Families participating in the program:

- complete an intensive hands-on training program designed to produce competent and confident backyard aquaculturists;
- construct a backyard aquaculture system and help other families do the same;
- participate in the project's coordinated marketing system; and
- become active members of the Wai'anae Backyard Aquaculture Family Association.

The project sponsor is the Wai'anae Coast Community Alternative Development Corporation (WCCADC). It was formed as a 501(c)(3) tax-exempt, non-profit organization in 1987. Its aim is to promote self-sufficiency and self-reliance for the Wai'anae Coast, and, in the process, to rebuild the

community's self-esteem and strengthen community members identity as Native Hawaiians.

### "Work is Medicine"

The WCCADC developed out of a citizens movement in the late 1970s to challenge plans for construction of a \$3 billion luxury class tourist and residential project by West Beach Estates at the mouth of the Wai'anae coast community. Concerned residents formed an unincorporated association, the Wai'anae Land Use Concerns Committee (WLUC). The residents saw that the development of the type and magnitude proposed at the mouth of the Wai'anae coast would deplete human and natural resources as well as cause environmental, social and spiritual problems in an already stressed community. There was 20% unemployment in the community and high rates of substance abuse and domestic violence. So the WLUC actively sustained its challenge of West Beach Estates' plan for more than ten years.

A mediated agreement was reached between West Beach Estates and the WLUC on January 22, 1987. In the agreement, West Beach Estates formally recognized the need for the Wai'anae Coast Community to maintain stewardship of its own natural and human resources by developing an independent economic base to support the social, cultural and spiritual development of people and families in the community. West Beach Estates contributed funds to assist in the establishment of a community-based development organization. The Wai'anae Coast Community Alternative Development Corporation resulted. It represents the mature vision of many community members and organizations that have tried for more than two decades to solve the problems of rapid urbanization and ghettoization of one of the few remaining rural areas on the island of Oahu. It seeks to provide a cultural anchor for the people of the Wai'anae Coast, and to assure residents that there can be economic development that does not sacrifice the community's self-esteem and respect for Native Hawaiian culture. Its guiding philosophy is "work is medicine."

### One Foot on Land; One in the Ocean

The Backyard Aquaculture Project is one of two WCCADC projects. The development process used by WCCADC in the project draws upon traditional Hawaiian values and principles of sustainable development, appropriate technologies, cultural compatibility and spiritual guidance.

The first two years of the project, 1989-90, were devoted to technical research and development using funds contributed

by West Beach Estates. The pilot phase of the project began in 1991 with nine families. It was funded by a \$300,000 grant from the Hawaiian Department of Business, Economic Development and Tourism. The Growth Phase ending in June, 1995, was funded by a \$617,000 grant from the Administration for Native Americans.

Backyard aquaculture was chosen because the island people say they live with one foot on the land and one foot in the ocean. Historically, fish has been a key element in the diets of all Hawaiians. Present day consumption of fish has declined dramatically. This decline reflects a supply and demand situation that supports high prices for fresh, locally caught fish.

Fish farming provides an alternative means of supplying fresh fish to local markets. Backyard aquaculture is essentially a modern translation of the ancient practice of raising fish in enclosed ocean "ponds." In earlier times, raising fish ensured families of available food when oceans were rough or fish was not plentiful. The same thing is true today. A fish-raising family can have fresh, safe fish to eat even in times when fish are scarce, polluted or, because of high prices, prohibitive to buy.

Most Wai'anae families can master the technology of backyard aquaculture. It is not time, space or water intensive. The tasks of tank construction, management and harvesting of the fish can involve all members of the family.

A major long-term goal of the project "self-reliance through food production" is beginning to be met both for the family and the community. There are 28 families participating in the project, including five who are currently being trained. The families operate a total of 50 backyard aquaculture tanks. A family operating a single backyard system can produce 500 to 600 pounds of sunfish per year and are averaging approximately 235 pounds of market-sized fish per tank per six month production cycle. Collectively, the families in the project are able to produce about 20,000 pounds of sunfish per year.

### **Families Work Together**

The projects focus on strengthening social relationships is based on an interpretation of the difference between work and employment. Work is considered to require passion and dedication and leads to building self-esteem for individuals, families and communities. Employment is considered an activity that pays bills, but may not help self-esteem. The project promotes backyard aquaculture as family work. It

supports the idea that families who work together will form strong bonds that can endure stress. And the project provides residents with a way to share the results of their work with friends and neighbors. Participating families have agreed to sell fish to community members at a discount (\$3.00 to \$3.25 a pound) in comparison with Oahu's market price (\$4.00 to \$4.50 a pound). The spirit of sharing success is valued in Hawaiian culture.

Another goal of providing home-based income opportunities for Waianae families can be met because the production of sunfish is profitable. The cost of production is between \$1.00 and \$1.30 a pound, well below the price to community members. A single tank may not generate much income, but additional tanks can be built by a family.

The project also has the potential to improve the community's nutritional standards. State Health Department statistics show that the Hawaiian population of the Wai'anae Coast has the greatest prevalence of chronic illnesses such as heart disease, diabetes and high blood pressure. Health officials link the problems to high fat diets. The Wai'anae Sunfish has one of the lowest fat contents of any species available to residents. As fish replaces other animal protein in the diet, people will benefit.

### **Next Steps**

The Backyard Aquaculture Project is entering into an expansion phase, planned to extend through June 1998. This expansion will:

- Extend participation to include families dependent on public assistance programs;
- Double the number of families participating in the program to approximately 60;
- Enhance the capacity of current families to produce food by: 1) supporting the expansion of their aquaculture activities; and, 2) providing training and technical support for integration activities such as taro, vegetable, or fruit cultivation, and/or hydroponic plant production;
- Aggressively establish an expanded market for the sunfish;
- Broaden the product base by introducing new species of fish; and
- Establish a legally-defined family cooperative;

The community-based economic development approach and activities of the Waianae Backyard Aquaculture Project are well known within the community and throughout the state of

Hawaii. The project has gained a number of supporters in state government, some of whom initially wrote the project off as "small-scale and insignificant." Agencies supporting the expansion include the Departments Agriculture, Hawaiian Homelands, the Housing Authority and Welfare Dept.

The WCCADC has developed a formula that works "for the people, for their economy and for their environment" and it is replicable, in similar climates "state-side," or with protection in colder climates.

## **Tri-State Implementation Council Sandpoint, Idaho**

**Contact:** Ruth Watkins; Project Coordinator; Tri-State Implementation Council; 206 No. 4th Avenue, Suite 157; Sandpoint, ID 83864; Tel.: (208) 265-9092

**Scope:** Regional

**Inception Date:** 1993

**Participants:** Federal and state agencies; representatives from industries, municipalities, counties, utilities, Native American tribes, timber, agriculture, and environmental groups

**Project Type:** Regional watershed management, public education, restoration/cleanup

**Methods Used:** Public outreach and participation, coordination of implementation activities

**Lessons Learned:** Importance of broad representation of stakeholders in planning and policymaking. Effectiveness of collaboration with local and state agencies. Necessity of ongoing public education.

### **Background**

The Tri-State Implementation Council came into being in 1993 to oversee, review and educate the public about the three-state water quality management plan developed for the Clark Fork-Pend Oreille watershed which encompasses roughly 26,000 square miles in northern Idaho, western Montana and northeastern Washington.

This plan was the outcome of a series of steps that grew out of citizen concerns over the increasing amount of algae and aquatic weeds in the Clark Fork River and Pend Oreille Lake in the late 1980s. In response, additional language was added to the 1987 Clean Water Act directing the Environmental Protection Agency (EPA) to conduct a three-year study of

pollution in the basin. The result of this study was the development of the tri-state management plan. Seventy different control measures were identified and categorized, resulting in a condensed list of the top priorities.

The Tri-State Implementation Council, a citizen-led group, was formed by the EPA and the three states' water quality agencies in October 1993 to oversee implementation of the plan. The Council is staffed by a project coordinator at its headquarters in Sandpoint, Idaho. It meets biannually at different locations throughout the three states.

The Council consists of 28 individuals who represent major stakeholder groups such as industry, municipalities, counties, businesses, utilities, Native American tribes, timber, agriculture, and environmental groups. The members, all volunteers, take an active role in building support for implementation activities through both the formal work of the Council as well as its subcommittees which work locally. Each Council member sits on one of the local subcommittees which meet at different times and frequencies depending on the needs of their local projects. They are each responsible for raising funding to support these activities.

The Council helps coordinate policymaking and the work of local committees. It provides assistance to those working on specific aspects of the management plan. Information and updates on committee activities are compiled and circulated by the Project Coordinator. After five years the Council will review and evaluate the progress made on the plan.

### **Pollution control and prevention**

Initially, the Council listed the following as its most immediate goals:

- the reduction of phosphorous and nitrogen pollution in the Clark Fork River and Pend Oreille Lake through a nutrient allocation system;
- the introduction of alternative wastewater treatment at the municipal facilities in Butte, Deer Lodge, and Missoula;
- the development of a coordinated approach for wastewater management in the Pend Oreille watershed;
- the design and implementation of a nonpoint pollution control strategy beginning with the Pend Oreille River and Lake and the Bitterroot river valley;
- the establishment of a coordinated water monitoring network; and,

- the promotion of citizen education programs to educate them about their role in protecting the watershed.

### **Integrated Planning**

During the first 18 months of its existence, the Council has worked to make the most efficient use of its members and resources to collaborate with other organizations, primarily at the grassroots level, in an integrated process. It began to address the most pressing needs first as initially defined. These include:

### **Nutrient Targets**

The first meeting of this committee was held in early 1994 to review current data and reports and to develop consensus among dischargers and agencies on nutrient target levels. The committee held a briefing workshop to better understand target levels and how they might be incorporated into a lake nutrient allocation strategy for the rivers and the Lake. Strategies are currently being developed for state and federal approval.

### **Wastewater treatment**

Deer Lodge and Butte jointly agreed to obtain a declaratory ruling on water rights issues as they relate to the proposed application of wastewater on land. For Missoula the committee researched and compiled alternative wastewater treatment options and is participating in a facilities planning effort with the city.

### **Pend Oreille Lake Sewers**

Several information sessions have been held for local sewer district officials to identify issues, problems and concerns, as well as existing regulations and technical options for dealing with operational problems. The subcommittee is working with the county on possible land use planning alternatives.

### **Nonpoint Source Pollution**

The Bitterroot River valley is one of the five heaviest nutrient sources in the Clark Fork Basin. For this reason, the Council has been working with a local grassroots organization, the Bitterroot Water Forum, to develop a nonpoint strategy. They began an extensive inventory of water quality data to use in identifying priorities for additional information needs as well as developing a management strategy. The Council is also working informally with the Pend Oreille County Watershed Coordination Committee, an independent group in

northeastern Washington, on a broad-based community education plan.

### **Water Quality Monitoring**

Charged with developing a tri-state monitoring plan, the subcommittee enlisted the services of a consulting firm to help with its design and evaluation.

### **Public Education**

Some of the greatest progress has come in the area of public outreach to all ages. In Idaho the subcommittee developed three project concepts: a Natural Resource Center for a new county library; a citizen monitoring program on the Pack River featuring an intergenerational (student and landowner) monitoring/streamwalk emphasis; and a primer for newcomers on water quality.

In Montana, a series of events and educational activities have begun to spread the word about individuals and their impact on the watershed. In June, the Missoula Water Festival was held to celebrate the Clark Fork. In partnership with the Montana Natural History Center, one of the members of the Council's subcommittee worked with sixth grade teachers to plan two days of educational and entertainment programs including hands-on projects developed by the students. This effort brought together local volunteers who had not known each other previously and who were successfully able to raise over \$20,000 for the project.

The Council has helped prepare a traveling watershed educational program designed for elementary schools. When completed the Paddle to Pend Oreille Watershed Trunk will contain puppets and other entertaining educational presentations. In order to introduce the general public to watershed protection, the Council will distribute a basin-wide publication to report on the management plan and establish a "sense of place" for watershed residents.

### **Challenges**

One of the ongoing challenges is obtaining the funding needed to staff the Council and to carry out the work of the subcommittees. Some support has come from local sources, businesses and government grants. The Council is not incorporated as a nonprofit organization. It has found that it can carry out its mission by working with and developing partnerships with local organizations and by complementing the work of public agencies.

The Council is playing a key coordinating and educational role in this watershed and has been effective in gaining widespread support for its protection.

## **Buckwheat Growers of Illinois Sumner, Illinois**

**Contact:** Kevin Brussell; Buckwheat Growers of Illinois;  
Route 1, Box 450; Sumner, IL 62466; Tel.: (217) 923-3774

**Scope:** Throughout rural Illinois

**Inception Date:** 1991

**Participants:** Farmers

**Project Type:** Marketing cooperatives, sustainable agriculture, value-added businesses

**Methods Used:** Growing, marketing and selling buckwheat

**Lessons Learned:** It takes complete dedication to make a project like this work. Things take twice as much time and cost twice as much money as you think they are going to.

The Buckwheat Growers of Illinois is a not-for-profit corporation formed in 1991 to help farmers in Illinois grow buckwheat for commercial purposes. Corn, soybeans, and wheat are the major crops in Illinois, but none of them replenishes the soil and helps other crops the ways that buckwheat does. The Buckwheat Growers has made it possible for farmers who were previously either not growing buckwheat or growing buckwheat only as a cover crop (cover crops are grown to protect the soil) to profit from raising buckwheat while improving their farmland.

The Buckwheat Growers of Illinois pools the production from many growers to guarantee a large and constant supply of buckwheat to millers. The delivery point of the buckwheat is at the Buckwheat Growers' processing facility in Sumner, Illinois. The buckwheat owned by each individual farmer is tracked as the crop goes from harvesting to processing to final sale.

In 1995, the Buckwheat Growers of Illinois is raising buckwheat on approximately 1900 acres, at 750 pounds per acre. This will yield 1.425 million pounds of buckwheat. About 35 farmers pay 25 dollars per year to be members of the Buckwheat Growers. This entitles them to sell their buckwheat through the Buckwheat Growers of Illinois and to attend the group's meetings which are partly educational. There is a wide range of farmers that are members: their farms range in size

from 200 acres to several thousand acres. The Buckwheat Growers holds at least one educational meeting somewhere in Illinois each year to educate other farmers about the benefits of growing buckwheat and to recruit new members.

### **Buckwheat gives back to the soil**

Buckwheat has several positive environmental impacts unlike other crops such as corn and soybeans:

- Buckwheat "pumps" phosphorus into the soil, thus improving the soil and yields for other crops. It can positively change the chemistry of the soil in as few as 35 to 40 days. Farmers growing buckwheat and corn in rotation, for example, can expect to harvest an additional three to five bushels of corn per acre on land previously planted with buckwheat.
- Buckwheat requires no inputs such as pesticides and fertilizer, just initial spraying with an herbicide before planting buckwheat seeds; and
- Buckwheat attracts desirable predatory insects including lacewings which eat insects, such as aphids and corn borers that harm crops. When buckwheat is grown close to corn or other crops it can reduce insect damage and therefore reduce the need for pesticides.

Buckwheat is not a true cereal, but a fruit, and is suited to situations that are unfavorable to other grain crops. Under dry growing conditions when other crops are adversely affected, buckwheat goes dormant and only returns to normal when moisture returns. Also, buckwheat is not so particular in its soil requirements as are other grains, and it will produce a better crop on poor soils.

### **Economic Benefits of Buckwheat**

Buckwheat has several economic advantages over other crops that farmers grow in Illinois:

- Because buckwheat requires few inputs, it is less expensive to grow than other crops and there is less of a financial downside if there is a poor harvest;
- There is also less risk of a poor crop of buckwheat. Rose Vollmer, the Secretary-Treasurer of the Buckwheat Growers notes that farmers may only get a really good soybean crop every five years, but they are more likely to get a good buckwheat crop with a higher frequency; and
- Buckwheat is an investment in farmers' soil. It increases the yield that farmers will get the following

year on the same field; and "It's such a good crop to produce that it's almost too good to be true," says Ken Heinzmann, a farmer who is a member of the Buckwheat Growers. He notes that as beneficial as the crop is to the soil, "You wouldn't lose money on the crop even if something came up that would keep you from harvesting it. It loosens the soil, improves soil tilth, and helps retain moisture over the winter."

### **Farmers Coming Together to Market Their Crops**

The Buckwheat Growers of Illinois was founded in 1991 by Robert Vollmer and other Illinois farmers who wanted to sell the buckwheat that they had been using as a cover crop. "It seemed like it would make some sense to look for a market, coordinate production, pool resources, and launch a sales effort," said Vollmer at the time.

Vollmer originally started growing buckwheat in order to build up his family's poor soils. He hoped to use buckwheat in rotation with other cover crops to eventually improve yields for corn and soybeans. In 1991, the Illinois Department of Agriculture (IDOA) named Vollmer "Sustainable Agriculture Farmer of the Year," a distinction he won, in part, because of his initiative to implement practices on his family's farm that are both good for the land and profitable.

### **Selling Buckwheat Overseas**

In the summer of 1991, officials from the Japan Buckwheat Millers Association visited the Buckwheat Growers of Illinois to inspect the buckwheat crop. The Illinois Department of Agriculture helped arrange the contact. Japan grows, on average, just ten percent of the buckwheat that its milling industry requires to fulfill the national demand for the sobe noodle, which is made of buckwheat.

As a result of the visit, the Buckwheat Growers of Illinois secured a trial order from the Association and the Kasho Co. Ltd. for 200 metric tons, about 440 acres worth, in 1992. In 1995, the Japan Buckwheat Millers Association is buying 500 metric tons of buckwheat from the Buckwheat Growers.

### **Adding Value to the Crop**

The Buckwheat Growers of Illinois clean, pack and weigh the buckwheat before it is exported to Japan. The Buckwheat Growers is looking into ways to add more value to the buckwheat before it is sold. According to Kevin Brussell, President of the Buckwheat Growers, the short term plan is to increase the amount of buckwheat sold that is minimally processed, like the buckwheat exported to Japan. In the long

run, the Buckwheat Growers would like to buy additional equipment to add more value to the buckwheat. Brussell says that the organization is raising capital to buy a dehuller which would enable the Buckwheat Growers to process buckwheat for human consumption. The organization is currently working with a nutritionist to develop a snack food made with the buckwheat. The Buckwheat Growers has also been approached by organizations that supply food to developing nations.

### **Some markets are hard to crack**

Although buckwheat is an excellent food for livestock (and for people), the Buckwheat Growers has had a hard time selling it as animal feed. Buckwheat contains all essential amino acids in good proportions, making it closer to being a "complete" protein than any other plant source, even soybeans. When farmers use buckwheat as livestock feed, they can reduce the amount of nutritional supplements that they give to their animals. The animals also gain weight faster and are healthier when eating feed containing buckwheat.

However, Rose Vollmer notes that cracking the market has been hard. She attributes this to the contracts that farmers have signed with large agriculture corporations: "We have a hard time breaking through to individuals that are already tied up with seed salesmen . . . In our area here we have a lot of Cargill operations. You can't crack them. The buckwheat would not be nearly as expensive but they don't want to recognize the fact that it is a complete feed."

### **Help from a related business**

The Buckwheat Growers do not own the facility they use to process the buckwheat. Rose Vollmer and her son Robert formed a partnership, Earth Select Bio-Energy to rent space to store and process the buckwheat. The Japanese purchasers of the buckwheat recommended, for quality control purposes, that they purchase a facility with proper equipment, but the Buckwheat Growers is a non-profit and didn't have the collateral. According to Kevin Brussell, the members of the Buckwheat Growers were not willing to make the financial commitment to invest in the facility.

Earth Select Bio-Energy took out a bank loan and bought the property that they had been renting, which includes a warehouse and 9.5 acres of land, in addition to five 18-foot storage bins in downtown Sumner, Illinois. Since they made the purchase, Earth Select has received a loan from a federal Small Business Development Center to install equipment to clean, pack and weigh the buckwheat. Vollmer says that she

made the purchase both as an investment and to help the Buckwheat Growers get their buckwheat processed at a reasonable price. The Buckwheat Growers had previously been hiring contractors to clean the buckwheat for a lot more than Earth Select Bio-Energy was charging the Buckwheat Growers.

### **Dedication key to success**

Kevin Brussell attributes the early success of the Buckwheat Growers of Illinois to the dedication of Robert Vollmer, who passed away in early 1995. He spent all of his time working on the project and kept all of the other members involved. "He was always on the phone looking to stretch what little money we had," says Brussel. Brussel says that for a project like this to work, there has to always be at least one person working on it full time.

### **Clean Cities Recycling, Inc. Griffith, Indiana**

**Contact:** Marie Fryar; 1010 Reder Road; Griffith, IN 46319; Tel.: (219) 922-1652

**Scope:** Lake County

**Inception Date:** 1994

**Participants:** Local non-profit organizations, businesses and government

**Project Type:** Job creation/training, recycling

**Methods Used:** Establishment of a joint venture, a county-wide network of recycling drop-off centers and a warehouse/processing facility

**Lessons Learned:** To affect legislation and public policy, it is necessary to prove there are viable alternatives. It is important to bring in everyone "businesses, community organizations and government" as responsible partners.

Clean Cities Recycling, Inc. (CCR) is a nonprofit community development corporation formed as a joint venture between 2-Ladies Recycling, Inc. of Hobart, Indiana; the Gary Clean City Coalition, a community-based environmental organization; and Brothers Keeper of Gary, a shelter for homeless men. The mission of CCR is "to benefit the public interest and lessen the burden on government by creating permanent employment by utilizing the economic opportunities available through the processing and marketing of [Lake County's] residential recyclables."

The joint venture was formed in 1993 to compete for a two year contract awarded by the Lake County Solid Waste Management District to set up and operate 25 drop-off recycling centers. The District and its Board were established in 1991, when the State of Indiana set a goal of reducing trash to landfills by 35 percent by 1996, and 50 percent by the year 2001. CCR's winning contract bid of \$354,000 was 66 percent of the bid submitted by the next competitor.

### **Job creation through recycling**

To date, CCR has set up ten drop-off centers at grocery stores. The sites are open Monday through Saturday, 8 a.m. to 8 p.m. and are serviced daily. They collect clean, source-separated household recyclables: glass, aluminum, steel cans, newspaper, cardboard and some plastics. Materials are sold to local markets and established scrap dealers in the Greater Chicago area: fiber is purchased by a paper mill in Lake County, glass by a company just over the county line in Illinois, and steel returns to the steel mills.

CCR now employs six full time and two part time workers who are paid \$6.50 to \$10.00 an hour. CCR provides job training, a local work history, and letters of recommendation to homeless shelter residents who are paid a stipend for their work; the venture also helps provide continuing financial support for Brothers' Keeper. Benefits from the business flow to the city of Gary and surrounding communities.

After further expansion this summer, CCR will be able to hire up to four more full time employees, including Brother's Keeper shelter residents who by then will be trained warehouse workers. The enterprise anticipates generating \$300,000 annually from sales of recyclables. Selling recycled materials to end-users in Indiana and the Greater Chicago area will increase the capacity and the labor requirements of local industry; for example, one Lake County paper mill that buys CCR's fiber to manufacture egg cartons and fruit box liners estimates that once CCR operates at capacity, the mill will be able to increase its output by 20 percent and hire more employees.

### **Environmental Education**

CCR diverted over a million pounds of recyclables from area landfills in the first six months of 1995, after moving into the new warehouse/processing facility. The drop-off centers also serve as environmental education centers. Information is posted about recycling and resources saved, for example, how many trees were saved by recycling at each drop-off site. The

emphasis is town-based, not county-wide, so local residents take ownership and pride in their community's efforts.

### **"Closing the Loop"**

The project also works toward "closing the loop" by promoting use of recycled materials. One grocery store hosting a drop-off site introduced green "please return for recycling" shelf tags under certain products and additional shelf tags listing the recycled content of packaging with a "smiley-face earth" logo. One national cookie brand's sales representative who toured the shelves was concerned because his competitor's brands displayed these attention-getting shelf tags; he has since been working to convince his company to adopt recycled packaging.

CCR has received start-up and ongoing support from a wide range of local, state and national sources. The Gary Clean City Coalition provided CCR with administrative and clerical services and office space until the facility in Griffith was completed. All current CCR staff volunteered their time during the start-up phase; community volunteers as well as community service workers assigned by county and city courts still help to support the program. Grocery site locations are donated by the merchants, who also contribute \$1,000 and help find "shelf sponsors," such as local dairies and the local newspaper, to make matching contributions.

CCR has received some equipment on loan, such as a \$10,000 can crusher/seperator and a vertical baler that will become CCR's own property after five years. The Indiana Department of Environmental Management provided advice as well as funds for equipment. The Hoosier Environmental Council and Greenpeace contributed advice on legislative matters. The Institute for Local Self-Reliance, based in Washington, DC, facilitated the development of the joint venture and provided technical assistance in helping to draft the business plan and obtain financing.

### **Key Elements of Success**

The experience of the participants was a critical element of the project's success. The Gary Clean City Coalition played a major role in getting the city to establish and expand a curbside recycling program, and Brothers' Keeper had collected newspapers as a source of income for years. 2-Ladies began as a volunteer, recycling educational effort initiated by a mayor's committee in Hobart. Marie Fryar and her partner participated in this effort but found that "education was not enough if there was nowhere to take the stuff," and opened the first drop-off center in 1989 on land left by her

father-in-law. Fryar became convinced that "it is necessary to prove there are viable alternatives in order to affect legislation and local policy." 2-Ladies, the Gary Clean City Coalition and other groups worked with the Hoosier Environmental Council and the Lake County Solid Waste Management District Advisory Board to insure that proper recycling programs were implemented.

In addition to credibility as recycling operators, their years of working on the Community Recycling Cooperative Effort for the Environment gave 2-Ladies a strong base of support in local communities. Fryar recounts: "we worked with the mayors, with the churches, the Chambers of Commerce, the Kiwanis Clubs, the Boy Scouts, the grocery store owners, old, young, everybody." This made them "somebody to be reckoned with" in the political arena and helped them win the district contract.

### **Barriers to Credit for Nonprofit Recyclers**

The major barrier to expansion and self-sufficiency for CCR has been lending institutions' refusal to provide matching financing, largely due to policies on collateral. CCR was told that their \$80,000 of equipment is not on the list of acceptable loan collateral and that recycling equipment is "too specialized". The contract for \$178,000 a year from the Lake County Solid Waste Management District was also considered insufficient security for the loan - even after CCR, at the banks' request, renegotiated an extended four year contract. Banks were unwilling to accept future sales of recyclable materials as collateral for purchasing equipment.

The unanticipated barriers to obtaining credit for nonprofit recyclers set back the program schedule in the initial business plan, as CCR has had to focus on fundraising from local business donations and grants or loans from the state and from foundations. The three sites scheduled to come on line and the final twelve drop-off sites will be set up by the end of the summer, now that CCR is obtaining the necessary equipment and financing. Meanwhile, a new business pilot program is picking up materials from a major appliance distributor and a tavern.

### **Iowa Energy Programs Des Moines, Iowa**

**Contact:** Ms. Roya Stanley; Chief, Energy Bureau; Iowa Department of Natural Resources; Wallace State Office Building; Des Moines, IA 50319-0034; Tel: (515) 281-8681; Fax: (515) 281-6794

**Scope:** Statewide

**Inception Date:** 1985

**Participants:** Iowa's Department of Natural Resources; government facilities, schools, hospitals, local governments and other non-profit organizations; utilities

**Project Type:** Energy management, renewable resource development, alternative financing

**Methods Used:** Innovative energy legislation and financing arrangements, marketing and public education, development of comprehensive energy plans

**Lessons Learned:** Importance of state and federal legislation for comprehensive energy planning. Necessity of innovative financing systems and marketing. Value of modeling education and utility leadership.

### **Background**

In 1985 Iowa began an ambitious series of innovative legislative program and planning strategies aimed at improving the state's economy and decreasing its dependence on external energy resources. Its goal was to reduce overall energy use, develop "home-grown" renewable energy sources, and to build a local renewables industry.

### **Using Energy More Efficiently**

The goal of the Building Energy Management Programs of Iowa's Department of Natural Resources is to achieve annual energy savings of \$50-60 million on a capital investment of \$300 million in all state facilities, schools, hospitals, and local government and other nonprofit organizations through the implementation of cost-effective building energy management improvements that have a payback period of six years. Improvements range from caulking and weather-stripping to replacing boilers and chillers.

Traditionally, lack of capital has limited investments in energy efficiency. To overcome this problem, the State of Iowa has developed several innovative financing programs. In 1985 a state law was passed authorizing state agencies to use lease-purchase financing for improvements and setting up a non-profit corporation to facilitate implementation. Savings that result from these improvements go to meeting the lease payments. A School Energy Bank, set up in 1986, assists schools with energy audits, engineering analyses (paid for with six-month interest-free loans), and lease financing for improvements. Additional enabling legislation, passed in

1987, allows all school districts to get the same low interest rate regardless of credit rating. Other legislation set up similar programs for hospitals, private colleges, and local governments. By the end of 1993, \$113 million in improvements had been identified and about 16% of these installed. Future programs will focus on industrial and commercial facilities, as well as promotion to other states.

### **Increasing "home-grown" energy resources**

Iowa's Comprehensive Energy Plan, developed in 1990 by the Department of Natural Resources, calls for 10% of Iowa's energy usage to be composed of renewables by 2010. Due to the large number of highly-rated wind sites in Iowa, wind energy will be the primary resource used. A study by the Union of Concerned Scientists estimated that wind turbines could generate more than two trillion kilowatt-hours per year in the state. Additional sources will be biomass, including ethanol, wood waste, methane, and municipal solid waste.

As with the Building Facilities Program, legislation has made development of this capacity possible. In 1992 the Iowa Utilities Board set guidelines requiring purchase by utilities of 105 megawatts of electricity generated by alternative power producers. A 1993 law exempted wind generation equipment from state sales tax and allowed local governments to exempt landowners from paying additional property taxes on the value of wind conversion systems. In addition renewable energy projects by cities, counties, and school districts became eligible for low-cost financing through the Iowa Energy Bank Program, operated by the Iowa Department of Natural Resources.

The Spirit Lake Community School District in northwestern Iowa was one of the first institutions to benefit from this program. Using funds from the U.S. Department of Energy's Institutional Conservation Program and low-cost financing from Iowa's Energy Loan Bank Program, the school district built a 250-kilowatt wind turbine in 1993. In the first year of operation the district saved \$26,000 which, according to Superintendent Harold Overman, "will provide a computer lab a year for our students."

The 1990 legislation requiring investor-owned utilities to purchase 105 megawatts of independently produced energy provides an added economic benefit to the school district. They can sell excess electricity to Iowa Electric at a guaranteed rate. Because this mainly occurs during the summer when school is closed, this supply serves to meet the utility's additional seasonal needs.

The students benefit by learning about energy conservation and other environmental concepts, e.g, the wind turbine will keep 1800 pounds of pollutants and 650,000 pounds of carbon dioxide from entering the atmosphere. They are monitoring the wind speeds and turbine production data with classroom computers and sharing this and other information with other schools through the Iowa Communication Network.

The success at Spirit Lake has inspired other initiatives. A local manufacturer in Adair, Iowa installed a wind turbine early in 1995. The system is expected to provide 70-80% of the company's electrical needs and to pay back within eight years. It also prompted a gift from two philanthropists of two generators to the Nevada County School District and a third to a community hospital.

### **Integrated resource planning: Waverly, Iowa**

In 1990 Iowa required municipal utilities to report their energy efficiency plans by 1992. Waverly was the first utility to submit its comprehensive plan, which has become a model for others in the state.

Waverly is a small, growing farm town of 9,000 in northeastern Iowa. Its publicly-owned electric utility, Waverly Light and Power, serves roughly 4,000 customers in a 33-square mile service area. It generates 45% of its power while the rest is purchased from Midwest Power Systems (MPS). During the late 1980's energy demand grew at a rate of 4.2% annually from an increase in population and small businesses. Faced with a contract termination with MPS in 1999 and steady growth in demand, it became increasingly concerned about future energy supplies. It looked to Osage, Iowa, where an impressive set of demand-side management programs had achieved 100% participation and significant savings for the city.

In 1990, the board of Waverly Light and Power hired a new general manager and energy efficiency expert, Glenn Cannon, who prepared the utility's first integrated resource plan in 1992. It identified fifteen environmental and conservation goals which provided cost-effective strategies and rationales for increasing customer efficiency and conservation in the use of energy and for investing in renewable resources.

The demand-side programs involve residential, commercial, and industrial customers. They include energy efficiency in new building construction; residential audit and appliance rebate programs; commercial audit, lighting and HVAC programs; home loan programs; and a demonstration electric vehicle program.

On the renewable supply side, after extensive research Waverly Power and Light installed an 80 kilowatt wind turbine on an acre of land leased from a local farmer. Although it is the costliest source of energy in its current supply, the utility foresees that wind will play a permanent part in its future mix. It is also a source of local pride among residents.

With the University of Northern Iowa, Waverly has also established the Midwest Wind Energy Program to provide evaluation, demonstration, and dissemination of wind energy information. In the words of Mr. Cannon, "We have a moral obligation to our customers and society as a whole to provide electrical service in the most responsible manner, and that's got to include the environment."

By developing an integrated energy plan, implementation has come at minimal cost for Waverly Power and Light. Careful planning ensures that energy-efficient appliances and other equipment were available before the plan was implemented. Effective communication and public education through radio spots and newspaper advertisements and public meetings reduced the need for expensive promotions and incentives.

In addition the success of the program was a boost for the local economy, making it possible for the utility to make an interest-free loan available to buy land for an industrial park. Administration commitment, efficient use of resources, credible messengers, long-term strategic planning have all been distinctive elements in this effort. For more information contact: Glenn Cannon, General Manager, Waverly Light and Power, 1002 Adams Parkway, P.O. Box 329, Waverly, IA (319) 352-6251 Fax: (319) 352-6254.

### **Key elements for success statewide**

Favorable legislation and state assistance in research have been key to the success of Iowa's energy programs. In the case of wind generation technological innovations in turbine design and efficiency have greatly reduced costs and increased technical reliability. As a result, there is far more public support for renewable energy projects.

The programs of both the State of Iowa and the town of Waverly demonstrate that careful, integrated, long-term resource planning addressing all sides of the energy equation can succeed and bring economic, environmental and educational benefits to communities as well as a sense of civic pride and the opportunity to be a model for others to follow. Energy efficiency and renewable sources result in a cleaner environment and fewer environmental and health costs.

Dependence on supplies of fossil fuels is reduced and new industries, products, markets, and jobs created. Education has a significant role in teaching sustainable energy use and development to future generations.

## **The Land Institute Salina, Kansas**

**Contact:** Dr. Wes Jackson, Director; The Land Institute; 2440 Water Well Rd.; Salina, KS 67401; Tel: (913) 823-5376; Fax: (913) 823-8728

**Scope:** National

**Inception Date:** 1976

**Participants:** Researchers, interns, scientists, land grant university

**Project Type:** Sustainable agriculture, natural resource conservation, public education

**Methods Used:** Research, peer-reviewed results, educational centers and programs, partnerships with universities

**Lessons Learned:** Importance of vision, long-term view and demonstration of principles. Value of educational exchange.

"When people, land, and community are as one, all three members prosper; when they relate not as members but as competing interests, all three are exploited. By consulting Nature as the source and measure of that membership, The Land Institute seeks to develop an agriculture that will save soil from being lost or poisoned while promoting a community life at once prosperous and enduring."

### **MISSION STATEMENT**

#### **Background**

The Land Institute was founded in 1976 by Wes Jackson and his wife, Dana, to research and model new agricultural production methods that exemplify the best of sustainability in agriculture, water and energy efficiency, waste management, and shelter. According to Dr. Jackson, a farmer and plant geneticist, its goal is to develop a system of agriculture that "saves the soil, runs on sunlight, and rebuilds local community." This small institute demonstrates what an enormous impact dedicated individuals with vision can have by virtue of their commitment to change, their ability to model what they believe in, and their inspiration to others.

Located on 28 acres south of Salina along the Smoky Hill River, the Land Institute now covers 275 acres, 100 of which are the original prairie. It began as a school to explore and model sustainability. Classes were first held in the fall of 1976, but within a month a fire destroyed the building. What happened next is symbolic. The students stayed and worked with the Jacksons to use the resources available to build a solar-heated classroom, an office and library and to begin their research.

For over two decades, staff, researchers and students have been learning from native prairies, seeking to identify and grow perennial prairie grasses in mixtures that would collectively retain and build topsoil, hold moisture, counter pests naturally, produce high yields of edible seeds, and require minimum tillage. They are taking the best of traditional empirically-derived approaches.

#### **Philosophy**

The Land Institute is based on a philosophy of "Natural Systems Agriculture", or an agricultural system that takes its cue from natural ecosystems whether they be prairies, tropical rainforests, coral reefs, alpine meadows or Arctic tundra. It is this fundamental belief that distinguishes the Land Institute from other research institutions. Natural ecosystems cannot be understood by looking at individual parts rather as an integrated whole.

He sees nature as an analogue, believing that ecosystems have worked for millions of years and have much to teach us. To the extent that researchers can unlock their secrets, the land and people will benefit. The challenge is to develop a more sustainable agricultural system.

#### **Learning from the prairie**

In their research, the Institute has tried to answer the following questions: Will perennials have the same high yields of seeds produced by annuals? Will this system address pest management effectively? Will a polyculture produce as much or more than a monoculture? Will it produce its own nitrogen? Through its research, the Land Institute has answered all the questions except how the prairie can adequately develop its own nitrogen.

#### **Innovative research and education**

To expand this research the Land Institute recently joined forces with Kansas State University in a collaborative development of a project. It will set up ten "plant materials" systems centers around the country. They will be located in

different parts of the country so that an ecosystem approach can be adapted to local conditions and different environmental conditions.

In each center there will be a team of scientists comprised of ecologists, plant breeders, biotechnologists and environmental historians. All the scientists will be under 40 so that in their lifetimes they can see the results of their experiments to find what kinds of polycultures, or mixtures of plants, will be best suited to different landscapes. Dr. Jackson estimates that this 25-year program will cost around \$750 million.

The Land Institute has also had some influence on what land grant universities teach and research. Admirers in many of these institutions are engaged in polyculture research and work in collaboration with the Land Institute and Kansas State. Because of these efforts and increased public interest, educational institutions are addressing sustainable agriculture more than before.

The transmission of this approach to the next generation and to interested colleagues is integral to the mission of this institution. Every year eight to ten interns come for ten months to study, write, conduct research, work, and grow crops. Visiting scholars come as well.

Dr. Jackson is also a prolific writer and lecturer. He has written three books, *Becoming Native to this Place*, *Altars of Unhewn Stone: Science and the Earth*, and *New Roots for Agriculture*, as well as many articles, and given numerous interviews.

## **Translating vision into action**

### **Sunshine Farm Project**

Begun in 1991, this project is intended to provide a type of control for comparisons with the Land Institute's perennial prairie polyculture research model. Conventional crops such as wheat, alfalfa and sorghum, or monocultures, are being grown but using sustainable practices. The Land Institute is also using an integrated approach that includes draft animals, tractors fueled with vegetable oil, wind turbines, crop rotations, and conservation tillage. By developing a farm that is regenerative and self-sufficient in energy and food and that receives no subsidies, they will be able to contrast and evaluate the two operations.

### **Matfield Green: An Experiment in "Keeping the Books"**

In this new experiment, a small town of 50 in the Flint Hills will be used to gather data on inflows and outflows of

materials, or what Dr. Jackson terms "setting up the books for ecological community accounting." Here, as in many rural areas, there is an increasing loss of "cultural seed stock" and with it the diverse knowledge base that is a strength of any community.

Once a thriving town, Matfield Green has lost most of its residents to the cities. What it has retained is clean air and water and a healthy quality of life. Here, the Land Institute is developing a rural studies center where researchers will identify how "to live within ecological limits." Several assumptions are made: that communities can be studied; that they have 'ecological capital'; that capital loss can be tracked; and that communities need to "balance the books" if they are to be sustainable.

Unlike human settlements, the prairie has two identifiable features: everything runs on sunlight, and it recycles all materials. In this study, the Institute will attempt to identify what principles guide the human community. How can we learn to live more sustainable lives? What is missing or what could be added to the community experience that would help guide the community toward sustainability? Matfield Green will become the research center to answer these questions.

## **Back to the Future**

Dr. Jackson uses the following analogy to explain the status of the Institute's research. In 1903 the Wright brothers knew they were on to something when they got the plane airborne at Kitty Hawk, but they could not have foreseen the day when jets could fly across the ocean. He explains that they are at the very beginning of a significant revolution in agriculture and he cannot predict where this experiment is going. He is certain that the kind of agriculture the Institute is seeking to model will reflect the wisdom of ecosystems they are studying.

## **Challenges**

The Land Institute is primarily funded by foundation grants and contributions from supporters in all 50 states and a number of other countries. Like many nonprofit organizations it is vulnerable to changes in foundation priorities and to the desire for short-term results. Reductions in funding in recent years has meant that the staff has been reduced and salaries cut. Although the ten centers will require substantial funding, Dr. Jackson estimates that the return on investment will be substantial and is seeking government funding for the centers.

Through its research and by training students and spreading the word among the research community and reaching a wider

audience, the Land Institute is increasing the number of people and projects teaching and researching in this new kind of thinking. It has already and continues to make a remarkable contribution to developing innovative means of sustaining land, water, air, people and communities.

## **Mountain Association for Community Economic Development, Berea, Kentucky**

**Contact:** Don Harker, President; MACED; 433 Chestnut Street; Berea, Kentucky 40403; Tel: (606) 986-2373; Fax: (606) 986-1299

**Scope:** Regional

**Inception Date:** 1976

**Participants:** Residents, nonprofit organizations, businesses, government officials

**Project Type:** Comprehensive community development, leadership development/training, public education

**Methods Used:** Technical assistance, training, education, revolving loan fund

**Lessons Learned:** Importance of residents in building sustainable communities. Necessity of developing social capital including relationships among people and organizations. Recognition of how much we need to learn about sustainable community development.

### **Background**

The Mountain Association for Community Economic Development (MACED) was formed in 1976 by ten community development organizations to improve the quality of life in mountain communities, particularly that of low-income residents. Its work encompasses the 49 eastern Kentucky counties served by the Appalachian Regional Commission.

These communities face serious economic, social and environmental problems. Of the 49 counties served, 38 are classified as distressed. Nearly 25,000 jobs have been lost in the state since 1979. The number of farms has declined from 267,000 to just 88,000 since 1940. Poor agricultural, mining and logging practices have left a toll on the environment throughout the state. The population of the area generally lacks the education and skills to become more employable. Only half the adults 25 and older have high school degrees, and deep divisions remain between the haves and have-nots.

Over the years MACED has developed programs to facilitate economic renewal and to increase the capacity of local citizens to build more sustainable, equitable and prosperous communities. Its staff of 23 draws on its expertise in finance and leadership development, community organizing, environmental issues, business, law, and education. Its Board of Directors represents the broad diversity of this region. Its annual operating budget is around \$1 million; the revolving loan fund, \$3.5 million. Funds are derived from government grants, private foundations and income from investments and consulting fees.

### **Economic Transitions and Transformations**

#### **Community Economic Development**

MACED is best known for its work in communities to improve their economic base. Its business development program supports projects to help low-income people which private banks will not finance. Over the years, MACED has helped to create more than 600 jobs through \$8 million in investments in 20 enterprises, such as secondary wood manufacturing processes and more efficient mill operations. It works with entrepreneurs and small businesses and helps to create flexible manufacturing networks that help small businesses work together on joint purchasing, training programs and collective marketing. Government funding from such programs as the Discretionary Grants Programs of the Office of Community Services (OCS) has played a key role in helping companies become more competitive.

One successful example of MACED's ability to provide a timely infusion of capital and ongoing technical assistance is the B & H Tool Works, Inc., a tool and die manufacturer in Richmond, Kentucky. Begun in 1979 by two men in a garage, it grew to \$150,000 in revenues by 1984. It sold common stock to its employees, bought five acres and constructed a 1,200 square foot building. By 1985 they had 18 employees and sales of more than \$212,000. To take advantage of market opportunities they needed to raise capital. MACED provided a \$100,000 capital loan when no other source was available. They also offered technical assistance with a business plan and counseling on information and computer systems to help track costs and market opportunities. They later were able to obtain a grant from the OCS for \$279,000.

Today B&H employs 115 people full-time in high skill jobs. Its sales in 1995 are anticipated to be \$6 million. Over one-third of its workers earn \$40,000 or more, which is double the average for the workers in the area. The company, in turn, has benefitted the region and the state and federal governments:

the original OCS investment of \$279,000 returns an estimated \$37,500 to the city and county, \$125,000 to the state and \$375,000 to the federal government each year through payroll taxes.

### **Kentucky Local Governance Project (KLGP)**

Since 1991, the KLGP has worked at the grassroots level in nine counties to help citizens make local government more responsible, accountable, open and democratic. It encourages governments to solve local problems: repairing unsafe roads, cleaning up polluted waterways and dumps, providing public transportation to underserved areas, and enhancing parks and recreation areas. It has also been effective in opening up opportunities for public participation in governmental processes.

To help citizens become more informed about their communities and better able to participate in local decision-making, MACED conducts workshops using an adaptation of the Rocky Mountain Institute's Economic Renewal model workshop and a compendium of case studies. These workshops have been particularly effective in attracting much wider community representation in discussing economic alternatives, a traditionally closed process.

In these workshops, participants identify assets and needs within the communities and analyze case studies for their applicability to their specific communities. In the course of the workshop they are asked to list a number of proposed projects. In recent workshops facilitators, Don Harker and Liz Natter, have added the issue of sustainability by asking participants to identify and incorporate sustainability indicators into their thinking processes about which local enterprises might work. They have also added follow-up workshops to define the next steps, timelines and areas of responsibility. In addition, the Local Governance Project has provided the ongoing technical assistance that is key to future implementation.

The KLGP also provides small stipends (roughly \$2000/year per group) to undertake special projects such as creating summer youth programs, improving a community center, or providing scholarships.

### **Generating new initiatives**

Over the years MACED has been instrumental in helping to form new organizations that complement its work. Forward in the Fifth is a group dedicated to educational quality in eastern and southern Kentucky. By working with local affiliates that engage a broad cross-section of the community, this group has

helped to enhance education through mini-grants to teachers, student attendance improvement and parent involvement programs. Since 1986 it has supported local organizations, organizing over 2000 members in 39 counties affecting local schools that enroll over 170,000 children.

Another representative organization, the Women's Initiative Network Groups (WINGS), was formed by three women entrepreneurs to help women in eastern Kentucky build skills and businesses through life assessment and business training workshops.

### **Sustainable Communities Initiative**

In recent years MACED has built upon the effectiveness of its past economic development work to incorporate more fully the principles of sustainability that recognize the interdependence of ecology, economy and equity. Instead of simply looking at ways to create jobs, they are examining opportunities to build a coordinated civic infrastructure in two counties that will enable citizens to determine the future of their communities.

In 1995 MACED plans to launch a five-year Sustainable Communities Initiative in Letcher and Owsley counties that will demonstrate how developing social capacity can inform and lead to sustainable development. The economy in the two counties centers on coal and agriculture. Owsley is Kentucky's poorest county. With a poverty rate of 52.1%, it is largely made up of small farms that grow tobacco. But its strength is in its active citizen groups, some of which have participated in the Economic Renewal workshops and are ready to diversify the economy. Letcher is a coal county with 31.8% living below the poverty level. It has two notably progressive institutions, its local newspaper and Appalshop, a nationally-recognized media center.

The Sustainable Communities Initiative will address fundamental problems and opportunities in an integrated environmental, economic, and social approach that makes efficient use of resources. It will demonstrate the benefits of moving away from an economic growth model to one that improves peoples' lives while reducing the use of natural resources. MACED will work together with many local organizations as well as with other non-profit groups that have special expertise. Both counties will work together and develop linkages to other communities as well as to state, local and national agencies.

MACED plans to develop a guide about sustainable development and social capacity for public education. This

will complement its previous publication, *Where We Live: A Citizen's Guide to Conducting a Community Environmental Inventory*, authored by Don Harker and Elizabeth Ungar Natter, and a forthcoming primer on sustainability for the general public.

### **Challenges**

Two of the ongoing challenges are finding entrepreneurs with the skills, vision and willingness to undertake new approaches and developing the social capacity for community sustainability. MACED's programs and new initiative are specifically targeted to address these needs.

All of MACED's work is intended to guide communities toward more sustainable development. Through local capacity building, technical assistance, education and public outreach, MACED is helping citizens and businesses work together to develop new approaches that improve their quality of life.

### **The Coalition to Restore Coastal Louisiana Baton Rouge, Louisiana**

**Contact:** Mark Davis; The Coalition to Restore Coastal Louisiana; 200 Lafayette Street, Suite 500; Baton Rouge, LA 70801; Tel.: (504) 344-6555; Fax: (504) 344-0590; E-mail: 102105.2461@compuserve.com

**Scope:** Regional, coastal, urban/rural

**Inception Date:** 1989

**Participants:** Businesses, community organizations, individuals

**Project Type:** Restoration/cleanup, public education, citizen-led initiative

**Methods Used:** Education, organizing citizens' groups

**Lessons Learned:** People can make a difference; motivated and informed citizen action has catalyzed state and national policy; important to move away from assigning blame and instead move toward solutions.

### **Background**

Studies through the years showed that the coast of Louisiana and the only great delta ecosystem in North America, the Mississippi River delta, was disappearing at the rate of 25 to 40 square miles per year: Between 1930 and today, Louisiana's coastal land mass has shrunk approximately 1.2

million acres, or 30%. The state, which contained approximately 25 percent of the coastal wetlands in the United States, was suffering about 80% of all national coastal wetlands losses.

The delta is of economic as well as environmental importance. Its fisheries, both recreational and commercial, contribute about \$2 billion to Louisiana's economy each year, supply a large part of the nation's commercial catch, and about 50,000 to 70,000 jobs for the people of Louisiana. The delta area provides about 50 percent of the nation's fur harvest. It is the nursery and feeding area for millions of waterfowl. And the coastal wetlands provide hurricane and storm protection for the inhabitants of the coastal zone. This is important because about 65% of the population of Louisiana lives within 50 miles of the coast.

### **Stewardship Basis for Growth**

Concerns for the health and vitality of the coastal lands, its communities and economy spurred informal meetings among environmental activists, scientists and concerned coastal residents beginning in 1986. They came together to discuss possibilities for taking action to halt the loss of coastal lands. They recognized that the loss of land is caused by human actions "the siting and protection of industries, communities, levees, and transportation infrastructure", as much as natural occurrences. And they decided to try to do something to halt the loss.

In 1987, several different religious denominations passed a common resolution that urged the people of Louisiana, particularly those in coastal parishes, to accept personal responsibility for environmental stewardship and to support groups and politicians who did also. Over the next two years churches and synagogues throughout coastal Louisiana sponsored 20 forums attracting more than 2,000 people to learn about ways to protect and restore wetlands.

In early 1988, the Coalition to Restore Coastal Louisiana (CRCL) formed out of the informal, ad hoc group, and was incorporated as a nonprofit 501(c)(3). By 1989, more than 60 clubs, businesses and organizations belonged to the coalition. More than forty people served on the Board of Directors. Most were representatives of religious organizations, universities, local governments, service organizations, environmental groups, small businesses or tourist bureaus. Among them were attorneys, scientists, environmentalists and landowners. About twenty-five scientists and engineers agreed to act as advisors. Today nearly 150 businesses, corporations, trade associations, civic, religious and environmental groups and hundreds of

individual members are involved in CRCL activities to support its mission of advocating for the restoration and preservation of the Mississippi River Delta and the coastal wetlands of Louisiana.

### **Ambitious Citizen Action Plan Realized**

The Coalition, which received foundation grants and challenge grants that were matched by in-state donations, released a citizens' action plan for saving the Delta, Coastal Louisiana: Here Today and Gone Tomorrow?, in April, 1989. Draft reports were circulated among and commented on by governments, fishermen's associations, research institutions, environmental and conservation clubs, civic groups, religious organizations, coastal landowners, scientific consulting firms and private businesses and industry. The plan proposed to:

- create dedicated, recurring and substantial state and federal funds for investment to preserve and restore threatened coastal wetlands;
- introduce the restoration of the Mississippi River Delta as an important component of the national environmental agenda;
- fast track and coordinate coastal wetlands restoration efforts by the Governor's office; and,
- convince Congress to expand the mission and mandate of the Army Corps of Engineers to include wetlands creation and preservation in addition to the traditional jobs of maintaining navigation and flood control.

The plan was considered extremely ambitious and generally was viewed as unlikely to be realized in the foreseeable future. But in 1989, voters of the state approved a constitutionally protected Wetlands Conservation and Restoration Fund. A trust, it is funded by a portion of the oil and gas royalties received by the state, which provides up to \$20 million annually to coastal restoration efforts.

The Coalition then developed a national "Save the Wetlands" campaign that helped move Congress to pass the Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA) in 1990. CWPPRA provides \$40 million annually to restore Louisiana's coastal wetlands.

### **Federal/State Task Force Oversees Restoration**

A task force composed of six federal agencies (the Departments of the Army, Interior, Commerce, and Agriculture, and the Environmental Protection Agency) and the State of Louisiana was created to manage planning and

project construction. The task force gets input from citizens through public meetings and an advisory Citizens' Participation Group (CPG). The Coalition to Restore Coastal Louisiana has played a major role in the selection of restoration projects under CWPPRA. In 1995, it led discussions of how to improve the selection process used by the CWPPRA Task Force and the criteria it uses in choosing restoration projects.

Over the past five years, 65 projects have been selected by the CWPPRA task force and the state. Five of these projects have been completed, or partially completed, and seven more are under construction. By year end, eight are expected to be complete and 14 under construction.

Restoration projects range in estimated cost from a high of \$8,142,000 to a low of \$126,000. A sampling of completed projects include:

#### **Bayou LaBranche Marsh Creation**

Completed in April, 1994, this project recreated 350 acres of marsh that had been lost to conversion and flooding. Once the area has settled, it is expected to be a freshwater and intermediate marsh that will serve as a valuable nursery habitat for finfish and shellfish.

#### **Cameron Prairie National Wildlife Refuge Erosion Protection and Marsh Enhancement**

This project protects more than 640 acres of freshwater marsh to prevent erosion of the spoil bank that separates the wetlands from the waterway.

#### **Vegetative Planting Demonstration Project**

Four locations, including West Hackberry in Cameron Parish, DeWitt-Rollover in Vermillion, and Timbalier Island and Falgout Canal in Terrebonne, are sites intended to demonstrate the suitability of using various plants to decrease erosion in areas prone to salt water intrusion and wave action.

#### **Citizens' Restoration Support Agenda**

In its ongoing effort to support coastal restoration and preservation, The Coalition to Restore Coastal Louisiana has a number of projects on its agenda designed to inform, involve and educate citizens, non-governmental organizations, and businesses. These include:

- supporting CoastWatch, local citizens' groups;
- sponsoring student field trips;

- developing educational programs ;
- maintaining a speakers' bureau;
- publishing CoastWise magazine, a semi-annual, and Coast Currents, a monthly newsletter;
- creating a Christmas Trees Project to build barriers in wetlands using Christmas trees; and
- testifying at state and national hearings in support of wetlands protection and coastal restoration legislation.

CoastWatch is a project of the Coalition to Restore Coastal Louisiana. CoastWatch groups are coalitions of local conservation and civic groups and individuals formed by volunteers to work on water quality, habitat or coastal restoration issues in their local area. Each region in Louisiana is faced with different conservation or restoration issues so each CoastWatch group sets its own agenda, structure and policy. The group becomes a way for local citizens to gather and share information about important local conservation issues, and to organize and act quickly when necessary.

CoastWatch groups have:

- monitored and made suggestions for expenditures for state and federal coastal restoration funds;
- improved sewage treatment laws and enforcement;
- worked on regional river planning;
- opposed projects harmful to the aquatic environment; and
- produced education materials.

The Coalition offers CoastWatch groups the latest information on wetlands and coastal issues; technical and legal expertise; assistance in forming and maintaining an effective local conservation group; funding and development assistance; and, statewide support for local initiatives.

The Coalition also sponsors workshops in different areas of the state on issues related to coastal preservation. For example, it held a two-day Barrier Shoreline Restoration workshop in New Orleans in the spring of 1995. More than 100 people attended to hear speakers and panel members from as far away as Maine, New Hampshire and Virginia. The Coalition also holds Louisiana Wetlands Workshops with local residents and guest speakers showing how citizens depend on healthy wetlands for food, safety, recreation and livelihoods.

Education projects include field trips that take students into coastal wetlands to teach them about the problem of erosion and restoration solutions. Other education projects include classroom presentations that use slides, video and activities to

explain the process of coastal loss and efforts at coastal restoration in Louisiana.

The Coalition to Restore Coastal Louisiana is joining with six other major coastal organizations to establish a national education campaign about the importance of the nation's coastal resources and estuaries. The campaign will focus on their value as fisheries and wildlife habitat and their cultural and economic importance.

## **Sustainable Cobscook Cobscook, Maine**

**Contact:** Dianne Tilton; Sunrise County Economic Council; 63 Main Street; Machias, ME 04654-0679; Tel.: (207) 255-0983

**Scope:** Nine towns on Cobscook Bay

**Inception Date:** 1993

**Participants:** Individuals and organizations in the Cobscook Bay region

**Project Type:** Community economic development, sustainable indicators, comprehensive community development

**Methods Used:** Small grants to local sustainable development projects, public participation

**Lessons Learned:** Most people are not used to having the power to make important decisions affecting their communities and local economies. Grassroots economic development is getting everybody in the community involved in every level of major decision making.

Sustainable Cobscook was founded by citizens from communities around Cobscook Bay in northeastern Maine as an effort to plan and implement sustainable development in their region. Four task forces composed of members of the community have begun to establish and raise funding for local projects in four areas: environment, economic development, education, and community/cooperation. These efforts include a sustainable indicators project, a conference on using Cobscook Bay as a teaching tool, a soft shell clam habitat restoration and management project and a directory of regional cottage industries.

There are nine communities along the rim of Cobscook Bay, with a combined population of 6,801 people. The lack of significant economic development in the region threatens the

qualities the people in Cobscook Bay wish to maintain: their livelihoods, the natural environment, their communities and their educational systems. Many people in the region are concerned that some types of economic development could be a threat to those aspects of the area as well. Residents are also concerned that if their towns are unable to provide quality education and job opportunities, they face losing their most precious resource as their children grow up and leave the area.

### **Flexible Funding**

Sustainable Cobscook is part of the Northern New England Sustainable Communities Project, a three-state initiative funded by the Ford Foundation. The underlying principle of the Project is that only the people living in a community can decide how to enhance or preserve what they value most. Sustainable Cobscook received \$10,000 from the Ford Foundation its first year and \$40,000 each of two following years.

Each of the four task forces received \$6,500 per year to use however they decided. The task forces are also authorized to seek other sources of funding. The only restriction made by the Ford Foundation was that grant money could not be used to pay staff salaries. The Foundation wants the money to be used only to increase capacity in the community.

### **Indicators of Sustainable Development**

The first action taken by the Economic Development Task Force was to hire a student intern from the College of the Atlantic to begin developing indicators to measure the status of the four commonly held values of the residents of the Cobscook Bay area.

Some of the specific indicators chosen by the task force are the dollar value of local fish landings to indicate economic health; the percentage of nesting eagles that successfully reproduce to indicate the health of the environment; the number of organizations with regional interests to determine the level of community and cooperation; and school test scores to indicate the quality of local educational institutions. These indicators will be used to track the history of changes in different aspects of life in the region as well as to determine if and when successes have been achieved in different areas.

### **Teaching About Local Ecosystems**

All of the task forces provided funds for an Environmental Teaching Conference to be held during the summer of 1996 to train teachers to use Cobscook Bay as a learning tool. They

hope that this will instill in young children an appreciation of the importance of the Bay ecosystem to the region.

The Education Task Force has also contributed money to create a computer animation project for students in area schools that illustrates how the ecosystem of Cobscook Bay works. The program will create a visual record of how the Bay is changing with time. The second phase of the project will be a simulation program for the ecosystem of the Bay which will allow students to learn how different factors affect the Bay.

### **Reviving the Clam Industry**

Because of poor water quality and over-harvesting, the soft shell clam industry, which was a large part of the regional economy less than 15 years ago is now virtually nonexistent. The Environmental Task Force received a grant of \$75,000 over two years from the National Fish and Wildlife Foundation and the Cox Charitable Trust to create a regional soft shell clam habitat restoration and management project.

This project will encourage regional shellfish management practices around Cobscook Bay, coordinate information among towns, and encourage local water quality testing using local school students and volunteers. The project will be working with the Maine Department of Marine Resources to open closed clam flats that are safe to reopen. The Environment Task Force is also investing funds in a clam seeding project to seed newly opened beds.

### **Helping a New Agricultural Industry**

The cranberry industry has recently returned to the Cobscook Bay region after a 50 year absence. The cranberry growers association educates new farmers about how to properly use pesticides. The industry is currently small, so the growers association is underfunded. There have also been problems with cranberry farmers using pesticides in larger than needed applications. The Economic Development Task Force is trying to correct this problem by contributing two thousand dollars for research to identify available funding for the growers association to hire staff. The association plans to be able to support itself within five years because the industry's barrel self-tax will bring in more money as cranberry growing becomes more popular in the region.

### **Building Awareness of Cottage Industries**

Many people in the Cobscook Bay area are self-employed, making products or performing services out of their homes. Most of these businesses advertise solely by word of mouth which means that people that don't know about them will often

leave the region for products or services they need. To make people more aware of these local products, the Economic Development Task Force is creating a directory of all the businesses and services available from cottage industries in the nine town area.

### **Bringing communities closer together**

Lubec and Eastport, the largest two towns on Cobscook Bay, are separated by only two miles across the water but are forty miles apart by land. The Community/Cooperation Task Force has contributed funds for Lubec to acquire a water taxi that will be used to transport people between the two towns.

### **Building community involvement**

A local ad-hoc steering committee met regularly during the first several months of the project in order to plan public participation and educate themselves on the concept of sustainable development. A series of public meetings, with attendance ranging from 10 to forty people, were subsequently held to determine commonly held values in the community.

According to Dianne Tilton, Executive Director of the Sunrise County Economic Council, people who participated in the

public participation phase of Sustainable Cobscook began to take ownership over the project: "We had teachers, town officials, people from the land trust, retirees, people from the historical society, students from the technical college. I think they feel ownership of the project because they made all of the decisions. The foundation didn't say we want you to come up with economic development. They had to come up with every step on their own. It was brutal but they can look at the results and can see that it comes from the community up rather than from the top down."

Tilton feels that community participation has been both the key element in the success of Sustainable Cobscook and the greatest barrier encountered along the way. The project became complicated in the short run as more people got involved. However, it is more successful in the long run because the community supports the effort and because the project reflects the values of the community.

### **Contact:**

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## Appendix C-2

### Maryland – Wyoming

#### **Alliance for Sustainable Communities (asc) Annapolis, Maryland**

**Contact:** Anne Pearson, Director; Alliance for Sustainable Communities; 5103 N. Crain Highway; Bowie, MD 20715; Tel.: (410) 741-0125; Fax: (same)

**Scope:** City/county

**Inception Date:** 1993

**Participants:** Residents, city, county and state officials, grassroots organizations, businesses, civic associations

**Project Type:** Comprehensive community development, public education, local business development

**Methods Used:** Public education, workshops, demonstration programs, ecologically-based planning, microenterprise development, and media coverage

**Lessons Learned:** Value of building creative partnerships with government. Importance of learning about innovative approaches that are working. Effectiveness of making the broader perspective specific.

#### **Background**

The Annapolis Alliance for Sustainable Communities was formed to "provide a livable future for the diverse residents, businesses, workforce, and visitors in the Greater Annapolis area, based on its extraordinary environment and historical importance."

Inspired by the innovative work taking place around the country and her work to develop a local public television series on sustainability, Anne Pearson founded the Alliance and, with the encouragement of colleagues like Richard Crenshaw, co-author of *Sustainable Cities*, began to build a foundation of support for this project in 1993. She established connections among organizations representing all facets of the community to start projects guided by sustainability principles. Residents of Annapolis, the capital of Maryland, concurred that the time was right. They were seeking leadership toward bold new approaches.

Since its inception two years ago, this effort has attracted the participation and support of residents, public officials, small business enterprises, educators, housing activists, and many more. The Annapolis Alliance draws on the expertise of a wide range of local citizens to carry out its work and is supported by grants from foundations, public agencies and local civic groups. A significant number of advisors and citizen activists from academia, public agencies, private firms, and nonprofit organizations have volunteered time and expertise. Over the past two years the Alliance has focused on two major activities: citizen summits and a number of specific community projects.

#### **Bringing the community together**

Recognizing the important contribution that citizens can make to chart their own future, the Alliance planned a series of well-attended public meetings beginning in October 1994. The first, *Toward a Community Vision*, evoked a vision of what the community could become, what obstacles needed to be overcome, and what activities could be pursued; the second, *Sacred Places*, drew on the collective knowledge of local citizens who expressed their connections to what they valued and wanted to preserve and created a map as a means for steering the City/County Comprehensive Review; the third, *Can the Creeks Run Clear?*, was dedicated to public education and solutions for improving the quality of local waterways and to develop a set of watershed-based principles for development which led to the development of citizen-based watershed surveys during the Comprehensive Review. The fourth summit, *Solutions from the Ground Up*, scheduled for the fall of 1995, will focus on bringing citizens, businesses and government together to develop practical approaches to ecologically-sound planning and to explore ways to finance community-based solutions that are economically viable.

The Annapolis Summits blend vision, inspiration and pragmatism and have attracted a wide range of speakers and of people with diverse interests from six counties and the cities of Baltimore and Washington. They provide an effective forum for citizens to contribute ideas and solutions, building support for innovative approaches, and orchestrating citizen involvement with local planning and development. Inquiries have come from five states and two municipalities are planning summits patterned after those in Annapolis.

Although it is premature to identify substantial change as a result of this process, the overwhelming response from citizens and public officials alike has been very productive. These summits have provided a forum to strengthen intangible connections, such as common "sense of place", and reinforce citizens' knowledge of and commitment to bringing about change, for example, to make local transportation planning more resource efficient and pedestrian friendly. The Summits have brought out the importance of addressing the needs of one of the low-income neighborhoods in Annapolis, Clay Street, by facilitating the efforts of residents who want to mobilize their community.

## **Clay Street community projects**

### **Green Gardens project**

"It's not where you live, but how you live," commented Bertina Nick, a local community activist and employee of an affordable housing company which donated land on Clay Street, in the heart of Annapolis, for the organic gardening pilot project. Sponsored by the Alliance and the UJIMA Clay Street Planning Action Committee, it is staffed by two full-time gardeners and volunteers of different ages, some of them neighborhood children.

The impetus for this project grew out of one of the goals of the Alliance: facilitating empowerment of local citizens through hands-on, experiential programs. The Green Gardens Project combines training and skills building, planning and organizing, and the experience of collaboration. Ultimately, the project aims to address several dimensions of sustainability: ecology, economics, and social equity. Already their work has helped to regenerate the soil, stimulate ecological diversity, prevent runoff, and inspire neighbors to adopt similar approaches. It is anticipated that some of the produce and flowers will be sold to local restaurants or at farmers markets in the county. Ongoing creation of skills and jobs is being encouraged through gardening and the development of a related landscaping and other businesses stimulated in partnership with a new organization, the Business Ecology Network (BEN).

The Business Ecology Network, a nonprofit organization supporting the use of business ecology, an innovative approach to planning and development, has been working with Clay Street citizens and businesses within Annapolis and surrounding county to support exchanges such as that of food, energy, materials, water, money and information. One such example of ecologically-based development is the use of spent grain from the Fordham Microbrewery (Ramshead Tavern) for

livestock feed for goats and cows at the nearby organic West River Farm. In turn, the cow and goat cheese produced at the farm is being sold back to the tavern.

In another collaborative project Clay Street residents are working with Reasoning, Inc., a local nonprofit, to survey community skills using the process outlined in the guide, *Building Communities from the Inside Out*, authored by John Kretzmann and John McKnight, which is designed to help community members rebuild their communities. They are also exploring the possibility of using an alternative economic system called Time Dollars to bank and exchange volunteer service hours.

### **College Creek cleanup**

Adjacent to the public housing in the community are the headwaters of College Creek, one of the least-impacted waterways in the area. Working with the Maryland Youth Corps, the Anne Arundel Community College, the Public Works Department, and the Department of Natural Resources, residents are working with the Alliance to develop a wide-ranging citizen education and action program to restore urban ecology, create innovative methods to prevent pollution, and monitor progress in containing effluent. Other projects include a habitat survey and water testing project.

### **Resource conservation**

The Alliance has also initiated a number of other on-going projects which include:

- A long-term community wide plan for a tree canopy that will not only contribute to energy reduction but also serve to re-introduce native species.
- The designation of Annapolis as an energy efficiency showcase city.
- The successful coordination of a collaborative effort to assure passage of a number of amendments to the county's solid waste plan that focus on waste reduction.

### **Comprehensive land use planning and zoning**

A number of counties in Maryland are reviewing their long-term land use plans, among them, Anne Arundel, where Annapolis is located. Recently a series of public hearings were held by the planning department to solicit citizen "visions" of the future, yet no clear mechanism exists to integrate these into the planning process. The Alliance is proposing using the Sacred Places map created by citizens at its second summit as

well as watershed surveys to help guide what should be preserved, how land is zoned, and to develop a framework for planners to assess proposed development around the state.

This effort is focused on systemic change - drawing on local knowledge and ties to valued physical sites in the area to guide land use preservation and planning.

### **Challenges**

Institutionally, the most immediate need is for more funding. Although the Alliance has been successful in securing funds from diverse sources, both public and private, and at leveraging other resources, its budget is lean, and it depends heavily on donated time to plan and oversee its projects.

Another challenge is more fundamental: changing traditional planning processes at the neighborhood, town and county levels into a more integrated, inclusive, long-term framework. Developing new working relationships, facilitating practical solutions, and creating whole systems thinking demands creativity and commitment. Alliance members are modeling new approaches to help residents and professionals alike learn from each other and collaborate in areas of mutual interest for the benefit of the larger community.

### **Greenworks Cambridge, Massachusetts**

**Contact:** John O'Connor; Greenworks; 160 Second Street; Cambridge, MA 02142-1502; Tel.: (617) 876-6828; Fax: (617) 876-6903

**Scope:** Cambridge

**Inception Date:** 1994

**Participants:** Start-up businesses, non-profit organizations and Cambridge residents

**Project Type:** Restoration/cleanup, redevelopment, business incubators

**Methods Used:** Brownfield redevelopment, business development, organizational support

**Lessons Learned:** Sharing resources helps new businesses and non-profit organizations survive.

The Greenworks facility is a set of three adjoining buildings, totaling 30,000 square feet, in the community of East Cambridge, just across the Charles River from Boston. An

adaptive reuse of a former contaminated rubber manufacturing facility, the buildings were rehabilitated to provide low-cost space and support for businesses and non-profit organizations that work on social change issues in the fields of employment and/or the environment.

### **Reclaiming a Contaminated Building**

East Cambridge, like many older communities in New England, was once a neighborhood with light industry and residential streets in close proximity. East Cambridge residents worked in neighborhood factories. Now, much of the industry has moved to suburbs, other parts of the country, and even overseas, leaving a legacy of contaminated buildings.

The Greenworks buildings were formerly a rubber manufacturing plant and warehouse. When the company moved to the suburbs in 1993, the buildings were contaminated with asbestos, lead paint and a leaking fuel oil tank. Before anyone could re-occupy the space, a great deal of remediation was needed.

The construction and start-up costs for the facility were financed by a \$2 million bank loan. Greenworks' founder, John O'Connor, also raised funds to back the loan from other Cambridge residents. O'Connor recalls: "with so many advances in environmental technology, it seemed that we should be able to turn that development into what people need as much as they need "environmental protection and environmental jobs." The Greenworks building has been designed to give a home to those entrepreneurs and non-profits that are working towards that objective.

### **Incubating Small Businesses and Organizations**

The failure rate of both small businesses and nonprofit organizations is high. Yet these businesses and organizations provide much needed services to the community. Greenworks was started to help non-profits and small businesses working for sustainable development improve their chances of survival. Reduced rents, flexible leases and sharing the cost of major office equipment such as copy and fax machines have helped Greenworks tenants keep their fixed costs low.

### **Energy and Water Conservation**

Boston has the highest water and sewer rates in the country as well as high electricity costs. These utility costs can be a significant burden to new businesses and small non-profits. By implementing energy- and water-saving technologies, Greenworks is able to save its tenants substantial amounts of

money while minimizing waste and depletion of natural resources.

Conservation devices currently include low flow toilets and sinks, and a system to catch rainwater on the roof. A solar powered research station being constructed on the roof will be used by one of the incubator businesses to evaluate photovoltaic panels from different manufacturers. Electricity from the research station also will be provided to building tenants to help defray utility costs.

### **Businesses That are Environmentally Sound**

The Greenworks facility houses five small businesses that are creating jobs through the development of environmental technologies. Tank Protectors produces an electro-chemical device that prevents underground storage tanks from leaking. The company, which employs four people, recently went to market and has already sold over 10,000 of these devices, primarily for use in residential fuel oil storage tanks. Tank Protectors may soon be ready to move from the incubator to make room for another start-up company. Lead Solutions is a company that produces in-home lead detection kits with a guide to preventing lead poisoning. Atlantic Biosurvey Laboratories breeds fathead minnows used to conduct effluent testing and performs bioassays. The Solar Jobs Company produces off-grid solar technology lighting systems. Solar Jobs is currently developing a less polluting system for etching photovoltaic solar cells. Armenian Crafts USA distributes crafts made of renewable wood resources throughout the United States; this company employs two people in Cambridge and provides a livelihood for hundreds of woodcarvers in Armenia.

### **Organizations Working Towards Sustainability**

Greenworks also houses a range of nonprofit organizations who share space, equipment and ideas. The Armenia Tree Project raises funds and support for reforestation efforts in Armenia that provide food, fuel, wood, environmental benefits, and opportunities for economic growth. As of October 1995, the Armenia Tree Project has planted over 100,000 5-foot tall fruit and hardwood saplings in Armenia. The project works collaboratively with one of the incubator businesses, Armenian Crafts USA.

The Citizens Environmental Laboratory is a nonprofit testing laboratory that offers water, air and soil testing and sample analysis to community groups and individuals. The Lab also provides technical assistance to environmental businesses,

including those in the Greenworks facility, in their product testing and development.

Another Greenworks tenant is the Native Ecology Initiative: an organization that provides legal and other technical assistance to Native nations and peoples regarding ecology, sovereignty and justice. Massachusetts Citizen Action, an affiliate member of a national consumer and environmental advocacy group, focuses its work on pesticide bans and health care reform. Massachusetts Jobs with Justice is a coalition of unions and other workers' rights organizations that seek to improve conditions in the work environment; the Jobs With Justice New Priorities Committee is pursuing sustainable development opportunities in the local area.

The Good Neighbor Project for Sustainable Development provides technical assistance to community groups that are working to lessen toxic pollution from factories in or near their communities through voluntary "good neighbor" agreements with companies. The Jobs and Environment Campaign is a nonprofit that works to create jobs "that are good for people and the environment." The organization provides technical assistance, leadership training, policy research, and organizational development services to groups and individuals working for sustainable development.

### **Sustaining Each Other**

A commitment to economic, environmental and social justice may take different forms, but it is the common thread among the businesses and organizations located at Greenworks. Weekly, informal "lunches" in the shared conference room promote the interchange of ideas and methods that each organization employs. Bulletin boards further enable the exchange of information.

John Williams, the Technical Director of Atlantic Biosurvey Laboratories, comments: "Tenants here at Greenworks seem to have a camaraderie that helps each individual company and organization succeed. If you are having difficulties, you can talk to someone without paying huge consulting fees. People at Greenworks all want everyone to succeed because the stronger we are, the stronger the social and environmental change movements are. I have never experienced this anywhere else and I like to know that there is a place for companies like mine that try to protect the environment and be socially responsible."

### **Self-Sustainability**

In large part, volunteers have been the core of the Greenworks facility's success. An advisory panel of business experts have donated their time to assisting the entrepreneurs in the building. A technical working group of engineers and scientists also contribute their knowledge to the start up companies.

The incubator businesses and nonprofit organizations in the Greenworks facility occupy approximately half of the available space. Commercial tenants such as an electrical contractor have been recruited to occupy the remaining areas; they pay market-rate rent and building related fees that will continue to subsidize the non-profits and developing "green" businesses. As the small businesses expand and begin to generate profit, they too will become part of the financing mechanism of Greenworks.

## **Urban Resources Initiative Detroit, Michigan**

**Contact:** Kerry E. Vachta; Urban resources Initiative; Department of Forestry; Michigan State University; 126 Natural Resources Building; East Lansing, MI 48824; Tel.: (517) 353-5103; Fax: (517) 432-1143

**Scope:** Local/neighborhoods, urban

**Inception Date:** 1991

**Participants:** Citizens, neighborhood "Block Clubs," university program and Extension offices

**Project Type:** Redevelopment, urban forestry, economic development

**Methods Used:** Presentations to neighborhood associations, meetings with interested communities, needs assessment of area, community design of project, donated plantings and materials from URI, maintenance of project by community with assistance of available resources through Michigan State University extension offices and local citizenry organizations, one year evaluation of project

**Lessons Learned:** Projects require active, on-going community participation and dedication to develop community ownership and empowerment over the long-term.

### **Background**

Between 1965 and 1990, Detroit experienced a population decline of 600,000 people. This led to a large number of vacant homes in the city. The problem became so severe that

in 1989 the city instituted a widespread demolition program to remove the "dangerous and abandoned" buildings.

Consequently, Detroit lost 60,385 housing units leaving 65,000 vacant lots in the city (Detroit Free Press, 1989). The vacant lots, often used as illegal trash and waste dumps, led many Detroit neighborhood groups to identify the vacant lots in their area as among the top problems in their communities.

But the vacant lots also present an opportunity for Detroit communities. Through the Michigan State University's Urban Resources Initiative (URI), Detroit communities have begun to reclaim vacant land and use it for forestry projects that offer economic, social and environmental benefits.

The Urban Resources Initiative, a program of the Department of Forestry, is a community forestry program that operates using a bottom-up approach to address community needs. The program is funded by the Kellogg Foundation and the U.S. Department of Agriculture's Forest Service. Its funding will carry through September of 1996, at which time URI will close operations. The impermanence of the organization is borne out of the organizations primary objective that it provide resources for community sustainability by emphasizing community participation, ownership and responsibility of the projects.

### **Community Involvement**

The Urban Resources Initiative and participating communities have designed a wide range of projects based upon the economic and social needs and resources within the community. When a community is interested in starting its own project, it requests technical assistance from URI staff. Once the community decides to embark on a project, it conducts an in-depth needs assessment. The needs assessment identifies all of the goals, concerns, limitations, and resources of the community. Everything from one residents expertise in landscaping to the availability of another residents lawn mower are accounted for. Relying upon the talents and knowledge that already exist within the community is key to creating community ownership and empowerment. The community must decide upon the focus of the project and who it wants to be involved in the project, whether the project will have a focus on youth and/or seniors, and whether the project will have an economic benefit to the community.

URIs involvement in the project is determined by how much technical assistance the community members feel they need. Assistance usually includes providing a list of possibilities from which the community will make the final decision (e.g., the types of projects that could achieve the goals of the

community or the appropriate tree species for a specific project). At the heart of the project is active community participation and decision making.

### **Benefits of Reclamation**

Many community groups have a small core of people who do most of the work. While it can be difficult getting younger residents to participate in their activities, teens and young adults often contribute to the tree-planting projects. Since the projects require regular maintenance, they provide participants with a constant reminder of the contribution they are making to the community. Those involved usually remain dedicated over the long-term and eventually become active in other community activities.

The projects are mostly in very low income neighborhoods and, while the forestry projects may be small, they can provide a source of seed money for future community projects. Some possibilities include planting community orchards, community tree nurseries, and Christmas tree and timber lots. Because the projects are only 3-4 years old, they have not yet reached a point of economic maturity where trees can be harvested or orchards will bear fruit. Planting trees in urban settings helps reduce air pollution, increases shade and decrease the temperature in the surrounding areas in the summer. They also attract birds and butterflies and other desirable wildlife. The reclamation of vacant lots is working to prevent the illegal dumping of chemicals and construction debris as well as provide safe places for children and community members to congregate. Through the Urban Resources Initiative, vacant lots that were once viewed as dirty or dangerous are now important assets to the communities.

### **Sampling of Projects**

#### **Prairie Street**

The first URI/neighborhood project was planted by the Prairie Street Block Club. This project includes nitrogen fixing shrubs that are enriching the soil for future community garden projects, shade trees under which the Block Club has been meeting in warm weather, fruit trees to educate the neighborhood children about how fruit grows, and a natural fence blocking illegal dumping from the alley.

#### **Appoline Street**

Appoline Block Club members have worked together in a community garden for the past several years. Block Club president, Alice Dye, works with the children of the neighborhood, teaching them about plants and ecology while

working in the garden. The children have a vegetable stand where they sell their produce to their parents for a nominal fee and utilize the profits for other community projects or common benefits such as a summer picnic. To lessen the use of pesticides and chemical inputs, the Appoline Club surrounded the community garden with nitrogen fixing shrubs and will be working with the Wayne County Cooperative Extensions 4-H urban gardening program to acquire further skills and information on organic gardening.

#### **Burnett Street**

The Burnett street group was most concerned about a large vacant area that covered nearly the entire northeast third of their block. The vacant area was the result of a large fire that destroyed seven homes. After the fire, the lot became overgrown with weeds and grasses and was often the site of drug sales and other illegal activity, according to the block residents.

To increase the safety of the area as well as provide a "nature path" for potential environmental education programs, the community built a woodchip path lined by 90 trees of species used by the Michigan timber and paper industries. The group may later choose to harvest some of the trees for sale as firewood or timber.

#### **St. Marys Street**

The St. Marys Street block club originally developed a highly innovative project integrating a community nursery and Christmas tree plantation with an agroforestry garden aimed at enticing adults to the site to supervise the children playing in the remaining open area. Unfortunately, due to difficulties, the Christmas tree lot and agroforestry garden had to be abandoned. After re-evaluation, the community has decided to continue developing the community nursery. The trees from the nursery will be "adopted" by the residents throughout the community for slightly more than the cost of replacement, thereby ensuring the financial sustainability of the project and additional funding for other community projects. The group will plant a hedge along the back of the lot to impede illegal dumping from the alley and turn the remaining area into a community gathering site. The group hopes to build a barbecue pit and acquire benches, to appeal to adult residents, and leave more open area for the children to use as a playground.

### **Making it Work - Meeting the Challenges**

URI staff realizes that for communities to feel ownership of and responsibility for a project, there needs to be active, on-going participation. URI never enters a community uninvited. All projects are initiated by the residents themselves. One project that did not gain widespread community support eventually fell apart.

Making sure the projects are compatible with the community's needs and resources has been very important. For instance, an older population may be able to maintain a fruit orchard more easily than a Christmas tree lot. Providing communities with additional technical assistance resources, such as university departments specializing in horticulture, has been key to the continued maintenance of projects.

Another challenge in the past was wide-spread planting of highly invasive tree species. Educating residents about appropriate tree species has been an important aspect of URIs involvement

### **Resources for Future Urban Forestry**

Despite the challenges, URI has completed 7 projects within four years and foresees 3 more within its last year. At the time of closure, URI will have available a number of manuals for Detroit communities and for organizations in other cities wishing to start similar initiatives.

The Community Resources Manual includes general information on care and treatment of trees as well as a technical assistance guide with about 75 references for sources that can provide more extensive expertise on the care and maintenance of the plots. The manual also contains descriptions of the trees that have been planted in projects, the different ecological needs of those trees, and the benefits of each species to the community. URI is also developing smaller manuals on specific types of projects such as Christmas tree lots or fruit orchards.

A second publication, Building Communities-Forestry Partnerships is written for organizations that want to start a similar initiative within their own city. It contains project descriptions, extensive sources of funding for projects, community organizing hints and tips on developing similar projects. Also included is a list of tree species and sections that may be reproduced for community group organizing. This manual will soon be published by the Government printing office.

## **The Green Institute Minneapolis, Minnesota**

**Contact:** George Garnett, Executive Director; Annie Young, Associate Director; The GREEN Institute; 1433 E. Franklin Avenue, Suite 7A; Minneapolis, MN 55404; Tel.: (612) 874-1148; Fax: (612) 870-0327

**Scope:** Phillips neighborhood in Minneapolis

**Inception Date:** 1992

**Participants:** Neighborhood residents, community organizers/activists

**Project Type:** Community economic development, environmental justice/equity, citizen-led initiative

**Methods Used:** Community education, community planning, eco-industrial park, business incubator, re-use of construction materials

**Lessons Learned:** It takes a lot of time and patience to make a project like this work. The more people that are involved, the bigger the dream will become.

The GREEN Institute is the name of an organization and the building the organization is creating on a site in the Phillips Neighborhood of Minneapolis that was previously intended to be a waste transfer plant. The mission of The GREEN Institute is "to create community-based models to protect and nurture the natural and urban environment through education and sustainable economic development." The Institute plans to eventually create 200 - 300 jobs through the following projects:

- A Materials Exchange and ReUse Center retail store. The Center is slated to open in October 1995.
- An eco-industrial park that includes a business incubator for 15-20 enterprises that pioneer new environmentally sound technologies and products. There are currently 10 prospective tenants for the incubator.
- A think tank that develops ideas for new enterprises. Some potential projects are a community window factory and a garden and lawn center.
- An urban environmental education and job training center that will promote understanding of the urban environment and industrial and community ecology.
- Office space for non-profit environmental advocacy groups.

- Landscaping and garden demonstration areas throughout the complex.

Construction on The GREEN Institute building, which will house the incubator, think tank, education and job training center and office space, is scheduled to begin in 1996. It will be built using salvageable and reused materials and will incorporate features that minimize energy consumption and waste generation. Three people currently work at the Institute and eight work at the ReUse Center.

The GREEN Institute site is one mile from downtown Minneapolis, in the southeast corner of the Phillips neighborhood, Minnesota's poorest and most ethnically diverse neighborhood. This location was the site of a 12-year struggle between the city and the county and neighborhood residents who defeated plans to build a large county garbage transfer station in their community.

### **Turning a Negative Into a Positive**

The struggle over the transfer station began in 1981. In 1992, the activists fighting the transfer station met with a professor from University of California Riverside. Annie Young, the founder of The GREEN Institute, recalls that "When we said we were tired, she asked what will you all do when you win this struggle; what's your plan for the land? She went on to say that you have to turn a negative into a positive. That generated the dream and is one of the driving forces of this project. We are taking a negative and turning it into a positive."

Young, a long-time community organizer from the Phillips Neighborhood, later had a dream of a sustainable vision for the site with windmills, trees and wildlife surrounding a building with solar panels. She shared this vision with the rest of the group who liked it and helped turn it into a concept on paper which eventually became The GREEN Institute. During the end of 1992 and all of 1993 Annie Young and others worked to plan The GREEN Institute.

Money for The GREEN Institute has and will come from a variety of sources. The Institute hired a capital fundraising company to help start a capital campaign for the industrial park building. The GREEN Institute received \$415,000 in Early Access funds as part of a larger amount allocated to the People of Phillips organization by the City of Minneapolis' Neighborhood Revitalization Program. Some future funding for The GREEN Institute will be received in 1996 from the same program. The Institute has received approximately \$280,000 from a federal Enterprise Community (EC) grant.

Profit-generating centers, including the ReUse Center are being developed to support the Institute's non-profit work such as the planned education center.

### **ReUse Center**

When the Hennepin County Board of Commissioners voted not to build the transfer station they did keep funding for one component: a building materials exchange and reuse center. The County Board gave The GREEN Institute \$30,000 in 1993 to do a feasibility study for the Center and followed that the next year with a \$100,000 grant to set up and open the ReUse Center.

The ReUse Center is stocking doors, windows, sinks and many other reusable piece from dissected buildings, which will be sold to low income people and environmentally conscious builders. Rising refuse disposal costs, the development of an environmental ethic encouraging reuse of materials, and the need for affordable construction and remodeling materials in a low-income community make the ReUse Center a viable concept, according to George Garnett, The GREEN Institute's executive director. The store hopes to stimulate additional enterprises in the area; for example, there might be crews of people who contract to salvage the guts of houses scheduled for demolition.

The ReUse Center will be opening in a 26,000 square-foot space in the Hi-Lake Shopping Center, across the street from the eco-industrial park site. Recently, the McKnight Foundation awarded the ReUse Center a \$150,000 grant. The ReUse Center also is getting \$250,000 from a federal Enterprise Community (EC) grant for rehabilitation of its building.

### **Eco-Village**

Another project of The GREEN Institute is the Eco-Village which aims to revitalize the Phillips Neighborhood by working with residents to create a community that is sustainable both environmentally and economically. The project is not designed to require substantial capital investment, but rather to emphasize the improvement of local systems in order to create incentives and reshape the traditional patterns of consumption, development and employment into more efficient and sustainable patterns. In the Eco-Village, there will be an emphasis on energy efficiency, stressing passive solar heating and cooling, encouraging local food production, and reliance on local resources; and fostering creation of on-site jobs and

neighborhood stores to revitalize communities and eliminate commuting.

The Eco-Village will be aided by a revolving loan fund. The District 4 neighborhood group will set specific design guidelines for all new construction and rehabilitation. The fund will finance changes in existing structures made by homeowners or landlords. These loans will be made in stages. The early stages will be for simpler conservation changes like getting every house to full insulation, retrofitting windows, and installing low-flow toilets. Later stages will be for homeowners or landlords who want to generate their own electricity through photovoltaic cells or wind generators.

### **Environmental Design Charrette**

The GREEN Institute will participate in an environmental design charrette (EDC) to involve the community and youth in the planning and design of the Institute. The charrette is one of 19 organized nationwide by the American Institute of Architects (AIA) Committee on the Environment and will take place on October 6-8, 1995. EDCs are intensive short-term workshops that are part of a longer, multi-disciplinary project study. According to the AIA, EDCs will educate citizen groups and make resources accessible to them; foster linkages among the community, professionals and the government; and accelerate the economic, environmental and energy benefits that can be realized through the adoption of sustainable development principles and practices. At the charrette, they will start by sharing information: maps, dreams, and slides of the neighborhood. Work teams will then be formed with community members and design professionals.

### **Education/community involvement**

The GREEN Institute is committed to educating the community about sustainability. "We are doing education now," says Annie Young, "People call us all the time and we go speak about the project. We are starting a workshop series in the fall on sustainability. We also see this as an eco-tourist site we are building the design so that it can be an education center. One of our big commitments is to transfer our information." This includes publishing The GREEN Institute's quarterly newsletter, Green News & Views.

One of the key elements in the success of The GREEN Institute has been the involvement and support of the Phillips Neighborhood. Annie Young is using her organizing skills to educate the community. "I have been out hitting the pavement and talking to people," says Young, "Once the neighborhood bought into it, it was a lot more successful. Building

community is about many many people being involved. When you're building a community it has to be a bigger picture."

Young says that the biggest barrier to the project's success has been government bureaucracy, "Government never makes things easy for people. Our local politicians have not necessarily been as cooperative as other branches of government." However, this has been compensated for by support from other areas, "We are getting help from a lot of resources that we never expected. You have to reach out to a broader community, everybody wants to help; the reuse center has gotten an incredible amount of in kind donations."

The GREEN Institute is committed to changing the quality of life for Phillips Neighborhood residents. "Inner-city neighborhoods don't have to erode into slums, and they don't have to be gentrified," says Annie Young, "They can be restored and maintained for their original mission: as healthy environments for people of diverse means to live, work and grow together."

### **Southern Echo Jackson, Mississippi**

**Contact:** Leroy Johnson, Co-Director; P.O. Box 10433; Jackson, MS 39289; Tel.: (601) 352-1500; Fax: (601) 352-2266

**Scope:** Statewide;

**Inception Date:** 1989

**Participants:** Mississippi residents

**Project Type:** Leadership development/training, environmental justice/equity, comprehensive community development

**Methods Used:** Intergenerational leadership development, community organizing

**Lessons Learned:** Leadership training helps people understand their own power. It takes time to overcome barriers and develop communities from the bottom up.

Southern Echo is a leadership development, education and training organization working to develop grassroots leadership across Mississippi and the Southern region. Southern Echo's primary objective is "to make the political, economic, environmental and education systems accountable to the needs and interests of the African-American community" by

developing strong community organizations that address these four areas.

### **Training and technical assistance**

In its five years of existence, Southern Echo has designed and conducted 16 residential training schools, more than 125 workshops and more than 650 community meetings for people from across Mississippi and the South. The staff have produced 15 training manuals on community organizing; non-profit organizational and board development; legislative, county and municipal redistricting; environmental racism; and creating a quality education system.

### **Environmental safety zones**

Southern Echo is working with people across the state to identify and create environmental safety zones, where limits will be placed on the use of agricultural chemicals and other environmental hazards. Many community people believe the misuse of agricultural chemicals and the spraying of fields surrounding churches, schools and homes is a primary cause of the high incidence of cancer, disease and developmental disabilities in poor and African-American communities. Forty young people from seven Delta counties attended a recent training conference to learn more about environmental degradation and how to build support for the environmental safety zone concept.

In September 1995, Southern Echo will hold its third residential school on fighting environmental racism. The three-day program will be attended by young people, public officials and community activists from around the region. The curriculum helps people understand the hazards of agricultural chemicals and other pollutants, the ways that these substances move through an ecosystem, and how local zoning policies can be used to protect the community. Participants learn through hands-on activities that "there are difficult issues to balance when doing a zoning plan, but that they have the capacity to understand the issues and develop policies that are responsive to the needs of the environment and the community."

### **Empowerment Zones/Enterprise Communities**

Since its beginning, Southern Echo has worked with small farmers, who cannot compete effectively against large plantations, to help them move toward diversification through alternative crops produced by organic and sustainable agriculture practices. Southern Echo has also participated in the region-wide economic justice network. More recently,

Southern Echo's members have pushed the organization into new areas of economic development.

Southern Echo is currently working with a federally designated Empowerment Zone (EZ) and three different Enterprise Communities (EC) covering a total of 15 counties in the Mississippi Delta to plan economic development "from the bottom up." Southern Echo is helping to design the process of bringing the communities together over the next 6 months. One goal is to assess what resources are available in the different counties, and what "homegrown" businesses and cottage industries can be developed from within based on available skills. Another goal is to develop value added industries, such as sawmills to process the lumber from Mississippi tree farms. Southern Echo is also hosting meetings of workers and injured workers from the many catfish and poultry plants in the region to plan ways to improve the work environment in the industry.

### **Intergenerational model**

The organization places a special emphasis on the inclusion of young people on an equal basis as adults. Young people are represented on Southern Echo's board, participate in projects with adults and elders, and run their own youth-led projects. Youth are involved in the entire organizational process, not only doing the work but defining what work should be done and critically evaluating the results.

This intergenerational model is at the heart of Southern Echo's work and flows from the experiences of the organization's founders. Co-Director Leroy Johnson recalls first meeting Southern Echo's President, Hollis Watkins, in 1963. Johnson, then 5 years old, was brought by his father to a Student Nonviolent Coordinating Committee meeting in Holmes County at which Watkins, then 21 years old, was speaking. "The intergenerational process ties communities together, as generations learn about each other and we recreate ourselves. How do we continue that process? Those linkages remain a vital part of the ongoing struggle for justice."

### **History**

Southern Echo began in 1989 when the three founders, who were working for different organizations, realized that communities were constantly bringing them together to provide training. Hollis Watkins came from the Mississippi Association of Cooperatives, Mike Sayer from the Center for Constitutional Rights' Voters Rights Project in Greenville, and Leroy Johnson from the Rural Organizing and Cultural Center in Lexington. The organization's board is composed of

Mississippi residents who are active in their communities. Southern Echo depended heavily on volunteers and in-kind donations from the community, such as meeting rooms and office space. Only in 1993, after establishing a solid track record, did Southern Echo finally acquire grant money to open its own office. Southern Echo's budget this year is \$250,000.

### **Obtaining resources and fighting racism**

Obtaining enough resources to do the level of work requested has been a major challenge. Johnson notes, "The more successful you are, the more you get pulled to do. Meanwhile, funders think non-profits should be able to take \$100,000 and hire twenty people. We're expected to do more with less than other folks do with plenty." The organization has forged partnerships with a number of foundations as "allies." The current goal is to develop more broad-based financial support, focusing on operational support rather than project-driven grants, through an extensive membership drive in grassroots communities in Mississippi.

Another major barrier the organization faces is racism. Southern Echo works in collaborations as widely as possible, but there are limits to how much the organization can broaden its base in Mississippi. Johnson states: "We need to stop viewing racism as a barrier that can never be breached. The reality is that we can. But it takes hard work, being creative, and being honest. Truth is absolutely necessary." In the meantime, the organization focuses on building political power to dismantle historical and institutional systems of domination and control over black communities in Mississippi.

Sometimes Southern Echo finds resistance from adults in the community to "giving up the baton" to young people. Johnson notes that "established leaders don't always want to play the role of elders, teachers, mentors and advisors while handing the spotlight to young people."

Southern Echo feels that it overcomes obstacles due to the strength of its members. "Once the human spirit is activated in people, once you give them the tools and the strength to move forward, you can overcome the obstacles and problems." An example is Tallahatchie County, where recent struggles to obtain potable water and fair election districts for black communities mobilized people to such an extent that additional changes have been made: the election of the first black county supervisors; new, affordable low-income housing; a bond issue to create and expand industries with higher-paying jobs; and two new public parks to which the

black community will have access for the first time in the county's history.

### **Farm-to-city Marketing Project - Patchwork Family Farms Columbia, Missouri**

**Contact:** Rhonda Perry, Program Director; Missouri Rural Crisis Center; 710 Rangeline Street; Columbia, MO 65201; Tel.: (314) 449-1336; Fax: (314) 442-5716

**Scope:** Statewide

**Inception Date:** 1992

**Participants:** Rural family farmers, urban community residents.

**Project Type:** Cooperative marketing, community economic development, sustainable agriculture

**Methods Used:** Certification of the "Patchwork Family Farms" product label; marketing to targeted urban and rural groups

**Lessons Learned:** Good planning is critical. Participants have to be committed to the long term and to learning new ways. Federal agriculture policy poses barriers to small farmers.

The Farm-to-City Marketing Project uses a brand label, natural farming, marketing to targeted urban and rural groups, and cooperative arrangements to help family farmers remain viable and support inner-city economic development. The project's goals are to provide sustainable economic development for family farmers, give an alternative to corporate control of all levels of food production, improve the quality of the food supply, and save the environment for future food production.

The Farm-to-City Marketing Project is a response to the proliferation of corporate hog farming. The concentration of livestock and vertical integration of the industry in Missouri flooded the market with hogs, displaced family farmers and small processors, and contaminated groundwater. The Project was created by the Alternative Economic Development Committee of the Missouri Rural Crisis Center. The Committee's members are current or former hog farmers, vegetable farmers, and an employee of the US Department of Agriculture in St. Louis who is an organizer of the government employees' union.

## **The "Patchwork Family Farms" label**

This Committee developed and gained USDA approval for the "Patchwork Family Farm Products" label. The label tells consumers that the product was raised by local producers who follow strict standards of sustainable agriculture such as no growth hormones or antibiotic feed, integrated pest management, environmentally-friendly methods of fertilization, crop rotation and minimum tillage. The lower concentration of livestock than that found in corporate feeding operations leads to less local groundwater contamination from manure.

The name "Patchwork" was chosen because the project brings together diverse groups, linking rural family farmers with low-income, urban communities of color to develop regional channels of processing, transportation and distribution. This will provide healthful food at prices that are fair to both producer and consumer and create jobs in both rural and urban communities. Patchwork products (currently pork and vegetables in season) have been marketed through churches in Kansas City and community groups in St. Louis. For example, the Project established a marketing program with the St. Louis Women's Support Group, an African-American organization that will sell meat through community groups. Direct marketing is also being done through six rural cooperatives with approximately 700 member families.

### **Elements of success**

The Farm-to-City Marketing Project assists family farmers to survive in their business and on their land. The Project provides an economic base for rural businesses and communities that relieves some of the employment pressure on cities. In 1994, the Project's five participating hog producers sold a total of \$38,000 in meat. This was the main source of income for one of the farmers and allowed another to resume raising hogs.

The Farm-to-City Marketing Project has been supported by the other organizing and advocacy programs of its parent organization, the Missouri Rural Crisis Center (MRCC). A non-profit organization formed in 1985 in response to a tripling rate of farm bankruptcies, MRCC's mission is to "preserve family farms, promote stewardship of the land and environmental integrity, and strive for economic and social justice by building unity and mutual understanding among diverse groups, both rural and urban." The organization has a membership of over 3,200 families statewide.

The Farm-to-City Marketing Project also draws on a number of non-profit and government agencies in and outside of Missouri. The Federation of Southern Cooperatives provided training and technical support for committee members in how to conduct a feasibility study, focus the marketing efforts, and ultimately set up a producers' cooperative. The Campaign for Human Development gave MRCC a grant to conduct the feasibility study. The Missouri State Department of Agriculture's Marketing Department subsidized appearances of Patchwork Family Farm Products at trade shows and provided technical assistance. The University of Missouri Agriculture Department's extension program provides technical assistance in developing new value-added products; for example, formulating jams and jellies with a stable shelf life.

The Project Coordinator cites a number of key elements that have made the Project work. The participants took the time and effort to educate themselves about how to start a business and do the research for a feasibility study, identifying markets as concretely as possible. For example, the Committee has decided not to target grocery stores because of numerous barriers to small producers such as expensive slotting fees. Bed and breakfast inns, on the other hand, are a likely market because they are locally owned by independent operators and are more flexible in their purchasing, and because many pork products are breakfast foods.

The Farm-to-City Marketing Project builds on the knowledge of its members: "They're hog farmers already; we're not asking them to raise ostriches." At the same time, the project depends on the willingness of project participants to learn something new: "The cooperative style is contradictory to the entrepreneurial mindset; farmers had to be willing to let others have a say in how they run their farms."

A major barrier has been the weather. The heavy rains that flooded fields and the local meat processing plant (along with much of the Midwest) in the summer of 1993 prevented the Project from meeting its first year goals. In June of 1995, some fields were already flooded and many crops were not yet planted. It also takes time for farmers to achieve the production standards required under the Patchwork label: raising a hog completely without using growth hormones or antibiotic feed.

### **Policies posing obstacles to family farmers**

Another major barrier has been federal government policies relating to credit and technical assistance that favor high-chemical input, high-yield agricultural methods and large

agricultural operations. Currently, the only access to the procurement agency of the USDA for family farmers, minority-owned businesses, and family farmer-run closed cooperatives is through subcontracting with large corporations. MRCC would like to see procurement policy change to encourage purchasing from family farmers. The federal Farm Bill also supports corporate livestock feeding operations while EPA regulations that provide some protection of water quality from large confinement feeding operations are in danger of being weakened.

The Committee has identified five markets for its produce: people who were raised on and maintain ties to farms, union members, members of urban community organizations concerned with environmental or social justice, health food stores, and bed and breakfast inns. The Committee will focus on developing more extensive relationships with these groups. The plan is for the Project to become financially self-sufficient within three years. Once that goal is reached, Patchwork Family Farm Products will spin off as an independent cooperative business.

The Committee is investigating ideas for value-added products to make from vegetables raised during the summer of 1995, such as salsa. Missouri's climate often means a very short growing season for vegetables; value-added would allow family farmers to market products all year for more consistent income. By assuming the function of further processing and packaging, farmers also will retain more of the profit in food production and create additional jobs for low-income rural and urban people. Developing cooperative processing facilities is the next priority for the project.

### **Beartooth Front Community Forum (BFCF) Red Lodge, Montana**

**Contact:** Gary Ferguson; Beartooth Front Community Forum; P.O. Box 1490; Red Lodge, MT 59068;

Tel: (406) 446-2388

**Scope:** Town/county

**Inception Date:** 1992

**Participants:** Residents, businesses, ranchers, planners, elected officials, developers, nonprofit organizations

**Project Type:** Communitywide visioning, comprehensive community development, public education

**Methods Used:** Public forums, working committees, grantmaking, education

**Lessons Learned:** Need for early, tangible successes and for ongoing communication. Time to develop trust among residents in towns and neighboring rural areas.

### **Background**

Red Lodge, Montana has many assets, both tangible and intangible, that make it an excellent place to live. It has a high quality of life, clean air and water, mountain views and good recreational facilities, a healthy economy, and a neighborly citizenry who value and participate fully in the life of the community.

In recent years, however, like many small towns located near the entrances to national parks, Red Lodge has been experiencing an annual influx of thousands of tourists. Known as a "gateway community" located 70 miles north of Yellowstone National Park on the Beartooth Highway, it faces the potential challenges of growth from an increase in its population.

### **Residents engage in anticipatory planning**

In 1992 residents concerned about the possibilities of a changed character of the town as well as concurrent impacts of development needed a forum in which to discuss alternative futures in order to channel change. They invited Luther Propst, the Executive Director of the Sonoran Institute in Tucson, Arizona, to facilitate a forum to help residents develop a vision for the future. The Sonoran Institute has conducted a number of two-day Successful Communities workshops in many towns in the West facing comparable land use and growth issues.

The workshop was attended by roughly 160 participants, a significant attendance in this town of 2000. Key to its success was the representation of a broad cross-section of the population: ranchers, developers, business people, educators, and senior citizens. In this community planning session, participants were invited to identify what they value, what they wanted to protect, and how they wanted to do it. In the course of the workshop a shared vision was developed of what the community might become.

They defined what they liked best about the community, identified potential threats, and then formed committees to further explore what needed to be done. Among those areas identified as needing to be preserved were the water supply and the small town atmosphere. Town needs included more

recreational choices for boys and girls, comprehensive planning and a protected greenway. This exercise helped to focus the needs and to provide the energy for local problem-solving and planning.

This workshop led to the development of the Beartooth Front Community Forum, a locally-based citizens organization that is inclusive, multi-faceted, and non-partisan. Its guiding philosophy has been to bring people together and find common ground. With a current membership of around 300 volunteers, it seeks to preserve and enhance Red Lodge's quality of life.

### **Early successes and a long range vision**

As a direct result of the workshop, several projects were defined, both short-term and long-term. Among the early undertakings and successes were the creation of a youth center, a water quality monitoring program, a master land use plan, and a new post office in the heart of town.

### **Boys and Girls Club**

The prompt establishment of a Boys and Girls Club to serve the younger children of the area had general support from the community and was a significant milestone. It demonstrated precisely and visibly what citizens could do for themselves. Now as many as 250 children benefit from this center which offers after-school programs and summer-long recreational activities which encourage kids to explore their own talents and interests. It is staffed by an Executive Director and housed in facilities donated by St. Agnes Church.

### **Post Office**

One of the most galvanizing efforts for the BFCF centered around the proposed relocation of the post office. In Montana, there is no postal delivery for towns with a population under 2500. In Red Lodge, the post office serves as a social gathering center especially for senior citizens who make up 25% of the population.

When the government proposed moving the post office outside of town, many were concerned about the social changes that would result as well as the possible loss of downtown businesses. The possible gutting of the downtown area prompted a full-fledged resistance by BFCF and other civic groups which resulted in keeping the post office downtown.

### **Land Use Master Plan**

The success of the post office proved to be just the right stimulus for other local initiatives. During the twelve months following the 1992 Forum, the BFCF land use committee talked with many individuals around the country - planners, elected officials, and others in small communities who had undertaken similar planning exercises. The BFCF presented the findings to residents in a public forum and helped to raise part of the funds necessary to hire a planner. Once hired, the planner helped to guide the process.

In the fall of 1994 the BFCF brought townspeople together to help establish priorities in the plan. In April 1995 the first draft of the Red Lodge Master Plan was presented to the public. A series of "listening posts" were planned to solicit input in May and then the second draft, which included the central business district, the entrances to the community, residential neighborhoods, open spaces, growth areas and infrastructure, was presented and adopted in June. A more expanded plan to encompass areas as a special planning district just outside the county will be discussed over the coming months.

### **Water Quality Monitoring**

The BFCF committee, concerned with water quality in two local creeks, the Rock Creek and West Fork, was instrumental in starting a water monitoring project under the direction of A-CRIC (the Absaroka Creeks and Rivers Information Council). Initially funded by the Greater Yellowstone Coalition, this ongoing project serves to provide a baseline of information about the health of these waters. Volunteers of all ages, trained in proper testing techniques by the Canyon Ferry Limnological Institute, collect the water samples. This work is now expanding to other areas along the Beartooth Front.

In recent months there has been a growing interest in developing an assisted care living facility for senior residents and the possibility of linking with Habitat for Humanity to increase the availability of affordable housing.

### **Building a support network**

Ongoing assistance from the Sonoran Institute has proved very helpful in guiding this planning process. The Institute helped sponsor a workshop on sustainable jobs and has been instrumental in linking this effort with that of the newly-formed Corporation for the Northern Rockies. The goal of the Corporation is to help bring people together to work towards collaborative problem-solving and to search for ways to meet economic needs while sustaining their environment. It has been working with BFCF on sustainable economic issues. One

of the ongoing challenges the town faces is to define exactly what kind of local enterprises are in fact sustainable.

During the past few years the local media has covered the issues, not simply the controversies, but much of the consensus and successes and has been quite supportive of the work of BFCF. Other support within the town has come from local elected officials, some of whom serve on the steering committee of the Forum.

### **Challenges ahead**

One of the most challenging aspects of guiding change has been to keep all interested parties engaged in and directing the process. It is important that land use decisions, for example, reflect the ideas and interests of the ranchers in the nearby outlying areas who tend not to participate in the town-oriented forums and are wary of changes they consider being generated outside the community. So the organizers and volunteers are taking a measured, inclusive approach to make certain that all voices are heard and information shared.

Another extremely important area is finding out what other communities with similar needs are doing. Small jurisdictions often do not have the local expertise nor the budget to staff planning offices or employ expensive techniques to educate residents. The BFCF has been a useful forum in which to exchange this type of information. It also publishes a newsletter to keep citizens informed of recent developments in Red Lodge.

The Beartooth Front Community Forum has gained state-wide recognition for its ability to foster community problem-solving. This past year representatives were invited to attend a Montana Consensus Council instituted by Gov. Mark Racicot. The model of coming together, developing a vision, and then breaking up into small groups for idea generation has worked for the Forum and has helped to educate other public officials on methods that result in consensus.

The Beartooth Front Community Forum is demonstrating how effective a democratic, inclusive, long-term process can be. Early successes, ongoing communication and a "can do" philosophy is yielding very encouraging results.

### **Center for Rural Affairs Land Link Project, Rural Enterprise Assistance Project Walthill, Nebraska**

**Contacts:** Marty Strange, Program Director; Center for Rural Affairs; P.O. Box 406; Walthill, NE 68067; Tel: (402) 846-5428; Fax: (402) 846-5420

**Land Link:** Joy Johnson, Program Director; Rural Enterprise Assistance Project; Rose Jaspersen, Program Director; Tel./Fax: (same)

**Scope:** Statewide, multi-state, national

**Inception Date:** 1973

**Participants:** Farmers, ranchers, educators, civic workers, other nonprofit organizations, businesses, government agencies

**Project Type:** Rural community development, sustainable agriculture, economic development

**Methods Used:** Research, advocacy, organizing, training, leadership development, and education

**Lessons Learned:** Importance of taking responsibility for rural communities. Need for partnerships with individuals and communities. Effectiveness of integrative approaches and intergenerational initiatives.

"We are committed to building sustainable rural communities consistent with social and economic justice, stewardship of the natural environment, and broad distribution of wealth. We work to advance our vision of rural America through research, education, advocacy, organizing, and leadership development."

### **Mission Statement**

#### **Background**

The Center for Rural Affairs was founded in 1973 in Walthill, Nebraska, a town of 800 residents, to provoke dialogue about social, economic, and environmental issues affecting rural America, especially the Midwest and Plains regions. Some of the issues it addresses are the loss of farms and residents, an aging population, the need for greater diversification of rural income, and greater access to information. Here in the northeast section of the state a staff of 24 carries out an integrated, complementary set of programs dedicated to improving rural communities and their residents. It is governed by a volunteer board of diverse constituencies representing agricultural, business, education and civic interests.

## Strengthening rural communities

The programs of the Center fall into two broad categories: Stewardship and Technology, which includes projects on Agriculture Policy, Beginning Farmer

Assistance Agriculture, and Research and Technology; and Rural Economic Opportunities, which includes Family Farm Opportunities, Land Link, Nebraska Issues, and the Rural Enterprise Assistance Project (REAP).

Much of this work is national or regional in character and concentrates on rural communities and sustainable agriculture. Marty Strange, one of the Center's founders and current Program Director, explains that it is based on the philosophy that people need to take responsibility for their lives and their communities. One of the greatest challenges they face is widespread indifference and ignorance nationwide about the characteristics and needs of rural areas. He adds that the major contributions of the Center fall into the following categories:

- Defining the relationship between social systems, technology and the environment focusing on agriculture and rural communities. They have worked "to develop appropriate technologies with farmers who want to become more environmentally responsible and who are socially motivated."
- Organizing those who believe in family farming and the environment to work for policies that have an influence on both these areas. In this regard they work directly with the leadership of other organizations.
- Analyzing a wide range of policies ranging from global warming to environmental health implications of farming.
- Developing and delivering strategic services.

The Center is funded through grants from foundations and other private sources, contributions, the sales of its publications and fee-for-service contracts. Its FY94 budget was a little over \$1,000,000.

### Land Link Project

Among the most recent and effective strategic services is the Land Link program. It addresses the need to create new opportunities to keep farmers on the land by matching young people who want to farm with older land owners who have the knowledge, management skills and resources to help them. This full service operation includes a range of farm management services, a licensed realty division and a

computerized clearinghouse to help put people in touch with each other. Its main contributions have been to help individuals reconnect with community, to build relationships between generations, and to increase the numbers farming sustainably. As a successful model it has influenced program replication in fifteen other states throughout the Midwest, as well as in California, Massachusetts, and Pennsylvania. It is also responsible for developing a curriculum on sustainable practices for community colleges that is now being used across the country.

Because the Land Link program has received a lot of free publicity from national television, major journals, and local and national newspapers, there has been no difficulty attracting young people. One of the services Land Link provides is to help young people decide whether farming is what they really want to do. Another is to help them with management practices particularly those who have been away from farming for a while. On the other hand, engaging the interest of older farmers has been more challenging. Timing is key. Many do not think about future of their farm until they are ready to sell. Others lack interest in the mentoring aspect.

Matching the long range goals of each party is important. The computerized database is one tool to identify possible matches. Hundreds of listings exist. Staff at the Center act as brokers between the landowner and the young farmer and can help negotiate an agreement that is agreeable to both. In some cases there is a 50/50 partnership; in others, a diversification of the farm; in some, immediate or phased-in sale of farms. Staff help train young people to become sustainable farmers and offer them financial guidance. One ongoing concern, however, is the reduced funding available for financing both within the public and private sectors. Lack of access to capital is helping to steer young people into sustainable farming as it requires fewer and lower inputs.

Numerous arrangements have been worked out. One such match, profiled in the Center's 1994-95 Annual Report, describes a young family that has participated in this program. Jim and Cheryl Bose and their two children took over a farm in Bloomfield, Nebraska when they wanted to build their cattle operation but did not have enough room on their family farm. Through Land Link they were able to connect with a land owner whose farm they now manage. They also stay in touch with the Center for ongoing support and assistance.

This process is working well. According to its Annual Report, as of the end of 1994 the Center had successfully made 169 matches that collectively cover over 125,000 acres in just four years. In addition, the Center reports that more than 1,200

other farmers with an average age of 34 are interested in seeking a match.

### **The Rural Enterprise Assistance Project (REAP)**

In 1990, the Center began another exemplary program, the Rural Enterprise Assistance Project, a Grameen-bank type of micro-enterprise system, designed to increase and diversify rural income and to develop local businesses. It helps members of local business associations to secure loans and receive assistance with strategic planning, loans to get them started, and ongoing counseling to manage their businesses successfully. The Center provides all these services to community members to help them expand and diversify their income base.

This program builds on local entrepreneurial spirit, and talent to keep locally generated dollars invested locally. Since its inception, REAP has lent roughly \$130,000 in loans averaging \$1,500 and experienced a default rate of under two per cent. The businesses created range from bed and breakfasts, crafts, and accounting to desktop publishing, small mechanics, and catering. One participant, a life-long farm wife, is now head of the Shell Creek Small Business Association, which serves five rural communities. These associations are key to the success of this program.

One of the advantages of this program is that it encourages small communities to support business formation. REAP requires the formation of small business associations comprised of microbusinesses and local residents, which, in turn, raise money within their communities. They typically raise from \$1,000 to \$3,000. For every dollar raised, the Center matches as many as ten from its endowment, which is funded by private foundations and the Small Business Administration. Members of the associations approve the loans and more than one member may borrow at any given time. Through this process, associations have a commitment to the communities and the communities have a strong stake in the success of the projects.

Other states, among them Iowa, Kansas, Nevada and Pennsylvania, have replicated this program as a result of the annual training programs offered by the Center. REAP has established 22 associations in three states with over 180 active members representing 77 communities. Associations learn about the work of their counterparts through the REAP Business Update and periodic meetings. The Center also publishes a number of different newsletters and journals, staffs a hotline and has begun an electronic "conference" on the Internet. Among the publications are The Center for Rural

Affairs Newsletter, The Beginning Farmer Newsletter, Consortium News. Many of these are free or available for a nominal fee.

### **Leadership for the future**

These two programs, in combination with the others, have helped individuals and groups take responsibility for their communities. They encourage participation, inclusiveness, diversification of businesses, local investment and capacity building over the long-term. They have promoted sustainable farming practices and policies and preserved family farming. The Center for Rural Affairs has provided the leadership and vision to increase social, economic and environmental sustainability.

### **Unlv Office of Energy and Environmental Education, Las Vegas, Nevada**

**Contact:** Christine Chairsell; Office of Energy and Environmental Education Environmental Studies Program; University of Nevada Las Vegas; 4505 Maryland Parkway; Box 454030; Las Vegas, NV 89154-4030; Tel.: (702) 895-4438; E-mail: chairsel@ccmail.nevada.edu

**Scope:** Local/regional, urban

**Inception Date:** 1991

**Participants:** University personnel and students, state energy office, state utilities, local government agencies, local professional organizations, schools/students, citizens

**Project Type:** Public education; energy efficiency; economic development; natural resource management

**Methods Used:** Partnerships and collaborative projects with local businesses

**Lessons Learned:** Corporations will participate in community education efforts; working with ecological subject matter is a good way to hold the interest of students.

### **Project Summary**

The University of Nevada Las Vegas, Environmental Studies Program, Office of Energy and Environmental Education was created to stimulate a shift to a more energy-efficient, sustainable society in Nevada. The office has initiated a number of projects and programs directed toward the community at large, government agencies, utilities and businesses to promote a variety of goals including:

- improving natural resource management;
- preventing pollution;
- reducing global environmental stress;
- improving the quality of life; and
- improving the local economy.

These efforts are being undertaken with the belief that innovative ideas must be developed locally and have their effectiveness tested and demonstrated before being spread throughout the rest of the nation.

The programs undertaken by the office are designed to promote conservation and reduce consumption. The office also seeks to further the knowledge of government, business, and industry on matters related to:

- environmental restoration;
- environmental remediation;
- sustainable development; and
- energy efficiency.

Specific programs organized by the office in collaboration with its local partners include a series of conferences and workshops related to energy and the environment; educational programs for high school and elementary students; and the creation of the Nevada Energy Consumer Educational Council, which is producing a home energy manual, as well as expanded public and professional education programs.

The UNLV Office of Energy and Environmental Education receives no state allocation of funding through the University of Nevada Las Vegas. It relies solely upon funding through grants, partnerships, and revenue from contracted education events.

### **Regional Conference Program**

A number of regional conferences have provided forums for local professionals to examine a range of current and potential problems. These have included: the Colorado River Basin Workshop, which was organized in conjunction with the President's Council for Sustainable Development; the Facilities Uniting to Utilize Resources Efficiently (FUTURE) workshops, dealing with energy and water issues; The Western State's Emergency Management Exercise, simulating responses to a natural disaster; Photo Voltaic Cell and Solar Workshops, exploring the state's role in using new energy technologies; Electro-Magnetic Fields (EMF) Conferences, examining health issues; and a Boiler Efficiency and Safety Conference, for local facility managers. Partners in these conferences have included the Southern Nevada Water

Authority, the Las Vegas Metropolitan Water Authority, the Nevada State Energy Office, the Nevada Power Company, the Sierra Pacific Power Company, the Southwest Gas Company, and the Western Area Power Authority. Other partners in specific conferences include U.S. Department of Energy, the Nevada Division of Public Safety, Sandia National Laboratories, and the Southern Nevada Facility Managers Association.

Related courses for environmental professionals and managers have covered environmental risk management, remediation of subsurface contamination, organic chemistry nomenclature for remediation, pre-engineering energy efficient fuels curriculum, real estate seminar on energy efficiency, and an air quality workshop.

### **School Programs**

The office has organized energy and environmental education projects for school children grades K-12. These have included workshops and a summer academy for teachers and the development of resource materials in areas such as society and the environment, energy and water, and Native American philosophies related to the environment. The office also established a "mentor" program in which students from the environmental studies program visit classrooms and present materials about energy and the environment, while serving as positive role models demonstrating their own environmental concerns. The office recently launched a highly successful SUNRISE (Students Understanding the Natural Resources in Society and the Environment) Explorers program, which involved 1,600 disadvantaged elementary school children. The program included summer energy carnivals at two local elementary schools and field trips to the Las Vegas Water District's Desert Demonstration Garden. Sponsors included the U.S. Department of Energy and the Southwest Gas Company. Forty university students participated as volunteers.

### **Recycled Art Project**

The office organized a Recycled Art Project in cooperation with a number of local businesses in Spring 1995. The project utilized over 1,500 pounds of trash and defective materials that were collected and sorted for the project. About 8,000 students participated in a hands on "trash-to-art" activity at the Annual Earth Fair Celebration, which were viewed by 40,000 visitors to the fair. This project resulted in the establishment of a Reuse Center to collect scrap materials from local businesses for use in classrooms.

### **Nevada Energy Consumer Education Council**

The UNLV Office of Energy and Environmental Education also established an ongoing partnership of local energy companies and government agencies, which is called the Nevada Energy Consumer Education Council. The council includes most of the partners previously identified with the conference programs, as well as the Southern Nevada Homebuilders Association. Other groups affiliated with the council include the Nevada Association of Professional Architects and the Southern Regional Association of Energy Managers.

The council, developed to build partnerships with educators, community organizations, government agencies, the media, local school districts, and public and private corporations and businesses, supports and coordinates programs that will improve the quality of life and the environment in Nevada.

Goals for the council include encouraging the public and businesses to:

- use energy efficiently;
- improve indoor comfort;
- manage consumption behavior; and
- maintain health and safety.

It was established in response to a state-wide survey (conducted by the Office of Energy and Environmental Education) of public energy awareness. The survey indicated high levels of concern about energy conservation and a need for additional public education. The council will maintain a number of the educational initiatives for school children and professionals begun by the Office of Energy and Environmental Education. In addition, the council will be active in public education, using a variety of media, including public service announcements, billboard displays, enclosures in utility bills, fact sheets, and newspaper articles and columns. The council will also publish a quarterly newsletter Energy and Environment News. One of the council's major efforts is the development of a consumer energy manual, which will be provided to builders, real estate agents, and property managers for distribution to new home buyers and renters.

### **Home Energy Manual**

The Home Energy Manual; A Homeowner's Guide to Maintaining the Energy Efficient Home, which is currently available in draft form, provides a collection of information about home energy and water conservation measures and techniques. Some of the topics covered include:

- wall, duct, and pipe insulation;
- door, window, and other opening insulation;
- sun-shading devices and techniques;
- thermal mass storage;
- setback thermostats;
- energy efficient furnaces and air conditioning systems;
- fireplaces for heating;
- home ventilating systems;
- plumbing and water conservation systems; and
- lighting and appliances.

The manual also contains sections outlining home maintenance procedures for energy conservation and reviews a variety of energy-saving techniques. In addition, it discusses major home improvement techniques such as the use of water efficient landscaping to reduce heat gain and to provide screening, and the installation of fans to facilitate natural cooling.

The council is planning to engage in several other educational and awareness activities. These include sponsoring home/neighborhood energy audits and workshops, promoting energy conservation in low income housing complexes to reduce utility bills, and conducting a follow-up energy awareness survey to assess the progress that has been made. Another proposal for the council is to develop a state energy conservation icon and accompanying slogan, for use in recognizing energy efficiency efforts and programs.

### **The Community School South Tamworth, New Hampshire**

**Contact:** Martha Carlson, Director; P.O. Box B; South Tamworth, NH 03883; Tel.: (603) 323-7000

**Scope:** Bearcamp Valley/Lakes Region (Southern NH)

**Inception Date:** 1988

**Participants:** Teachers, parents, students, community members

**Project Type:** Environmental education, land use, community economic development

**Methods Used:** Creation of a school as economic development; progressive education for sustainable community development

Lessons Learned: Sustainable development is not linear; developing housing, jobs, land protection, and young people are related and synergistic activities. Community connections are vital.

The Community School is a private school on a restored, historic 307 acre farm. Forty-two students in grades 6-12 attend from Carroll County, the Lakes Region and western Maine. The school's goal is to teach students to be life-long learners and problem solvers; the school is also concerned with returning land and resources to sustainable production and promoting local economic development.

### **Developing Students and the Community**

Students at the Community School learn about land management by taking charge of the farm and forest land. Students raise products that they sell, mainly vegetables and white pine. The school sold \$40,000 of timber just from thinning the 230 acres of forest; students are also developing value-added products from "under-utilized" woods. After more than twenty years of neglect, the farm is getting back into the business of feeding people through a community supported farming effort. Local residents who subscribe to the program pay \$200 in advance to receive a basket of food each week from late June through September; they are also invited to participate and help with harvesting.

Director Martha Carlson emphasizes the Community School's role as a new business contributing to local economic development and job creation. After beginning with two teachers, the school now employs seven full time and eight part time employees: twelve teachers, a bookkeeper and a secretary. Carlson relates that for three teachers who received health benefits from the Community School this year, it is the first time that they or their families have ever had health insurance.

### **Building the School**

The Community School was created in 1988 by local residents, led by Martha and Rudy Carlson and Katy Thompson. The three had worked together previously on land preservation, local economic development, and low income housing, as well as teaching. The School opened in the Carlsons' house with nine students while the board, staff and parents raised money from the community to purchase the Perkins Farm under a conservation easement.

The land and 110 year old farmhouse were purchased in 1991, at the recession price of \$90,000. An initial \$210,000 was

raised to rebuild and expand the structure before moving the school in 1992. Parents and local residents donated their time and labor as well as money. A local philanthropic trust provided a total of \$75,000 for start-up costs. The Trust for New Hampshire Land, a one-time state program, contributed \$60,000 to purchase the conservation easement. Another \$190,000 has since been spent on rehabilitation and reconstruction.

The school's budget this year was \$260,000. Eighty percent of the budget is covered by tuition, set at \$5,600 a year, plus another \$1,000 for transportation. A scholarship fund helps support some students from single-parent families or families where only one parent is working. A number of students contribute as much as \$1,000 from summer job earnings. Although Carroll County is the poorest in New Hampshire, some "summer families" and retirees contribute substantially to the school and scholarship fund.

### **Sources of Support**

The New Hampshire Department of Education encouraged and facilitated state approval of the Community School's operation. The School has achieved the first step in the formal accreditation process, affiliation with the New England Association of Schools and Colleges. Fifteen seniors have graduated so far and are attending colleges such as the University of New Hampshire, University of Vermont, Goddard College, and Maine Maritime Academy.

The U.S. Department of Agriculture's Stewardship Incentive Plan has provided technical assistance from the Agricultural Stabilization Service to map, inventory and plan the management of the school's land. This process has made the school eligible for some federal cost sharing in land management for example, brush management on a 3-4 year rotation in a flooded former hayfield.

A major barrier to the school's own sustainable development was the economic recession of the late 1980's/early 1990's. Although the land and building were available at a "once in a century price," the school was hit hard on operating income. Parents lost jobs and could not afford tuition. "It was like the Great Depression up here." The school is planning alternative sources of energy as one method of decreasing costs and remaining sustainable. The conservation easement contains permission from the state (approved by special vote in 1991) to put up a windmill. The school cannot sell the power, but plans to install a wind pump irrigation system.

### **Working Toward Sustainability**

The School is planning an endowment and reserves to maintain the physical assets. The need for scholarship funds also keeps growing if the School wants to remain a true "community" school. The staff and board are beginning to develop a "Year for a Year" program to provide full scholarships for students who agree to return after college to work in sustainable businesses or perform community work in the Bearcamp Valley.

To create sustainable local jobs that will allow youth to return to and remain in the community, the School participates in a local development planning project sponsored by the Ford Foundation. The "It Takes a Community" Project is generating and evaluating ideas for economic development in the Lakes Region that will provide employment opportunities at different skill levels.

The School is already implementing a new "eco-tourism" project, advertised as "A Day in the Bearcamp Valley," one of the last undeveloped valleys in the White Mountain area. Staff, students and volunteers will educate tourists about sustainable development, sell the students' vegetables and wood products to raise additional money for the scholarship fund, and help support local restaurants and businesses with tourist dollars. Community School Director Martha Carlson stresses that this model of schooling drawing on and contributing resources to the community can be replicated with different forms in different places. In an urban area, such as New York City, the neighborhood community, the multicultural society, and the arts are unique resources. In a rural area like northern New Hampshire, the great resource is the land and its forest.

Carlson states, "we believe that young people are useful and that the world needs them. Our community is our classroom. Students apply their studies to solving real problems that arise on the Perkins Farm, in local towns, or the White Mountain National Forest." For example, students learn to use Geographic Information Systems (GIS) as a land use management tool for the farm and forest. They also collect data with GIS for a University of New Hampshire study on the effects of ozone pollution on white pine trees, an indicator species. Students use GIS as a resource for local development, as well; the Town of Sandwich requested mapping of well tests, and students were asked to create a database to determine replenishment rates in nearby underground watersheds.

Martha Carlson cites the century-long tradition of conservation efforts in the communities of the region as one reason why they generated so much support to purchase the

farm and establish the school. For example, the League of New Hampshire Craftsmen was formed in the Bearcamp Valley in the 1920's to help local people develop and market high quality versions of their traditional crafts; eleven shops around the state still exist to market these products. Twenty percent of the land area of the neighboring towns is protected as part of the White Mountain National Forest. Local people were receptive to the notion of the school because "for a long time, before we knew the word sustainability, people have been thinking about how to protect this place and preserve the community."

## **Isles, Inc. Trenton, New Jersey**

**Contact:** Martin Johnson, Executive Director; 126 North Montgomery Street; Trenton, NJ 08608; Tel.: (609) 393-5656; Fax: (609) 393-9513

**Scope:** Trenton region

**Inception Date:** 1981

**Participants:** Community residents, local and state government, businesses

**Project Type:** Comprehensive community development, land use

**Methods Used:** Organizing, community gardens, environmental education, housing development, job training, "brownfield" redevelopment

**Lessons Learned:** For organizations to endure they need to build relationships and develop credibility over time. Workable solutions help provide the resources and the framework for people to promote long-term change in their own communities.

Isles, Inc. is a community and environmental development organization that addresses issues of food, housing, and environmental improvement by fostering neighborhood-based "islands" of development. Isles has four focus areas: urban greening and land recovery, environmental education, affordable housing, and job training.

## **Urban Greening and Land Recovery**

Isles works with communities to transform vacant land into productive and valuable neighborhood assets. The Community Garden Project focuses on food production and community environmental improvement and control. Isles has created 65

community garden and beautification sites designed, constructed and maintained by local residents. The community gardens produced more than \$100,000 worth of fruit and vegetables in 1994. Isles provides technical assistance to urban gardeners, including an annual plant sale for inner-city residents, a tool lending library, soil testing and experimental methods of removing lead from soil. Isles has completed a 200-page "how-to" gardening manual for use by other cities and organizations.

In its most recent endeavor, Isles is cooperating with the City of Trenton and the NJ Department of Environmental Protection to reclaim abandoned industrial facilities, beginning with the seven-acre former Magic Marker site. Isles is bringing together area residents, government, and technical assistants to help clean up the site, plan its reuse and participate in its redevelopment while educating young people about this important New Jersey issue.

### **Environmental Education**

The urban environmental education program has trained 100 teachers since 1991 and reaches 7,000 Trenton children every year. The Cadwalader Park Environmental Education Center provides hands-on science and environmental experiences for urban youth and teachers. The Children's Garden encourages participation from very young children. The Trenton Neighborhood Tree Project, a partnership between local schools, the community, the City of Trenton, Trenton Board of Education and the NJ State Department of Environmental Protection, has been implemented in six city schools.

### **Affordable Housing**

Isles has constructed or rehabilitated 69 units of affordable housing in Trenton; 21 additional units are currently under construction. Local, minority crew members and contractors are employed on these projects. Isles recently formed a joint venture partnership with a for-profit developer to convert a local factory to 46 units of affordable housing and office space for nonprofit organizations. Isles has provided home ownership training in English and Spanish to more than 100 Trenton families; the organization also conducts home maintenance and repair training and mortgage counseling.

To institutionalize this work, Isles helped to create statewide intermediaries. During the 1980's, Isles founded the New Jersey Community Loan Fund, a statewide nonprofit lender and technical supporter of housing and jobs development. Community Reinvestment Act (CRA) negotiations provided an initial infusion of capital. Some foundations gave program

related investments and corporations and utilities also participated. The Loan Fund is up to \$7 million capitalization and is growing. Isles also co-founded the Affordable Housing Network trade association.

### **YouthBuild Training**

Isles has trained 36 at-risk youth in construction trades while completing affordable housing projects. Isles recently received a YouthBuild implementation grant from HUD to provide construction job training, classroom education and leadership skills to an additional 60 young people who will rehabilitate four vacant homes in Trenton's "Weed and Seed" neighborhoods. The homes will be sold to low income families.

### **Origins**

Isles began as an offshoot of a student-initiated seminar at Princeton University in 1980. Director Martin Johnson recalls: "we were promoting appropriate technology development in the third world, but we were ten miles from Trenton. We had to look in our own backyard." The Institute for Community Economics, based in Massachusetts, was particularly helpful in helping them frame their early thinking on local development. Isles started as a technical assistance organization coming from an academic arena; over the next seven or eight years, the group evolved into a locally owned and controlled development organization.

Key to this successful transformation was the commitment Isles' founders made to living and staying in Trenton, working with established community groups, and broadening their base of support by building relationships within the community. Each Isles program has evolved over time through the "creative tension" generated by the dialogue between technical ideas and community perceptions. Johnson sees time and commitment as major barriers to doing this work. "If you don't have relationships, you can't get things done, no matter how smart you are. We're successful because we've stuck it out. We built credibility over time."

To succeed, Isles had to integrate the different cultures of organizations that worked on economic or housing development, and environmental organizations that tended to be non-urban and middle class. Early on, housing development was seen as competition for open land. Isles' strategy was to define both open space and housing as basic human needs, critical to a sustainable quality of life in urban areas. Johnson relates: "We had a broadly interpreted goal of community organizing and development. We can make cities

more self-sustaining through development initiatives that are controlled locally, culturally appropriate, environmentally sound, and speak to basic human needs."

### **Diversifying the Funding Base**

Another barrier to overcome was financing the work without sacrificing integrity or the ability to be independent. Isles has strengthened its board's fundraising capabilities by creating a separate Resource Development Committee with thirty members who have ties to corporate and institutional interests and are willing to lend their names and their time to strengthen the organization financially. This board plays an advisory role to the twelve voting members of the Board of Trustees.

Isles currently has a \$1 million annual operating budget. Forty percent of funding comes from local, state and federal government sources. Sixty percent comes from the private sector -foundations, corporations, individuals and religious institutions. Johnson notes that "in New Jersey, we have tremendous wealth as a state dotted with pockets of poverty." The current challenge is to further diversify the funding base by targeting individuals and employment-based giving programs.

Johnson emphasizes that the comprehensive nature of Isles' work helps the organization to sustain itself over time; it broadens the base of financial and political support while reducing revenue volatility. Furthermore, Isles has a greater ability to affect state and local policies on a range of issues than it would as a single-focus organization. In New Jersey, environmental groups, largely based in middle-class suburbs, are more organized and have more political power than the urban community development organizations. By building relationships in both communities and breaking down preconceptions, Isles is able to tap into a stronger power base to further its work.

### **Ironstone Gardens Santa Fe, New Mexico**

**Contact:** Burke Denman (Developer); Denman & Associates, Inc.; P.O. Box 4938; Santa Fe, NM 87502; Tel.: (505) 983-6014; Fax: (505) 986-1419

Michael Ogden; Southwest Wetlands Group, Inc.; 901 W. San mateo, Suite M; Santa Fe, NM 87505; Tel: (505) 988-7453; Fax: (505) 988-3720

**Scope:** Local, urban

**Inception Date:** 1991 (phase 1 - renovation); 1994 (phase 2 - new construction)

**Participants:** Developer, residents

**Project Type:** Commercial development, redevelopment, 'green construction', waste water reuse

**Methods Used:** Construction and renovation using new building materials that replace wood and new technologies that save energy and minimize water consumption and waste

**Lessons Learned:** Find an advocate within the local bureaucracy to support new and innovative building techniques.

**Government levels:** Two projects have been funded: one, a US Housing and Urban Development grant for loans for senior citizens; and the other, a city grant for the homeless and those under the 60% income level.

Throughout the process Nos Quedamos has emphasized the importance of using local contractors to implement the plan and have met with local labor coalitions. A job completed by the middle of 1995 as a joint venture of a local contracting company with one of the largest construction companies in the city employed 80% of the workers locally.

All of these efforts have increased the visibility of and knowledge about Melrose Commons locally and nationally. This process has brought in students from local colleges and universities such as City College and Columbia, other members of civic organizations, and from many downtown areas to attend hearings and to demonstrate support for the effort. In this way, others are connecting with Melrose Commons and the neighborhood residents are feeling less isolated.

### **Challenges ahead**

Access to technical assistance and funding are continuing challenges. City funding is being cut back at a time when the neighborhood needs it to acquire some of the properties residents would like to sell. They also need to attract developers to construct and renovate the housing.

Institutionally, the strength of the organization and its efforts have been in organizing the community. In order to continue to implement this ambitious plan, ongoing momentum and support will be needed.

## **Sunshares Durham, North Carolina**

**Contact:** Anne Aitchison, Executive Director; SunShares, Inc.; 1215 South Briggs Avenue, Suite 100; Durham, NC 27703; Tel.: (919) 596-1870; Fax: (919) 596-5382

**Scope:** Local/state, urban/rural

**Inception Date:** September 1980

**Participants:** Urban and rural residents, low-income housing communities, schools, businesses, churches

**Project Type:** Recycling, energy efficiency, waste reduction, water conservation, public education

**Methods Used:** Demonstration projects, education, programs maximizing citizen involvement as volunteers and participants in community building projects

**Lessons Learned:** Strong leadership and vision spurred initial activity in the community. SunShares' history and reputation in the community inspired the public trust and the building of institutional relationships necessary to expand activities and access opportunities.

### **Summary of Project**

Since its inception in 1980, SunShares has grown from a small, local nonprofit organization with two staff members and an annual budget of \$40,000 to a nationally recognized leader in the field of resource recovery, employing 62 people and generating \$3 million annually for the local economy.

SunShares' mission is to help people use the earth's resources in a more sustainable, efficient, and healthful manner. It provides opportunities for communities and neighborhoods to recycle, reduce waste, conserve energy and water, and use more renewable resources.

SunShares programs maximize citizen involvement as volunteers and participants in community-building projects. It partners with individuals, local and regional government agencies, corporations, small businesses and other organizations to facilitate the transition of the "Research Triangle" region (including the cities of Durham, Raleigh and Chapel Hill) toward a more sustainable economy. SunShares works to facilitate that transition through education, demonstration and policy activities designed to involve the citizens and institutions of the region.

### **Building the Foundation**

In 1979, the Energy Information Office (EIO) was founded with proceeds from a newspaper recycling project established by the Council of Garden Clubs and the City of Durham Sanitation Department. Newspaper revenues allowed EIO, a non-profit organization, to offer energy conservation information and winterization services to the general public. In 1982, SunShares, a grassroots campaign to build low-cost solar heaters, was founded as a project of EIO. SunShares then merged with EIO to form a single non-profit dedicated to promoting recycling, energy efficiency and solar energy.

The experience and contacts from these organizing efforts, combined with the resources of ECOS, an established local recycling effort, enabled the new SunShares to win long-term recycling contracts in a three county area, with the City of Durham, the Town of Cary, Durham County and the Orange Community Recycling Program.

Partial funding for SunShares recycling programs comes from revenues generated by landfill tipping fees and solid waste collection fees. The revenue that SunShares makes from the sale of recyclables partially off-sets program costs. As a non-profit organization, SunShares also receives grants to investigate issues and carry out programs such as energy efficiency, water conservation, and market development for recyclable materials such as mixed paper. Individual and corporate partnerships help to support outreach and education programs.

### **Leader in Recycling Technology**

SunShares recycling programs now include 33 drop-off sites, serving over 300,000 residents in Durham and Orange Counties; as well as curbside collections from 43,000 homes in Cary, Durham and Orange Counties. Commercial and fee-for-service programs collect from over 200 area businesses.

SunShares is able to collect and process the materials cost effectively because of its unique collection system, recycling facility, and community participation. From curbside trucks, to drop-off bins, to the expander curbside container attachment for which SunShares holds the patent SunShares has been a leader in developing new designs for effective recycling. These designs have been adopted in many areas of North Carolina and other states, helping to make recycling more efficient and cost effective.

SunShares community education programs support awareness of the "Reduce, Reuse, Recycle" concept. Broad public

participation in separation of recyclable materials enables SunShares to maintain the integrity of the materials it collects and helps to insure stable markets and maximum convertibility of new products.

### **SunShares Research and Product Development**

Recycling is only a part of what SunShares is about. SunShares current research and development focus is on reducing waste at the source of generation, locating stable market uses for problematic recyclables, and combining organic portions of the waste stream together to produce compost.

SunShares practices a team approach to decision making, analyzing with Board, staff, and client communities strategies that will result in long term economic, social and environmental benefits for the region. A good example is the process by which "Bull Durt" has been developed. Mixed paper constitutes approximately 20% of the total waste stream being landfilled in this country. With funding from the North Carolina Office of Waste Reduction and the Environmental Protection Agency, SunShares and its local partners, the City of Durham and Durham County, worked for three years to research and test this compost product that combines hard to recycle mixed paper with treated municipal sludge. At the same time, a public education campaign introduced "Bull Durt" to the public, answering questions related to product safety and applicability. SunShares, the City of Durham, and Durham County are in the process of establishing ongoing production of Bull Durt, providing a ready bulking agent for sludge treatment processes as well as a local, stable market for mixed paper.

As part of a team approach, SunShares engages the community in research on "next steps" for waste reduction to determine actions people are most interested in pursuing. Results include: reduction of junk mail, alternatives to household toxins, and the re-use of items. SunShares directs information and educational materials to the community on these topics and on how to make source reduction and backyard composting familiar behavior in our residential and business communities.

### **Sunshares Energy Programs**

Energy saving projects are an important part of SunShares operations. Since 1980, Sunshares has trained 2,000 residents to build solar collectors and weatherize their homes. Together with the North Carolina Alternative Energy Corporation, the Duke Endowment, and hundreds of volunteers, they have

retrofitted over 600 churches and non-profits, to cut utility costs by \$500,000 since 1987.

The new "Resourceful Buildings" program is SunShares expanded energy program. SunShares has recognized a need for an integrated approach that goes beyond energy efficiency to address indoor air pollution and the reduction of solid waste and toxins. The new program focuses on making buildings healthy, safe, economical and comfortable. Staff members provide assistance in increasing energy and water conservation, reducing building health problems dealing with issues such as lead, carbon monoxide and moisture, and incorporating waste reduction activities.

### **Sunshares Education Programs**

SunShares has partnered with the North Carolina Museum of Life and Science and the North Carolina Cooperative Extension Service to locate three permanent backyard composting exhibits in Durham. Several methods of composting are displayed, and regularly scheduled workshops on backyard composting are given free of charge to community residents. SunShares has also provided "vermicomposting" workshops, bins and technical support to 129 teachers in Durham Public Schools.

SunShares provides in-depth recycling and waste reduction information. A quarterly newsletter is circulated to 102,000 households in the region, a more in-depth SunSpot publication to members, activists and officials, and environmental programs are promoted through the media. Education activities conducted by SunShares include:

- Earth Day Celebrations. Since 1990, SunShares has worked with corporate sponsors and the City of Durham to bring together dozens of environmental and conservation organizations and entertainers with thousands of citizens to inspire, educate and celebrate.
- The Scrap Exchange. SunShares provided early institutional and financial support for this organization that provides teachers, artists, children and others with scrap industrial materials and instruction for creative reuse.
- The Block Leader Program. When SunShares expanded curbside recycling to the citizens of Durham and Cary, hundreds of volunteers in each neighborhood were recruited to talk to their neighbors about the new program;
- The Schools Program: SunShares has offered recycling and waste reduction programs and tours for

students since 1988. SunShares provides recycling collection services to Durham Public Schools and works through Environmental Educators of North Carolina, the NC Cooperative Extension Service, other organizations, school systems and individuals to assure comprehensive environmental education programs in the Triangle.

### **Recycling Challenges**

A barrier to recycling and energy conservation efforts in general is that current governmental and corporate policies often do not consider environmental impacts or conservation opportunities. Early on, SunShares realized the importance of policy development and advocacy in the recyclable materials marketing arena. Between 1988, when SunShares began the Durham Recycles program, and 1993, the price paid for recycled commodities dropped nearly 50% on average. To reverse this trend, SunShares realized that governmental and corporate policies for retooling the industrial infrastructure to make use of recycled materials needed to be put into place (virgin material use is still subsidized and preferred). SunShares became active in national policy development through the Recycling Advisory Councils Market Development Committee to advocate federal legislation and infrastructure changes to facilitate the transition to materials reuse and recycling. These efforts paid off in increased governmental mandates for recycled products that brought prices back up and increased production of recycled products and the creation of jobs. Initial policy work by SunShares has focused on those areas in which new or revised policies can foster the next steps in the sustainable transition.

### **Carrington Research Extension Center Carrington, North Dakota**

**Contact:** John C. Gardner, Superintendent; Carrington Research Extension Center; North Dakota State University; P.O. Box 219; Carrington, ND 58421; Tel: (701) 652-2951; Fax: (701) 652-2055; E-mail: [recenter@ndsuent.nodak.edu](mailto:recenter@ndsuent.nodak.edu)

**Scope:** Statewide

**Inception Date:** 1960

**Participants:** Researchers, farmers, processors, consumers, Native Americans

**Project Type:** Sustainable agriculture, partnerships, market development

**Methods Used:** Whole-systems approach; development of alternative crops; variety in testing methods; value-added projects; team approach of researchers, educators, farmers, processors, and consumers

**Lessons Learned:** Integration of research into applied farming. Emphasis on whole system approach and sustainability. Support from state government agricultural leadership.

### **Background**

North Dakota is one of the most farming dependent states in the country. Over 64% of the land is in crops. The type of practices used and the crops raised as well as changing economic trends and agricultural policy have had a broad impact on the health of its land, air and water and the economic viability of farming.

The Carrington Research Extension Program in central North Dakota has played an important role in influencing choices. Unlike traditional research centers it employs a multi-disciplinary whole-system approach linking agricultural science with economics. The Carrington research and education programs go far beyond basic crop research by developing "value-added" products and new partnerships to meet the needs of farmers, processors and consumers. According to John Gardner, Superintendent of the Center, "We want farmers and consumers to understand each other's needs."

Originally conceived as an irrigation research facility, the Carrington station opened in 1960. Its original mission was to develop new ways for farmers to use water more efficiently, develop irrigated agriculture and to do research on specific vegetable crops. Livestock research was added to help farmers use farm-raised crops, often by-products, to feed cattle. In the 1990s, the focus shifted to an approach that examines a variety of ways to help farmers economically as well as to introduce more environmentally sound farming practices. Now it is more of a community-based land grant institution that intertwines applied science with community education programs in order to set up a mutually beneficial agenda.

The Carrington Station is located on 1,200 acres. It's staff of 24 carry out more than 36 crop and livestock projects within an annual budget of \$1,000,000. It is important to note that about half of its funding comes from the sale of seed and livestock and from foundation, government and industry grants. The remaining comes from the state general fund.

## Expanding Sustainable Agriculture

Carrington Center is no ordinary research center. Here sustainability is in evidence throughout the programs with John Gardner a leading proponent. He believes that "sustainability means taking into account how a crop or other agricultural product fits into the social and economic system. We look at the social, economic and environmental impacts, as well as agronomic profiles, of our research." This means that all the aspects of production, processing and consumption are factored into its approach. The focus is on partnerships and whole systems that help to encourage the development of new crops and markets, the reduction of pesticide and fertilizer use, and the potential for increasing the number of local value-added crops. The Center uses a variety of methods to implement these ideas.

- Variety and yield tests are run under different controlled conditions at the research facility (dryland, irrigated land) as well as under real-life conditions on farms both on- and off-site.
- Diverse crops are raised (oilseeds, grain legumes, and grasses) so that the farmer can choose what is best suited to the land rather than continuing to grow traditional crops that deplete the soil.
- Research is conducted on the cost-effective use of herbicides. In the future this will include the use of integrated pest management strategies.
- Experiments in processes that add value to crops such as uses for agricultural by-products for cattle and fish feed, fuels and fertilizer are carried out.
- Under the livestock program, cattle act as "recyclers" of the crop residues; all manure is composted.
- Programs, consultations, and educational extension meetings are carried out statewide.

Two examples illustrate these methods: the growing of crambe as an alternative crop and the introduction of aquaculture for value-added potential and recycling, closed loop production.

### Crambe

Over 50% of the crops in North Dakota are wheat and barley. In recent years, the Center has been influential in persuading some farmers to experiment with crambe, a cousin of the mustard family. It was first introduced by Carrington in 1990 as an alternative oilseed crop for use both as an oil (lubricants, plastic coating, hair conditioner, and a chocolate additive) and

as a meal (for cattle). As many as 60,000 acres have been planted.

Its assets are many: it is pest-resistant, high-yielding, environmentally desirable as a nontoxic lubricant, and suitable for rotations and less fertile land. It requires fewer purchased inputs and has low production costs. It has the additional advantage of saving taxpayers money by reducing subsidies which currently represent 30% - 40% of the region's income. In certain cases the yields have been more profitable than wheat.

### Aquaculture

To develop a new economic alternative as well as a new value-added agricultural product, Carrington recently opened a Northern Aquaculture Center in conjunction with the North American Fish Farmers Cooperative using a grant of \$250,000 from the Rural Development Administration. This fish farming venture is set up as a processing/marketing cooperative as well as a research facility to study the feasibility of closed-loop indoor aquaculture. Consistent with its whole-system philosophy, Carrington is researching the use of alternative crops and manufacturing byproducts for fish feeds, thus increasing demand and price for the traditional and alternative crops grown in the state. The effect of these feeds on water quality and the cost of production will be among the factors monitored.

### Elements for Success

The defining elements of the Carrington Center are the focus on sustainability, participatory processes, and a whole-system approach that expands its role into a forward-looking, interdisciplinary facility. As a governmental institution it is unusually experimental in its words, "taking from test tube to landscape and everything in between." As in many successful enterprises, leadership is key, and John Gardner is a passionate advocate of sustainability above and beyond the reach of the Center. He has adopted many other environmentally-beneficial practices on the state farm and modeled social sustainability by transforming an historic house into a thriving cultural center.

According to Dr. Gardner, "The concept [of sustainability] has not been a hard sell." Much of the environmental interest in these approaches has come from the large contingent of state residents who have longstanding wildlife and environmental interests. Many are concerned about water quality and the health of their families. Practitioners of organic farming who work with the Center are already practicing sustainable

agriculture. Others have recently adopted more sustainable practices for the social and economic benefits.

Admirers of the Center cite one of its main accomplishments as the process of partnership with farmers and participatory research which weaves applied science into community education and visioning. It has been effective in working with farmers on long-term, whole farm approaches that reduce costs and identify opportunities to add value to farm products. It has also helped smaller producers find niche markets and partner with processing plants and marketing services for alternative crops.

The Center has also facilitated collaborations. It has opened communications between and engaged the university, government and private sectors in collaborative undertakings. By creating an informal network that can address problems, it provides a more coordinated framework for problem-solving. It has also worked with the Northern Plains Sustainable Agriculture Society, a grassroots educational organization that promotes ecologically- and socially-sound food production that currently covers roughly 22,000 acres in organic production.

Additionally, the Carrington Center has influenced the work at other research stations as well as that of its staff. In its experiments with alternative pest control, for example, where chemicals are seen as a last resort, it attracted interest from other centers, resulting in the adoption of biological pest control. Indirectly, it has influenced the sustainability of the family farms by offering a greater diversity of crops that are best suited to the specific aspects of the land and that will offer a good return on investment.

### Challenges

There is more work to be done in certain areas. For example, in the past, market research has been limited for alternative crops and little emphasis put on their development. New crops are often developed before potential uses or markets are defined. This can influence the receptivity of farmers to being in the vanguard of those who are willing to make the switch to lesser-known varieties. Traditional family farm values and generations who have always grown the same crops also play a role.

Unpredictable changes in processing facilities and market partners have presented other difficulties. In the case of crambe, the processing company's operations were halted when the parent company wanted to be in the more lucrative parts of food production. Finally, public policies that

determine the economic distribution of wealth among input producers and the processing and marketing sectors also present difficulties.

Carrington's leadership in research and education has already helped to meet these challenges and needs of farmers in North Dakota. As additional potential profits are obtained from farming sustainably and as assistance in developing markets for new crops and by-products becomes available, more farmers are likely to make the transition.

## Rural Action Athens, Ohio

**Contact:** Carol Kuhre, Executive Director; One Mound Street; Athens, OH 4570; Tel: (614) 593-7490; Fax: (614) 593-3228; E-mail: aa075@seorf.ohiou.edu

**Scope:** Multi-county in Southeast Ohio Inception Date: 1982

**Participants:** Residents, non-profit organizations, businesses, universities, local and regional government agencies

**Project Type:** Comprehensive community development, economic development, leadership development/training

**Methods Used:** Area-wide collaboration with other organizations; broad-based citizen participation in developing and implementing projects; extensive training and education programs; anticipatory, long-term, and integrative planning; investment in social capital; local generation and circulation of dollars

**Lessons Learned:** The key to giving residents hope through their participation in a sustainable community is to provide well-designed training and projects that have measurable results. For this Rural Action places special emphasis on project development, training, benchmarking and collaborative undertakings.

"Southeast Ohio contains a wealth of human and natural resources that, when put to good use, can promote the co-existence of the environment, the economy, and the society as a whole."

### Rural Renewal Strategy

#### Background

Rural Action was formed in 1982 to educate and train citizens on issues of economic and environmental justice. In 1990 it redirected its focus and adopted a broadbased, pro-active

strategy to promote economic and social development, revitalize communities, and protect the environment.

The focus of its work is in the Appalachian region of Southeast Ohio. There the boom and bust cycles resulting from reliance on extraction-based economies has led to poverty, unemployment, poor social and physical infrastructure, illiteracy, ill health, and family instability.

Rural Action works with over 25 grassroots organizations, 10 issue-oriented committees, regional agency representatives, and scores of individual citizens to improve the environmental, economic and social fabric of the 20 counties served by Rural Action. In 1994 the small staff was augmented by 31 VISTA volunteers, most recruited locally, and six AmeriCorps volunteers. The latter work through Rural Action's HealthCorps to improve health education and access. The annual budget of \$150,000 (excluding VISTA salaries) consists of grants, donations (cash and in kind), revenues from events, membership dues and capital and major donor drives.

### **The Rural Action strategy**

Innovative planning and broad participation and collaboration among many sectors of the community are key to Rural Action's Rural Renewal strategy. The process includes four components: organizational development, a civic democracy initiative, a sustainable communities program, and a projects development initiative.

By implementing these objectives, Rural Action is building its own internal capacity as well as human capital resources in order to train and assist community members throughout Appalachia. It uses a well-crafted developmental process to create, plan and implement projects. Every project must meet sustainability criteria before it is selected and given a project director. Volunteers, leadership development and training, and many other types of assistance are made available to each project.

### **Integrated initiatives**

Ten issue committees, made up of Rural Action members, help plan and implement a variety of programs. They address diverse yet interrelated issues - sustainable agriculture, environmental conservation, restoration and management, heritage and cultural preservation, and projects designed to meet specific human needs such as affordable housing, health, and access to credit.

### **The programs include:**

- a ten-year project to clean up and restore streams in two watersheds severely polluted by acid mine runoff. The RestoreCorps, made up of youth, students and juvenile offenders, works on tree planting, stream cleanup and bank stabilization projects.
- a Pesticide Reform project which has successfully encouraged the adoption of Ohio's first safe pesticide management policy in a local school district;
- a ReUse Industries project to help reduce waste and create jobs;
- an Oral History project and an historical mural created by 300 elementary school children in one town which has spawned similar projects in other towns and promoted the conservation of historical and cultural resources;
- an affordable housing program, an Emergency Prescription Fund, and the rural transportation project that provides free or low-cost van transportation to meet many needs of low income residents. These are augmented by the development of a wellness center in Trimble and the work of HealthCorps volunteers.

### **Areas identified for project development work over the next few years include:**

- affordable housing and self-help housing, including home loans and construction skills training;
- agricultural production, processing and marketing, including the promotion of more effective farming and grazing methods and the development of local and regional markets;
- energy efficiency, including business audits and a biomass fuel project;
- improvement of rural health services;
- mobilization of volunteers to meet human and environmental needs, matching trained volunteers to the needs of area individuals, groups and agencies.

### **Grassroots Leadership, Planning and Networking**

Inclusive planning and decision-making within each community balanced by individual initiative and collaboration represent distinctive qualities of Rural Action's strategy. Its team of field workers provide the foundation for all the projects. They assist citizens in each community to identify their own issues and assets and help them plan and implement projects. They provide leadership training, mediation and

entrepreneurial services. This grassroots community involvement is key to Rural Action's success.

Rural Action's effectiveness is also boosted through collaboration with 100 other organizations within Ohio as well as with the Central Appalachian Network in five states. VISTA and AmeriCorps volunteers leverage the impact of each project, by providing training and help in housing, health care, environmental clean-up and in other areas.

There is extensive networking among the Rural Action Network organizations as well as among the membership. In 1994 communication was enhanced through access to the Internet by the South East Ohio Regional Free-Nets (SEORF). The establishment of public use terminals in libraries and civic centers will improve public access to this valuable source of information, but issues of cost and illiteracy must still be addressed.

The scope of Rural Action's activities is limited primarily by lack of financial resources. Its funding comes from diverse sources, but the lack of foundations in the multi-county area creates a disadvantage. Within a limited budget, staff also find it difficult to do the necessary travelling to meet with potential funders and to network in the greater community to increase the visibility of its work.

### **Sustainable Communities Initiative program**

Rural Action is meeting the needs of many of its low-income residents in the areas of health, education, housing and access to employment and training. In its new five-year Sustainable Communities Initiative Program it will seek to further increase social capital while restoring the environment. This is a collaborative program with the Mountain Association for Community Economic Development in Kentucky. Each organization will use basic elements but adapt them to the unique areas in which they are working. Rural Action will focus its efforts in the communities of the Sunday and Monday Creek Watersheds. There they will emphasize the development of social capital, which Carol Kuhre describes as the "prime determinant of a community's ability to develop sustainably."

Through its leadership training and mentoring programs it is increasing the skills of those it serves. Locally-organized Sustainable Development Councils will guide these community-based development initiatives. Community-building is promoted through the arts, celebrations and collaboration as well as the involvement of youth in many of the service programs.

Improvement in the environment is occurring through watershed restoration, land trusts, waste reduction and reuse, a biomass fuels project, sustainable agriculture and forestry projects, and the development of safe pest management policies.

Economic needs are being addressed through the formation of a food cooperative, incubator projects such as the Rural Action Supply that sells office supplies and uses local contractors to build the wellness center, and a credit union to serve low-income residents, increase local economic development and promote entrepreneurship. Rural Action, Ohio University and the US Forest Service are also working together in five economically-distressed communities.

Collectively, these locally generated, integrated projects are improving the lives of the residents in communities throughout southeastern Ohio and providing the foundation for a more sustainable future.

### **Families First! Oklahoma City, Oklahoma**

**Contact:** Linda Larason; Families First!; P.O. Box 675; Oklahoma City, OK 73101; Tel.: (405) 525-4854; Fax: (405) 525-4853

**Scope:** Oklahoma City metropolitan area

**Inception Date:** 1995

**Participants:** Neighborhood residents, service providers

**Project Type:** Process-oriented planning, comprehensive community development

**Methods Used:** Grassroots community development

**Lessons Learned:** For a new project to be successful, it is important to constantly go back and assess what worked, what didn't work and why.

Families First! (FF!) is an effort in the Oklahoma City metropolitan area to improve the lives of residents by increasing the capacity for individual, family and neighborhood self-sufficiency. The project is attempting to do this by helping to build bridges between neighbors, blocks and neighborhoods and by linking neighborhoods to resources and policymakers.

Families First! is organizing around the dual premise that everybody has innate abilities and assets that can be

developed, and that families are the infrastructure of their communities and need to be strengthened. Families First! defines families as people connected by caring; families can be small groups or entire neighborhoods. "We know that the best prevention [for communities] is finding people's positive assets and developing those assets," says Linda Larason, the acting coordinator of FF! There are four parts to the framework of Families First!:

- Clusters are made up of multiple neighborhoods and have populations of 12,000 to 15,000 people. The three county area including Oklahoma City has been divided into 22 Clusters. Volunteer leadership and a paid coordinator will be recruited from within each Cluster.
- Capacity-Building. FF! will partner with cluster residents to do their own assessments, analysis, presentations, prioritizing, planning and action steps that will enable residents to affect the future of their neighborhoods.
- The Resource Team is comprised of persons with linkages to governmental and non-profit human service delivery systems. Their purpose is to help the cluster gain entry and access to the system of services in the larger community in the areas of health, education, housing, criminal justice, economic development and the arts.
- Community Partners are corporations, small businesses, universities/colleges, church coalitions, and/or hospitals/health care providers that serve as voluntary resources for the cluster. Oklahoma City's four major hospitals are serving as anchor community partners for the initial clusters.

Families First! is a project of the Community Council of Central Oklahoma and is one of 12 initiatives to emerge from Central Oklahoma 2020, a broad-based region-wide planning effort. Families First! is modeled on The Atlanta Project, founded in 1991 by former President Jimmy Carter. The Atlanta Project has coordinators working in each of its 20 clusters, has registered over 100,000 volunteers and has formed partnerships between clusters and 20 major corporations and 18 colleges and universities.

### **Working with the Community**

Near Northwest Neighbors, the first cluster, was established around the Paseo neighborhood of Oklahoma City in June 1995. The core group, composed of 15 community leaders from the five initial neighborhoods, organized a cultural

festival which took place at a local middle school on August 1. Although there was a heavy rainstorm, two hundred fifty people came to the festival. They followed the festival with community-wide planning events on August 3 and 5, but the turnout at these events was lower than they had hoped. At their community meetings they identified some key areas to work on including economic development and neighborhood safety.

They are now working to expand both the number and diversity of people involved in their efforts. According to Linda Larason, acting coordinator of Families First!, they are trying "to reach outside of the already identified leadership in areas and reach out to untapped leaders."

One early achievement of the Near Northwest Neighbors was the creation of the Rolling Thunder Bike program. This program for disadvantaged kids is managed by community leaders but run completely by the youth participants. The program meets in Paseo at the home of a local resident. Kids learn bike safety and repair and also develop respect for each other, according to Deb Johnson of World Neighbors. They also receive free bike helmets for participating in the program.

This program is entirely funded by the community, with much of the money having been raised at the community festival. "One of the benefits of this program, is that the youth are seeing a positive adult influence," says Johnson.

### **Using community development techniques from developing nations**

Families First! is working in partnership with World Neighbors, an Oklahoma City-based organization that works on grassroots community development overseas. In Oklahoma, the partnership is designing a participatory community development project using many of the same techniques that have been used in other countries. A major part of the participatory project design is teaching problem analysis - helping people look closely at symptoms and root causes of problems. FF!, along with World Neighbors personnel and local community development professionals are developing a comprehensive Capacity-Building Training Manual for use in the clusters. Trainers, to be selected by FF!, will work in teams of one skilled facilitator and one cluster resident.

Deb Johnson, the development communication coordinator for World Neighbors who is working with FF! explains the benefits of grassroots community development: "Once the

community members become organized and know what they want and need they can tap into resources from all over the place. We have started to pull these five neighborhoods into a community. We don't really have community feelings; people shut their doors. We are starting to break down those barriers, getting people out talking to people they hadn't met before."

### **Funding**

Families First! has received a Presbyterian Health Foundation grant of \$50,000 to fully fund the work with World Neighbors in the first cluster. FF! has a grant pending with the Center for Substance Abuse Prevention of the Department of Health and Human Services for \$300,000 per year for three years. If received, the grant will focus on youth development within the Families First! target area.

The rest of the financial support for FF! will be coming from corporations. FF! is seeking three year funding commitments from corporations and they are getting that from most of the companies that are contributing. They are close to reaching their goal for 1995 for corporate contributions. This will make it easier for FF! to fundraise from other sources in the future because they will only have to ask each corporation for money every three years.

### **Connecting people to human resources**

Linda Larason explains one way that FF! will be working to bring human services closer to the neighborhoods: "In the area where we are working right now there is a lot of substance abuse. Three treatment programs are spread all over town but aren't accessible. We would like to see accomplished a 'one stop shop' for services, a family resource center in local neighborhoods. Then they wouldn't have to negotiate the maze of services."

Once Clusters are organized, the role of Families First! in relation to organized Clusters will be to serve as a bridge between human service agencies and the Clusters and to help the Clusters access the Community Partners and Resource Team.

### **Learning how to work with the community**

One of the greatest challenges for Families First! has been how to interact with the neighborhood groups that are part of the program. "We're trying to steer them and provide guidance without taking over the project," says Linda Larason. She feels that Families First! did not explain clearly enough to people in the first cluster what their mission is and what grassroots community development is all about. She explained that they

had a day-long community planning session after the cultural festival, but that the turnout was much lower than hoped for. The staff of Families First! were afraid that this might happen but they didn't want to seem like they were steering the community groups. "We learned that sometimes we should share our experiences with them and not steer entirely away from providing direction. That is a real fine line to walk and will always be a fine line to walk because we don't want them to look at us for direction."

Families First! doesn't want participating groups to think of themselves as Families First! groups but to have their own identity and their own name. "We bent over backwards initially to avoid looking like we were imposing an agenda on the neighborhoods and in doing so did not articulate well the Families First! philosophy and purpose." says Linda Larason. "That was confusing to people. It made it more difficult to explain. We will not do that again. We do have a purpose and we do have a philosophy. We will state that up front and they can decide whether they want to participate."

Linda Larason says that one of the key elements to the success thus far of Families First! is that the idea came out of Central Oklahoma 2020, a regional visioning process, "I think the fact that it came out of the community planning process that involved a broad cross section of people from social service providers and government people to community volunteers to business leaders, that it evolved from that group of people gave it legitimacy even though it was a brand new idea."

## **Applegate Partnership Applegate, Oregon**

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**Scope:** Regional, rural

**Inception Date:** 1992

**Participants:** Residents, industries, local, state and national natural resource agencies, environmental organizations, and ranching and farming community

**Project Type:** Natural resource conservation/management, economic development, citizen-led initiative

**Methods Used:** Consensus meetings, newsletters, projects

**Lessons Learned:** Building a sense of community is extremely important. Identifying fundamental points of agreement can foster dialogue, cooperation and community. Giving participants equal footing to discuss problems keeps people at the negotiating table.

### Summary of Project

The Applegate Partnership provides a community-based, grassroots approach to working with the ecological and economic issues that affect all members of the Applegate River watershed region. Its overarching goal is to promote ecosystem health and diversity and a strong, sustainable economy.

The Applegate River watershed encompasses an area of 500,000 acres in Jackson and Josephine counties in southern Oregon, and Siskiyou County in California. Sixty-nine percent of the land is publicly owned, and thirty-one percent is held in private ownership. There are about 7,000 households in the area, with 12,000 residents. There are towns but no incorporated communities in the area. The region's major industry is forestry and forestry products.

The Applegate Partnership's mission statement clearly defines its participants, its ecological and economic mission and its methods for carrying it out:

The Applegate Partnership is a community-based project involving industry, conservation groups, natural resource agencies and residents cooperating to encourage and facilitate the use of natural resource principles that promote ecosystem health and diversity.

Through community involvement and education, this partnership supports management of all land within the [Applegate] watershed in a manner that sustains natural resources and that will, in turn, contribute to the economic and community well-being within the Applegate Valley.

### History

The Applegate Partnership was founded in October 1992 when a group of environmentalists, timber industry representatives, federal agency land managers, farmers, ranchers, and community representatives gathered to talk about common views they shared about how the forests of the area should be managed. They shared a mutual desire to formulate a local solution that could address both the ecological and economic issues over which they had been

fighting: Until that time, environmental activists and the forest products community had been involved for two decades in a continuing conflict over management of the region's public forest lands. Managing for healthy forests was something everyone could agree on. Forest health brought the Partnership members together because they all wanted healthy, resilient forest ecosystems.

### The Applegate Partnership

The Applegate Partnership is run by a board of directors and alternates that include representatives of the North Applegate Watershed Protection Association, the Rogue Institute for Ecology and Economy, the Applegate Watershed Conservancy, the Southern Oregon Timber Industry Association, one timber company, an independent logger and farmer, Southern Oregon State College, the Farm Bureau, and Thompson Creek Residents for Ecological Education (TREE). Representatives of the Bureau of Land Management and the United States Forest Service were members of the board but became inactive as board members after objections that their participation violated the Federal Advisory Committee Act.

The Applegate Partnership began meeting four times a month on Wednesdays. These meetings continue, two Wednesday evenings and two Wednesday mornings each month.

The organization is not hierarchical and has no permanent paid staff. It does not intend to exist beyond several more years. There are no acting officers and no chairperson. Conveners of the meetings, who rotate every meeting, help facilitate the meetings. From the beginning, the idea of the organization was to provide a setting in which people, who usually fought with one another, could work together. They found that members generally agree on about eighty percent of the land use issues. And in working together they have learned to regard each other as decent people, not enemies.

### Model for AMAs

The idea of the Partnership was greeted with great enthusiasm by those concerned with the battles between environmentalists and producers in timber regions. In developing President Clinton's Forest Plan, the Department of the Interior cited the Applegate Partnership's process as a model for other forest-based communities. Under the Forest Plan, ten Adaptive Management Areas (AMAs) have been established in the west as sites for experimentation with the kind of substantive community participation in forest management planning that the Partnership exemplifies.

The Partnership experienced an adjustment in its participation when one of the regional environmental groups withdrew because of the Partnerships links to the AMAs. Some environmental groups see the AMAs as fronts for increased timber harvest. Following this, representatives of the federal agencies were ordered not to take part in the meetings because of the Federal Advisory Committee Act which requires that the agencies control any such meetings.

The Partnership, however, continued to meet regularly and overcame the setbacks. The federal government appointed an inter-agency liaison to attend the meetings. The environmental group that withdrew still continues to work with the Partnership on projects. And the Partnership has increased its base of local support by dealing with a number of important local issues.

### **Funding the Partnership**

An important part of the Applegate Partnerships activity is the Applegate Watershed Council. The board members of the Applegate Partnership along with other interested community members are members of the council. State lottery money is disbursed through the Watershed Councils in Oregon to be used for restoration activities in watershed areas. The Applegate Watershed Council has received almost \$500,000 in lottery money for various restoration projects. The money also funds the Applegate Partnership newsletter, Applegator, published six times a year. And it pays for people to supervise some of the projects.

The Partnership is applying for non-profit status. Since it formed, funds received have been funneled through organizations represented in the Partnership that have non-profit status. The Partnership now is in the process of applying for project-specific funds from federal, state and private sources.

### **Applegate Partnership Projects**

The Partnership has a number of on-going projects that build on local cooperation to provide for environmental, economic and social needs. A number of the projects are funded for the next two or three years. Projects include:

- providing for irrigation ditch projects such as headgates that improve agricultural capability and fisheries habitat restoration;
- improving access roads to reduce soil erosion; and
- providing free fencing for anyone who needs it to protect riparian habitat.

In the spring of 1995, the Partnership provided 60,000 trees that were planted on 140 individual properties. Several people were paid for part time work to supervise the project. Five-hundred volunteers did the planting. That project will continue in the spring and fall for the next two years.

Other opportunities for the timber industry, environmental groups, agencies and universities to work together have resulted in cooperative stream surveys, and watershed planning and integration using Geographic Information System mapping. In Summer 1996, the Partnership plans to employ 40 high school students at about 7\$ to 8\$ an hour to do projects in conjunction with a watershed-wide fuels reduction / fire management plan in which the Partnership, the BLM, the U.S. Forest Service, State Forestry, and private land holders are participating.

The Applegate Partnership also participates in a group called the Lead Partnership, a coalition of ten watershed groups similar to the Partnership. They meet monthly to discuss issues in common and, with the help of the Irvine Foundation, are organizing a summit (to be held October 6-7, 1995) to bring together national environmental and timber organizations to talk about how the communities of place can work with the communities of interest.

### **Commitment Key to Success**

According to members, several key elements have led to the Applegate Partnership success. One is that the group meets four times every month to ensure that as many people as possible have a chance to participate and make their concerns and ideas a part of the solution. In fact, anyone attending any meeting is encouraged to participate in the entire process. People with strong positions on any given issue are often asked to chair a subcommittee to develop solutions. Another is the refusal to establish a normal hierarchical organization so all participants have equal status, an important consideration in maintaining relationships between people with strongly opposing views. And finally, as one member says, "The Partnership is not for the faint of heart. Luckily we have had a group of people who are just too stubborn to give up. It's an extremely committed group."

### **Green Harvest Program McKeesport, Pennsylvania**

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**Scope:** Local/regional, urban/rural

**Inception Date:** 1991

**Participants:** Residents, farmers, volunteers

**Project Type:** Urban gardens, community supported agriculture, food production, job training

**Methods Used:** Education, training, demonstration, volunteer donations

**Lessons Learned:** A diversity of potential urban / rural linkages exist that benefit interests in both areas; skill-building is critical to helping low-income people move away from dependence on assistance.

### Summary of Project

The Green Harvest sustainable food system project was developed by the Greater Pittsburgh Community Food Bank in 1991 to generate nutritious produce for low income people while facilitating agricultural sustainability, economic development, and urban beautification in communities it serves. The program encourages self-sufficiency within local communities by teaching gardening skills, providing Food Bank member agencies with easier access to locally produced fruits and vegetables, and promoting the local economy with small business development. The Food Bank also attempts to link Green Harvests efforts with those of other projects designed to address the root causes of hunger and poverty.

**The project uniquely combines environmental concerns, community economic development, and direct service to low-income people in the following ways:**

- As a sustainable agriculture program and environmental enterprise that has resulted in new jobs (especially in low-income urban communities);
- By promoting accessible, well-planned garden space and retaining the community focus in urban/public housing areas; and
- By providing a multitude of opportunities for citizen and youth involvement in sustainable agriculture and environmental issues.

The Greater Pittsburgh Community Food Bank, a non-profit food distribution warehouse, distributes over one million pounds of food and grocery products monthly to over 370

soup kitchens, shelters, food pantries, and low income day care and senior citizen's feeding programs in Southwestern Pennsylvania. It has been in operation since 1980. Its 1995 budget is \$2.3 million, of which about \$1.2 million is derived from donations and grants, \$700 thousand from "regular shared maintenance" fees (of .05, .07 or .10 cents per pound to cover the cost of sorting and packaging donated food), and \$72,000 from its wholesale program.

Revenues to support the Green Harvest program come from CSA shareholder fees (see Longview Food Bank Farm, below), sales to farm stands, seed and produce sales, and foundation support that includes funding from an anonymous local foundation, the Center for Rural Pennsylvania, and Share Our Strength. Community Development Block Grant funding helped secure needed equipment for the farm. Total project revenues for 1995 are estimated at \$196,800.

### Program Components

The Green Harvest project has six inter-related components: Gleaning, Community Gardens, Longview Food Bank Farm, the Farmstand Project, Market Gardens, and links to City Parks Farmers Markets. The components link to one another and to the Food Bank in a variety of ways, as described in the following:

- Gleaning, a strategy for eliminating food waste on farms, organizes volunteers to pick surplus fruits and vegetables from local fields and orchards. When a farmer has edible crops that might otherwise go to waste, s/he calls the food bank and volunteer "gleaners" are sent to harvest the food for the benefit of the Food Bank's member agencies. The volunteers, which number in the hundreds, come from colleges, churches, member agencies, and businesses. Farmers who donate their produce to charity can benefit from tax credits. Since 1991, over 148,000 pounds of fruits and vegetables have been gleaned for the use of the Food Bank. In 1994, over 50,000 pounds of food were harvested during a total of 12 gleaning efforts. The estimates for 1995s gleaned harvest is 60,000 pounds.
- Community Gardens, organized to empower residents of low-income urban or public housing communities to learn to grow and share their own vegetables, are located throughout the Pittsburgh area. In the era when air pollution from industry was high, low-income housing was built on hill tops - places where no one else wanted to live.

Consequently, the low income areas of Pittsburgh, which are for the most part isolated and difficult to reach, have inadequate sources of high quality food. What is available is expensive and generally inferior. To address the need of these communities for high quality and reasonably priced food, the Food Bank offers seeds, equipment, and technical support for community gardeners in the first year of assistance. Involvement by the Food Bank is designed to lessen each year until the gardens operators become self-reliant and are able to maintain the garden on their own. The gardens beautify vacant urban land, bring residents together to improve their communities and learn new skills, and provide thousands of pounds of food to residents and local pantries. Since 1991, community gardens have been established in 11 separate urban communities. In 1995, the Food Bank is working with five community gardens, and a summer youth program that will engage 50 youth in neighborhood beautification, organic gardening and recycling projects, with related field trips throughout the summer.

- Longview Food Bank Farm is a certified organic farm located in Armstrong County, 35 miles north of Pittsburgh. The project currently uses 20 acres of the 125 acre family-owned farm. In 1994, the Food Bank assumed responsibility for operating the farm with the help of its owners and the families who are members of the related Community Supported Agriculture (CSA) program (see below). The Food Bank employs a farm supervisor who coordinates the growth of several acres of produce that are planted and harvested by volunteer groups, including many young people, and distributed to member agencies free of charge. A second parcel of land is dedicated to the CSA program, which grows produce for "shareholders" in the Greater Pittsburgh area who pay to have weekly packages of organic produce delivered to their neighborhoods during the growing/harvesting season. The farm also houses a demonstration garden and serves as host to high school, college, community garden, and farmstand workshops. The revenue generated by the CSA supports a portion of Green Harvests operating expenses. In 1994 \$25,215 was generated from 81 CSA share fees. In 1995, 100 share fees are expected to produce \$32,500 in revenues. Since 1991, the farm has produced more than 89,000 pounds of organic vegetables for the Food Bank. In 1994, the yield was

35,000 pounds. The goal for 1995 is an increase to 52,000 pounds.

- The Farmstand Project, makes fresh, Pennsylvania-grown produce accessible to low income communities through the development and operation of a community-run farmstand. It also provides small-scale business training and employment opportunities for community residents. The project, in a method similar to the Community Garden Project, aims to empower residents through technical assistance and training to eventually maintain the seasonal profit-generating produce stands themselves. Farmstands are run by managers who are residents of the communities. They accept cash, food stamps, and WIC Farmers Market coupons, and are supplied with produce from Longview Food Bank Farm and several other local grower/suppliers. Managers and staff are responsible for decision-making at their stands, including produce selection and sales/marketing techniques. Profits generated by Farmstands are used to sustain the project in future seasons. Host agencies in the communities act as program sponsors. Sites for Farmstands are chosen based on evidence of community support and location within needy communities. In 1994, farmstands were established in six separate inner-city communities. In 1995, six will be in operation, with six being assisted by the Farm Bank. This year also ushered in an expanded educational training program for Farm Stand staff that spans six one-day sessions. Topics covered included: advertising/community support, marketing, bookkeeping, sales and price-setting, produce and nutrition, and organic farming. As part of the training program, the Green Harvest Project developed a comprehensive manual to assist participants in the program. Included in the content are program requirements, a garden calendar, garden design and planning guidelines, growing methods, and information on soil, compost, mulches, seeds, insects, weeds, and diseases.
- Market Gardens link community gardens with Farmstands. Under this arrangement, community gardeners will be able to grow produce to supply a portion of the vegetables for sale at their own community Farmstands. In 1995, a third year community garden will link with a first year farmstand location. Also, with funding from the Center for Rural Pennsylvania, the assistance of Slippery Rock University interns, a search for a large

gardening plot within the city limits will be conducted. The goal is to employ homeless and low income people as farmstand suppliers. Other markets for the produce may be developed as well.

- City Parks Farmers Markets are another way area farmers assist in feeding the hungry. The Green Harvest Coordinator, at the beginning of the season, links Farmers Markets and Greater Pittsburgh Community Food Bank member agencies so that at the end of market day, unsold produce is not wasted but picked up by an agency closest to the market. This strategy is expected to harvest approximately 25,000 pounds of food in 1995.

### **Skill-Building to Break Free From Dependence**

The Green Harvest Project/Food Bank has not encountered challenges or barriers that it has not been able to resolve, either by reassessing expectations or by developing strategies to address them. The project is helping to fill the void created by the sharp decline in government commodity foods for the hungry. USDA allocations have been cut by approximately 75% in the last two years. As local agencies requesting donated food continues to grow the services of the Food Bank become increasingly important. In turning this challenge into a benefit, the Food Bank has come to realize that the production of wholesome, locally grown foods is a more self-sustaining and effective plan to meet the needs of the hungry. In addition, growing, selling, and harvesting food locally makes effective use of local land resources, stimulates the local economy, and exposes many people to the benefits of sustainable agriculture and social issues, such as hunger. And, realizing that it is no longer enough to provide increasing quantities of food to meet the needs of the poor and hungry, the project is addressing the root causes of hunger by giving people skills to break free from dependence on private food assistance.

### **Woonasquatucket River Greenway Project Providence, Rhode Island**

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**Scope:** Providence neighborhoods along the Woonasquatucket River

**Inception Date:** 1993

**Participants:** Community groups, statewide conservation organizations, educational institutions, city, state and federal agencies and residents from communities along the Woonasquatucket River

**Project Type:** Greenways, public education, restoration/cleanup

**Methods Used:** Environmental education, river clean-ups, community-wide events

**Lessons Learned:** Take one step at a time. It is important to maintain strong lines of communication among the people and organizations working on the project

The Woonasquatucket River Greenway Project in Rhode Island is an attempt to use the clean-up and revitalization of a river corridor as a catalyst for change in the economically depressed communities near the river. The Project is working to develop a greenway along the Woonasquatucket River along with opportunities for recreation, education, conservation, and community and economic development.

The Woonasquatucket runs through some of Providence's poorest neighborhoods and represents a potential recreational resource for these communities which are sorely lacking in recreational outlets for their children. Olneyville, the neighborhood that most of the river corridor passes through, is one of the neighborhoods in Providence designated as a federal Enterprise Community (EC) area and will receive economic development grants from the program. Only half of local residents have graduated from high school and over 36% of children live in poverty. While there is evidence of people occasionally walking along sections of the river, there is little active use of the river by community members, and there is no formal programming of events or activities in the river corridor. Two of the three publicly owned greenspaces along the river are closed and undeveloped.

The focus of the project will be the development of a 4.4-mile greenway and bicycle/pedestrian path stretching from the Johnston/Providence border to Waterplace Park in downtown Providence. Within a ten-minute walk of the proposed Greenway, there are only 2.1 acres of park space per 1000 residents, no soccer fields and four basketball courts. The project will provide visible and physical access to the now hidden river.

**The goals of the Woonasquatucket River Greenway Project are as follows:**

- increase the recreational and green space available to local residents;
- promote business development and reduce crime;
- promote river conservation and environmental action;
- increase awareness of local history and river ecology.

The Greenway Project is an effort of The Providence Plan, a not for profit corporation and joint venture of the City of Providence and the State of Rhode Island, created "to address the fundamental causes of urban decline, to create hope and new opportunity for the people of Providence, and to revitalize the city's neighborhoods." The Providence Plan is funded one-third by the City, one-third by the State and one-third from other sources.

### **Rediscovering a hidden community resource**

Jane Sherman, Director of the Greenway Project, calls the river "a trashed and hidden natural resource. People aren't even aware that the river is in their neighborhoods." The Greenway Project is attempting to change this by educating local residents about the river.

In February 1994, The Providence Plan and two other local organizations implemented an educational outreach program at six elementary and three middle schools in the Olneyville, Manton and Hartford neighborhoods. Armed with a large tri-panel map of the river and its neighborhoods, along with teacher resource packets filled with river facts, history and classroom ideas, outreach volunteers opened their sessions by asking, "Did you know that there is a river in your neighborhood? Who can tell me its name?" They shared some of the river's history, led discussions about water pollution and talked about creative ideas for what could happen along the river. Several teachers followed up by developing related classroom projects - murals, display boards, a "living map" of the river and an activity workbook - which were displayed at the Olneyville Library and the Woonasquatucket River Greenway Festival. During the summer of 1995, the Greenway Project worked with five community centers and the Olneyville Public Library to set up youth environmental groups that did their own mini-clean-ups in their communities as well as lead testing of paint and soil.

The Greenway Project recently hired a bilingual community outreach coordinator to work with the residents of the neighborhoods along the river. In addition to awareness and planning activities, she will continue the environmental awareness programs which are partially funded by an Environmental Justice Grant awarded to The Providence Plan by the EPA.

River Festivals are annual events that have been created to draw attention to the river. On June 17, 1995, over 750 people attended the Second Annual Woonasquatucket River Greenway Festival. An area business provided at least 500 free canoe rides for local residents, many of whom had never seen a canoe before. The first Woonasquatucket River Greenway Festival was held in Olneyville square on June 11, 1994 and attracted over 250 people.

### **River clean-ups**

The water in the Woonasquatucket is relatively clean for an urban river carp and ducks live in it. However, there has been a tremendous amount of trash dumped in the river, including tires, shopping carts and entire automobiles. The Greenway Project has begun organizing river clean-ups to reverse this problem. In May 1994, the Woonasquatucket Neighborhood Cleanup involved over 50 participants from the area. Volunteers picked up litter and debris from various sites along the Woonasquatucket River. On August 9, 1995 there was a neighborhood cleanup with 118 children from 14 - 17 years old from local community centers and the statewide anti-litter program sponsored by the Rhode Island Department of Environmental Management.

### **Collaborations with other groups and agencies**

In January, 1994, the National Park Service announced the adoption of the Woonasquatucket River Greenway Project as part of its Rivers and Trails Conservation Assistance Program. In November, 1994, the Lila Wallace-Reader's Digest Fund announced its Urban Parks Initiative, and awarded a total of \$859,632 in grants over four years to the Trust for Public Land and The Providence Plan for developing greenspace along the Woonasquatucket River. Of the total, \$419,432 will be disbursed to The Providence Plan for its community involvement efforts in the planning, design and implementation of the project. The Trust for Public Land (TPL), a national nonprofit conservation group and a partner in the Greenway Project, will receive the balance to work on land acquisition and easements. TPL will use most of the funds for environmental assessments of "brownfields," site assessments, legal fees and other aspects of land transactions. They will use \$20,000 to create a revolving loan fund for small businesses near the river corridor.

The Providence Departments of Parks and Planning and Development have been active participants in the Woonasquatucket River Coalition and have contributed staff time and expertise to this project. The Rhode Island Department of Administration, Division of Planning, has

awarded funds to The Providence Plan for parcel based GIS (geographic information system) mapping of the Woonasquatucket River Greenway Corridor. Funds for preliminary engineering studies of the corridor for a bike and pedestrian path have been allocated by the Department of Transportation through the Congestion Mitigation Air Quality Program.

"We have benefited from the strong support and participation of non-profit organizations and institutions including universities in Rhode Island, the Rhode Island Audubon Society, Save the Bay, and many local community organizations," says Jane Sherman. "Professor Harold Ward from Brown brought in his class to do studies along the river. University of Rhode Island graduate students conducted neighborhood surveys on housing, recreation and other indicators of neighborhood needs. A Johnson and Wales professor is looking at access points along the river. A representative from the Rhode Island Audubon Society gave a nature walk in an abandoned park along the river. It's a real collaborative effort."

### **Community participation key to project's success**

According to Jane Sherman, one of the greatest current challenges for the Project is to solicit citizen opinion, and then go out and find mechanisms for developing and maintaining the project. "It is the people whose daily lives are and will be affected by the river and its environment who must have a strong voice in what, when, where and how the overall project will develop," stresses Sherman.

There were about 17 meetings in the community during 1995 with attendance ranging from 3 to 30 people. Sherman feels that it is sometimes difficult to draw participants to these meetings because residents are already involved in efforts to improve their community and their own quality of life. "You find in many of these neighborhoods that people have many meetings to attend."

Sherman says that after raising awareness of the river, the Greenway Project is entering a new phase "where we'll be going to the community and talking to them about the role of the river and what they would like to see along it. So rather than ask the community to come to us, it is very important for us to talk to the community where they are. We want to talk to them about how they would like to use the river as a resource in their neighborhoods."

A key element in the early success of the Woonasquatucket River Greenway Project has been the effectiveness of efforts

to raise awareness of the river in local communities.

According to Jane Sherman there has been a noticeable change in awareness of the Woonasquatucket River. Before the Project began, most area residents didn't even know the name of the river and referred to it using the name of a local supermarket that was near the river. On August 15, 1995, Sherman attended an Olneyville Celebrates Olneyville meeting which included a game of historical and geographic questions about Olneyville. She said that when there was a question asking for the river's name, "There was a chorus of kids answering the name of the river "Woonasquatucket."

## **Sea Islands Preservation Project St. Helena Island, South Carolina**

**Contact:** Emory Campbell, Executive Director; Joseph McDomick, Dir., Land Use & Environment Program; Sarah Bobrow, Economic Development Planner; Penn Center; P.O. Box 126; Martin Luther King Jr. Drive; St. Helena Island, SC 29920; Tel: (803) 838-2432; Fax: (803) 838-3139

**Scope:** Coastal islands of South Carolina

**Inception Date:** 1992

**Participants:** Local residents; public officials; local and national nonprofits

**Project Type:** Economic development, cultural/historic preservation, leadership development/training

**Methods Used:** Comprehensive planning, training and education, legal assistance

**Lessons Learned:** Importance of training local leaders; time demands of fund raising on a small staff.

### **The Sea Islands**

The Sea Islands of South Carolina and Georgia are located between the coastal estuaries of the mainland and the Atlantic Ocean. Before the Civil War most of these islands belonged to large plantation owners. In 1861, when Union forces established a headquarters in the coastal town of Beaufort, SC, these properties were abandoned by the owners and in 1862, by an order of President Lincoln, set aside for the soon-to-be-freed slaves. For over a century these natives and their descendants maintained a way of life closely linked to the land, sea and community. Traditional livelihoods that revolved around agriculture, fishing and oystering depended upon basket weaving, fishing net knitting, boat building, and blacksmithing skills. Their language, Gullah, a blending of

English and West African languages, is still spoken by some of the residents.

Recently, however, these communities have come under increasing pressure from resort development, which is polluting the environment and threatening the loss of their land, culture and way of life. Forty percent of South Carolina's coastal shellfish beds are now closed due to pollution from runoff from new roads, parking lots, golf courses, and lawns. Access to sources of sea grass used in traditional basketweaving has been cut off by private coastal development, forcing weavers to buy grass from Georgia and Florida. Property taxes and land values have escalated.

Although the Sea Islands belong to some of the wealthiest counties in the State, the native population has not shared in this prosperity. Unemployment rates are high and low-skill jobs in the nearby resorts provide low wages, no benefits, and little opportunity for advancement.

### **New directions**

The Sea Islands Preservation Project was started in 1992 to educate and train local community leaders and landowners in strategies that will preserve their land and the culture and environment of their communities while developing economic activities that are in harmony with the natural environment and traditional way of life. Its main focus is on St. Helena Island, just off Beaufort, SC although its lessons can be applied to many of the other islands equally threatened by extensive resort development. A combination of citizen education and leadership training, sustainable economic development, and land-use planning serves to achieve its preservation goals. Partnerships with regional and national groups enhance its activities and provide much needed legal and financial advice and support.

The Sea Island Preservation Project is a program of the Penn Center, an historic institution, which was founded in 1862 on St. Helena Island by northern abolitionists to teach self-sufficiency. Today, the Penn Center continues this educational focus and, in addition to the Sea Island Preservation Project, has a museum, a conference facility, educational enrichment programs for children, and an early childhood "at-risk" family initiative. Its programs are funded through foundation and government grants.

### **The Penn School for Preservation**

The Project's first priority was to set up a facility to train community leaders and public officials who could then begin

the process of building a community vision and formulating a strategic plan for St. Helena Island. The Penn School for Preservation was started in 1993 in collaboration with the South Carolina Coastal Conservation League and the Neighborhood Legal Assistance Program.

Meeting on weekends for six months, the first class of 37 community leaders and public officials from St. Helena Island and other coastal communities studied planning, zoning, growth management, community economic development, the environment, and other issues. Applying what they had learned, participants then broke up into committees to explore several economic development projects.

The 1995 class, composed of both graduates of the previous year and new participants, built on this process, drafting specific strategies and holding public forums to broaden the constituency of those committed to a sustainable future for St. Helena Island. Their goal was to create a master plan that would include a economic feasibility study for the development of the Corner Community, the "traditional commercial heart of St. Helena Island"; a set of regulations to preserve the character of this area and revitalize its economy; and land-use goals for the whole island. Between sessions community leaders had the opportunity to attend numerous regional and national conferences on community development issues.

### **Home-Grown planning proposal**

The studies done by participants in the Penn School for Preservation formed the basis for both a Master Plan for St. Helena and an application for a U.S. Department of Agriculture Enterprise Community grant, submitted in 1994. Although this grant was not funded, the planning itself initiated numerous comprehensive strategies for human and economic development.

### **Establishment of an economic development strategy**

One of the first steps was to set up the South Carolina Coastal Community Development Corporation (SCCCDC) that would be the lead organization for building and implementing economic development strategies, for providing local residents with needed business and leadership skills, and for applying for financing from a variety of sources.

Based on the Enterprise Community application, the SCCCDC applied for a U.S.D.A. set-aside of \$1 million in May 1995 to build a farmers market and food center in the Corner Community that will include a large commercial kitchen to

process and then market locally grown produce and seafood. Modeled after the Spokane Business Incubator and Business Center Project in Washington State, it will also house a business center, giving local residents access to computers, fax machines, and on-line computer linkage to food industry databases.

### **Product development and marketing strategies**

One of the main objectives of the Sea Islands Preservation Project is to develop economic enterprises based on traditional folk arts and crafts, the production of Sea Islands and African specialty foods and agricultural products, fish and seafood, and value-added forest products. Access to loans, technical assistance, and development of local farmers markets and national niche markets for specialty goods are all major components of this goal. To develop local crafts a Folk Art School is planned that will teach traditional arts and crafts, using locally available natural resources such as wood and sea grass. The school will also offer instruction in business techniques and include a marketing component for school graduates. It will be open to non-residents in the summer.

### **Legal assistance for land ownership**

Because land has traditionally been handed down to subsequent generations without documentation, the lack of clear titles to property have made land vulnerable to purchase by developers and complicated the access to bank loans for home ownership. Workshops are held to help island residents hold on to family land, giving assistance with wills and deed transfers. Participants are taught how to avoid "partition sales", a strategy used by developers to gain control over a tract of property owned by numerous heirs whose shares are not carefully defined. Individual counseling sessions and assistance help landowners clear title to their property to insure it will remain under their control. Plans are in place to seek funding for home construction.

### **Land Use Planning**

With the help of graduates of the Penn School the Project researched and analyzed many issues relating to land-use planning and zoning in preparation for the zoning revision required by the state every five years. It has also explored other options to zoning revision such as purchase of "development rights" and conservation easements. It has sought partnerships with national non-profits to help research and fund these efforts. Other studies on property tax and agricultural-use tax issues are also part of the Sea Islands Preservation Project.

### **Historic building preservation**

In order to preserve valuable assets and restore the Corner Community's traditional function as the commercial and cultural center of the community, extensive research has been carried out into a variety of historic designation possibilities, purchasing options of some of the historic buildings, and funding opportunities to accomplish these objectives.

### **Sustainable Forestry**

To prevent a 328-acre forest on St. Helena from being clear-cut, project staff hired a forester to timber the property in a sustainable manner, selectively cutting trees so that timber would still be available for the future. In the process, the community made a greater profit than had the forest been clear-cut.

### **Challenges**

In three years The Sea Islands Preservation Project has shown the community of St. Helena Island what is possible with commitment, expertise and innovative coalition-building. By providing the training and structure needed to create a vision and define objectives, the Project demonstrates that communities can develop successful strategies that have human, economic, and environmental dimensions while preserving traditional lifestyles and values. As with many new undertakings, attention must now be paid to building an infrastructure that can implement these activities, strengthen the capacity to meet complex funding requirements, and keep the momentum going for years to come. However, the groundwork has been laid for a community-based comprehensive approach to economic development that builds on the rich traditions of the past to ensure a sustainable future.

### **The Lakota Fund Kyle, South Dakota**

**Contact:** Elsie Meeks, Executive Director; P.O. Box 340; Kyle, SD 57752; Tel.: (605) 455-2500

**Scope:** Pine Ridge Reservation

**Inception Date:** 1987

**Participants:** Oglala Lakota Tribal members, banks, foundations

**Project Type:** Alternative lending/investment, community economic development

**Methods Used:** Peer group microenterprise lending, small business loans, business incubator

**Lessons Learned:** It is important to hold to your mission but remain flexible in your strategy.

The Lakota Fund is a community development organization that fosters the social and economic development of Oglala Lakota tribal members on the Pine Ridge Indian Reservation. The Fund's main tools are business loans, sectoral intervention and technical assistance applied in a culturally appropriate manner. More recent projects include construction of a small business incubator and affordable housing loan packaging.

Since 1987, the Lakota Fund has made over 220 small and micro-loans amounting to \$800,000. Loans are available through two programs: the Circle Banking Project, one of the first micro-enterprise loan funds established in the United States, provides opportunities for both borrowing and saving to people who otherwise lack access to credit and bank accounts. The Small Business Loan Program is the next step in providing access to credit, lending up to \$25,000 to individuals who operate small, formal businesses or to start-ups with a feasible business plan.

### **Circle Banking**

Circle Banking uses a peer lending model. Four to six members of a community join together and participate in five training sessions before becoming a certified circle. The members decide who first will receive an initial loan of not more than \$400; collateral is not required, but the circle members become co-debtors. Additional loans, ranging from \$100 to \$1,000, are conditional on successful repayment of the first loan and on regular attendance by circle members. Loan payments and savings deposits are made bi-weekly at circle meetings with a staff member.

Lakota Fund Director Elsie Meeks notes that much of the program is about education. "If I were to identify the one most valuable aspect of Circle Banking, I would have to say that learning to deal with and solve problems is more important than even the loans." Although circle lending generates only one tenth of the volume of individual loans, the program reaches the poorest in the community with the least financial experience. Meeks describes how an initial loan of \$250 several years ago gave a mother of five children who was a recovering alcoholic a chance to become independent, start her own custom beading business and begin steps toward getting off welfare. She was able to remain sober, became Chairperson of her circle, does not miss meetings or payments

on successive loans, has seen her sales rise each year, and sets an example for other circle members throughout the community.

### **Support for small businesses**

To receive a Small Business Loan for a start-up, an entrepreneur must take a six week training course that screens out people unwilling to invest the time and effort to create a successful business. The course assists people to learn from each other while learning the fundamentals of business success. Lakota Fund staff provide the training, review applications, monitor reporting and debt collection. The Fund also provides technical assistance for business plans and for ongoing operations.

The Lakota Fund began in 1987 as a project of the First Nations Development Institute, based in Virginia. For fourteen years, First Nations has worked with tribes and Native people to "change the economic environment of reservations to one that builds on local resources, is sustainable, recognizes Native knowledge and culture, and supports development from within." Meeks notes that becoming independent from First Nations in 1991 was a milestone in the development of the Lakota Fund because "then we took the responsibility for our success or failure."

When the Lakota Fund began, staff had run their own businesses but lacked experience in lending and organizational development. The "long learning curve" was one of the barriers they had to overcome. Besides First Nations, their most important resources were the other new micro-enterprise loan funds grappling with similar issues. The National Association of Community Development Loan Funds and the Association for Enterprise Opportunities facilitated networking. The Ms. Institute's Collaborative Fund for Women's Economic Development and Economic Development Training Institute also provided assistance.

Now an independent organization, the Lakota Fund is staffed by four tribal members. The nine-member Board of Directors is also composed of tribal members who reside on the reservation, with one slot left open for a professional from outside (this slot is currently filled by a tribal member from a neighboring reservation). Having community members who are committed to the area as the staff and board has been a key element of the Fund's success and survival.

The Lakota Fund's budget in 1994 was \$328,442. The organization generated \$36,500 in interest income from loans and investments. The rest came from foundations,

corporations, individuals and religious organizations willing to invest in the fund for a 0-4% rate of return.

The Fund's loan loss rate is about 10 percent and delinquencies range from 15-25 percent, sometimes as high as 35 percent. These rates, however, must be judged in their extremely high risk context. The Pine Ridge Indian Reservation, the home of over 20,000 Oglala Lakota, ranked as the poorest county in the United States in both the 1980 and 1990 Census. Unemployment on the reservation hovers between 75 and 85 percent; the main source of income to the reservation is federal programs for education, health and tribal government, ranching and farming. Most of this income is spent outside in border towns because of the lack of a business sector on the reservation.

### **The Lakota Trade Center**

One of the main barriers to setting up businesses on the reservation has been the lack of available commercial space. In May 1995, the Lakota Fund broke ground for the construction of the Lakota Trade Center, a 13,000 sq. Ft. building that will house the Fund and provide commercial space for seven retail or service businesses. These ventures will remain in the center for three to five years, until they can construct and operate out of their own space. The \$1.25 million construction project is being funded by a \$1 million grant from the Economic Development Administration, \$180,000 from the Bush Foundation, and \$80,000 from NorWest Bank/South Dakota. Rental income will cover operating expenses.

One of the tenants in the new facility will be an arts and crafts marketing cooperative. Because many of the Circle Banking Project members are arts and crafts producers, the Lakota Fund began to offer informal marketing assistance. This program will now become a formal entity with its own board of directors. NorWest Bank has approached the Fund about opening a branch office in the new Lakota Trade Center. The Fund had considered developing a credit union but may choose the bank branch rather than taking on another new project.

The former director of the Lakota Fund, Gerald Sherman, asserts that "Indian people have shown that they will not accept those things that are culturally or environmentally damaging but will allow new concepts to become culturally appropriate." He believes that the peer lending method used by Circle Banking is more successful than previous methods tried in Pine Ridge because it modifies the traditional tiyospaye, or living group, in a way that is acceptable, and because the

method allows people to use the money on their own terms. For example, one woman who uses her loans to buy materials for quilting makes two quilts at a time, selling one and keeping one to give away since "the traditional measure of wealth was not how much you could accumulate but how much you had to give." She uses part of her earnings to make loan payments and the rest to buy more supplies.

### **New focus areas**

The Lakota Fund remains flexible in developing new programs and focus areas in order to fulfill its mission. Recently, the Fund has begun to work on affordable housing development, also a huge need on the reservation, by packaging housing loans for the Farmers' Home Mortgage Association under a contract with the Housing Assistance Council to build expertise in this area on the reservation. The Fund is beginning to discuss packaging a low-income housing project. Later, after careful planning and research, the Fund may go on to capitalize a housing loan fund.

### **Highlander Research and Education Center Environmental Economic Program (EEP) New Market, Tennessee**

**Contact:** Susan Williams; Coordinator; Environmental Economic Program; Highlander Research and Education Center; 1959 Highlander Way; New Market, TN 37820; Tel: (615) 933-3443; Fax: (615) 933-3424

**Scope of organization:** Rural areas in the Appalachian region and the deep South

**Inception Date:** 1932

**Participants:** Individuals, nonprofit organizations, Latino, African American and Native American communities

**Project Type:** Leadership development/training, community development, coalition building

**Methods Used:** Residential education, adult leadership training, workshops, resource and financial support

**Lessons Learned:** Solutions come from the people. Effectiveness of convening individuals from diverse backgrounds and interests.

"People were in pretty bad shape. But at Highlander we learned how to handle our daily problems, to do by organizing, by showing our power and our strength. . . The

most important thing the people ever learned from Highlander was how we could help ourselves." *Henry Thomas*

## **Unearthing Seeds of Fire: The Idea of Highlander**

### **Background**

Located on a farm in the Smoky Mountains in East Tennessee the Highlander Research and Education Center, formerly the Highlander Center, began in 1932. For over half a century it has helped individuals to empower themselves through an effective process of learning and discovery that evolved under the tutelage and dedication of one of its founders, the late Myles Horton, and many others. Its participatory learning approach has proven to be a very effective means for persons from all different backgrounds to begin to think in new ways and to apply the information to local issues that they choose to address.

Over the decades Highlander has been known principally for its work on social change and education in the areas of labor, civil rights and Appalachian issues. In 1981 a PBS documentary featuring the work of Highlander was presented by Bill Moyers. In 1982, the Center was nominated for a Nobel Peace prize in recognition of its work on behalf of human rights.

Highlander works mainly with community groups in Appalachia and the deep South, servicing the areas not usually served by mainstream programs: the coal hollows of eastern Kentucky, the coastal regions of South Carolina, and Native American and growing Hispanic communities in the southern region. This is an area that continues to lead the nation in poverty: the South has over half the nation's persistently poor rural counties and the highest percentage of the nation's working poor. Because of the difficult working conditions and environmental degradation in these communities, Highlander has been developing programs that integrate both economic and environmental strategies.

Highlander's board and staff reflect the diverse cultures it serves. Half the Board are people of color and its staff reflects racial and gender diversity. Highlander's support is primarily from individual donations and grants from foundations and churches. It also receives revenues from the sales of its publications and rental of its facilities.

### **Facilitating Change**

Highlander conducts residential workshops, provides ongoing technical assistance, helps organizations network, and carries out field work in communities. It has an extensive resource

center in New Market which is available to individuals and groups. Through its participatory research program it documents local cultures. Through its youth and internship programs it helps to develop future leaders.

In the 1990s it has begun to link issues and constituencies in a broader context. It describes its programs as multi-issue, multi-cultural and inter-generational. These include:

- An Environmental Economic Education Program
- A Community Environmental Health Program
- Southern Appalachian Leadership Training Program
- Culture and Diversity Initiative
- Global Education Project
- A Residential Education Program

### **Environmental Economic Program (EEP)**

In 1989 a new initiative was created to link economic and environmental issues and programs. Formerly segmented programs were coordinated under a single program. The goal of this program is to bring together individuals from diverse communities to analyze their problems, share ideas, learn from each other's experiences, and to develop action plans that can be implemented in their own communities.

In each periodic cycle, three to seven community-based organizations are selected which represent a wide range of issues. For practical reasons, most of the selected representatives are from the nearby region. The selection process is competitive and staff members make site visits to assess the organization's capability and commitment to carry out a project.

The number of participants depends on the availability of funding. Each organization commits to attend five weekend workshops and to develop and implement a project in their community that will contribute to its long-term sustainability. For example, they have examined such issues as the cleanup of abandoned PCB dumps, explored the feasibility of rural recycling programs, and identified opportunities for using organic agriculture to save black-owned family farms.

One indication of the growing effectiveness of this program is the increase in numbers of applications received and the numbers of organizations that are willing to commit the time and resources necessary to participate. For most organizations this is a significant outlay of time and resources, especially those staffed by volunteers. Common limitations include lack of funding and personnel and adequate background in

leadership training. Each organization receives a stipend up to \$4000 to cover expenses.

Most of the workshops take place at Highlander but every attempt is made to schedule one or two in one of the participating organization's neighborhood. This has the benefit of increasing understanding of local conditions as well as cultural, racial and ethnic issues.

Recent participating groups included one in West Virginia located in an area that has suffered from economic and environmental degradation as a result of coal mining. As a result of Highlander's training, this group has been able to galvanize the community to rebuild the sewer system and other parts of the infrastructure. In Atlanta, another group in a low to middle income neighborhood successfully had a nearby site redesignated from a proposed landfill into a neighborhood park.

Although it is difficult to document or even evaluate some of the outcomes that result from this practical, hands-on process, there seems to be a greater application of integrative thinking in strategic project development and problem-solving. Another change that is occurring is greater long-term thinking. This is important as most of what our society and institutions encourage and reward is short-term approaches that may work for the near term but do not develop the foundation nor invite the widespread participation that can offer more permanence and chance of long-range sustainability.

In April 1993 Highlander brought together fifteen groups to evaluate the impact of the program. In addition to the training, many have found Highlander's publications to be extremely valuable in developing and implementing their projects. Some of the groups with whom it has worked include Rural Action, the Community Farm Alliance, Jesus People Against Pollution and Americans for a Clean Environment.

### **Catalyst for Other Initiatives**

Some of the groups who have benefitted from Highlander's training have proceeded to form other organizations. One example is the Coalition for Jobs and the Environment which led to the creation of the Clinch Powell Sustainable Development Forum, a regional consortium of community organizations, small businesses and public agencies in southwestern Virginia and upper east Tennessee. With assistance from the Virginia Center on Rural Development, the Forum is working to help communities meet their needs; establish ecologically sensitive businesses, promote sustainable livelihoods, and sustain local resources. Since its

inception in 1993 it has created the Highlands Bio-Produce Network; eco-log, an alternative forestry and wood products company; several microenterprises; and the development of a nature tourism plan.

### **The STP Schools: Education for Environmental Action**

Through a related program, the STP leadership workshops, begun in 1989, have brought together over 800 people from 45 states and a number of other countries. The goal of these workshops is to help community leaders become more effective in addressing local environmental problems by linking them with other participants working on related issues. Participants have included factory workers, teenagers and retirees, teachers, miners, Latinos, Native Americans and African Americans.

With little access to money and information, what these individuals need most is to learn from each others' experiences, about ways they can help each other, and about approaches that work. In each workshop they share ideas and brainstorm practical actions that they can then apply locally.

### **Challenges**

While most of the focus is on the poorer areas of Appalachia and the South, increasingly Highlander has found it important to build bridges with grassroots groups working on similar issues in other parts of the country and the world. Although an impact may be local, the cause is frequently way beyond regional and national borders. In this regard, groups facing common challenges are linked in order to learn from each other and contribute to the greater public dialogue. One of the greatest challenges is developing long enough range programs to help build community.

### **Colonias Program College Station, Texas**

**Contact:** Dr. Duncan Earle; Associate Director for Research; Center for Housing & Urban Dev.; College of Architecture, MS 3137; Texas A & M University; College Station, TX 77843; Tel: (409) 862-2370; Fax: (409) 862 2375

**Scope:** Local/county/regional, rural

**Inception Date:** September 1991

**Participants:** Residents, federal, state and county government, university faculty and students

**Project Type:** Community development, economic development, leadership development

**Methods Used:** Building partnerships; using Community Resource Centers as platforms for partnership, action research, dialog and community identity.

**Lessons Learned:** Helping means "listening, learning, leading, and leaving"; self-development equals sustainable development; communities get built, become sustainable around common ground; sustainable communities are ones that know where they are, who has power and resources, and where they are going.

### Summary of Project

The Colonias Program, spearheaded by Texas A&M University, is designed to assist residents of low income settlements, or colonias, in improving the quality of their lives. The program is designed to catalyze "community self-development," a process whereby the majority of the residents become involved in activities to strengthen the social infrastructure of the community, which in turn supports meaningful and appropriate development as determined in partnership with the residents of the community's physical and economic infrastructure. The program seeks to do this by providing a venue for communication, education and the delivery of social and health services.

The Colonias Program is run by the Center for Housing and Urban Development, College of Architecture, Texas A & M University. The primary financial support for the Colonias Program (\$911,000 - \$958,000 per year) comes from the Texas Legislature. The Colonias Program leverages the Legislatures funding by soliciting and receiving additional funding, both in-kind and cash, from a variety of sources including county governments, private companies and organizations, and federal agencies (\$580,000 was recently granted by the U.S. Department of Housing and Urban Development for the establishment of a Community Outreach Partnership).

The Colonias Program works in partnership with colonia residents, county governments, local, state and federal agencies, non-profit organizations, and several other member institutions of the Texas A&M University system (including the Texas Engineering Experiment Station, Texas Agricultural Experiment Station and Texas Transportation Institute).

### History

Colonias, which have sprung up along the U.S. / Mexico border in response to a shortage of low-income housing, have

increased dramatically in the last two decades. High birth rates, immigration and migration in response to the border industrial boom, all contribute. Land developer response to a decline in low-income housing has led to the sale of unregulated lots, affordable for the truly poor (ex., \$20 down, \$40 a month). Purchasers of these lots proceed to build homes, usually shacks of recycled materials, or dilapidated trailers or campers, some of which eventually evolve into substantial, if not always code, houses. The following data sums up the status and inherent challenges of these settlements:

- There are 1,436 colonias (1,193 in 1992) in Texas alone;
- These settlements are home to an estimated 340,000 residents (280,000 in 1992);
- Approximately half of Texas colonia residents do not have adequate water supplies;
- 1,190 out of 1,193 Texas colonias surveyed in 1992 have no approved wastewater services;
- A large majority of colonias have dirt roads, not even including gravel surfaces, and have no surface drainage systems;
- Incidence of health problems is high. Flooding is common in many colonias, making the existence of privies an additional health problem;
- Education levels are quite low. School drop-out rates are high;
- Median annual income is estimated at \$7,000-11,000 per household, depending on location along the border. Typical family size is 5-6 people;
- It is common for half of the lots in a colonia to be unoccupied and available for use; the population within colonias in which the Colonias Program is working appears to be continuing to grow at a rapid rate, as much as 7-10% a year.

### Reducing Isolation with Community Centers

Colonia residents, the majority of whom are of Mexican or Mexican-American descent, are isolated by geography, by limited transportation, by a limited understanding of the assistance programs available to them, and by their limited ability to read and write English. The Colonias Program is targeted to assist in reducing their isolation from the education, health, and human services programs that could help them help themselves to greater, sustainable economic self-sufficiency and well-being.

The Colonias Programs core activity is to establish Community Resource Centers (CRCs) within colonia communities. The following are elements of the program:

- Community Resource Centers are constructed within colonias, after input from residents about the programs they need. These centers are built on land provided by county governments or not-for-profit entities.
- Public and private agencies are recruited to deliver education, health, and human services programs on a part-time, shared-space basis in these centers. Other member institutions of the Texas A&M University System help deliver job training, communications, transportation planning, family programs, youth programs, leadership training and community development training.
- Residents participate in the programs of the centers, to develop community organization skills, to interact with service providers, to express residents' preferences and needs, and to interact with the county government that owns and operates the building. These activities help them begin to understand "the system" from which they have been previously excluded. Residents can sponsor their own programs and other activities, including weddings, baptisms, queen of the colonia coronations, and Mother's Day, Father's Day, and "Day of the Child" celebrations. It is neutral space between the private space of the home and the alien space of the city, where people can easily and freely come together and interact. Such meetings can be by design or the result of informal contact while awaiting a service or seeking information.

In addition, the Colonias Program is beginning an effort to develop the means of stimulating sustainable economic development in colonias, for residents.

### **Measures of Success**

The Colonias Program, which began its current phase of conceptual and programmatic development in September 1992, opened its first Community Resource Center in March 1994 in Cameron Park, population 4,800, located near Brownsville, Texas. Also completed that month was a CRC in El Progreso, near Weslaco, Texas, population 2,500 people. Since then two other CRCs, El Cenizo near Laredo (population 5,000) and Montana Vista, near El Paso (population 7,400) have been opened; two more are

committed, and another three are expected for FY 1996. These nine centers will serve approximately 45,000 previously isolated people per year.

Key to the success of the Colonias Program is what is referred to as "action research" conducted by University researchers and students. The idea is that by focusing research specifically on issues that impact colonias program success, one can guide, evaluate, and redesign the development process as the implementation of the program proceeds.

### **Measures that reflect the effectiveness of the CRCs are:**

- 110,000 clients served to date (July 1995);
- Currently serving 9,500 clients per month, to increase to 12,000 by September 1995;
- 120 agencies, public and private will be providing education, health, human services, community development and youth programs each month through the four existing centers;
- The number of client contacts in Cameron Park Resource Center increased to 5,600 in July 1995 from an average of 3,000 in prior months.
- The number of client contacts in El Cenizo Resource Center increased to over 6,000 in July 1995 from an average of 2,500 in prior months.

Particular emphasis has been placed upon the design of the Community Resource Centers, with the goal of creating attractive, high-quality, and culturally appropriate structures to serve as focal points for the communities. This is a conscious strategy of the Colonias Program, one that is intended to offer a concrete expression of hope for community residents and provide environments in which service providers and residents can feel comfortable. The Community Resource Centers feature classrooms, examining rooms, an auditorium, and other social spaces. Their cost averages about \$300,000, which includes a parking lot and, generally, a park area behind the building that includes a play/activity center for children, benches, barbeques and landscaping. In addition to accommodating health and social service providers, each center has a VCR video and book library, a community kitchen, copying services for community events, and a bulletin board for community events and social service announcements.

After a center is constructed it is turned over to the county in which the colonia resides. The county government commits to operating and maintaining the centers with the help of the colonia residents.

## Problem solving for the Future

Barriers encountered in the Colonias Program revolve mostly around bureaucratic delays and the challenges of working in partnership with a diverse group of interests that occasionally have turf, institutional, and other kinds of conflicts. However, such problems are part of everyday life for those learning to use a new and unfamiliar system. The Colonias Program sees problem-solving by colonia residents as an essential educational experience that their participation in the CRCs affords. Because of this, the obstacles as well as the resources serve the colonia residents in the end.

All in all, the obstacles pale against the demands. The greatest challenge is the need for more centers.

## Grantsville General Plan for a Sustainable Community, Grantsville, Utah

**Contact:** Eugene E. Carr, AICP; Adjunct Professor, Urban Planning; Center for Public Policy and Administration; University of Utah; 2120 Annex; Salt Lake City, UT 84112; Tel.: (801) 581-6491; Fax: (801) 585-5489; E-mail: ecarr@cpga.utah.edu; Neal Cline, Toole County Engineering; Tel.: (801) 882-9160

**Scope:** Local/county, rural township

**Inception Date:** September 1993

**Participants:** University students and faculty advisor, community residents, high school students, farmers, historic committee, Soil Conservation District Commission,

**Project Type:** Community planning/growth planning

**Methods Used:** Research, survey, report

**Lessons Learned:** An accurate assessment of local conditions is necessary to develop approaches to sustainability.

### Summary of Project

The Grantsville General Plan for a Sustainable Community is a model plan prepared for a small rural community in Utah. The plan was developed during the 1993-94 school year by a team of university students as a class project. The city of Grantsville is now rewriting its Master Plan in response to the student's work and is including many of the elements relating to community sustainability.

The student effort was performed in consultation with representatives from the local community. Although the report clearly says that this is not equivalent to a professional product, the large team of students spent a considerable amount of time on research and analysis, and the results are highly informative.

### The goals of the project were to:

- provide guidance to assist in understanding the current and future capabilities of the community;
- provide a guide for Grantsville to become more environmentally sustainable;
- facilitate a viable, marketable, profitable and sustainable economy; and
- achieve a stable, healthy and enjoyable community through sensitive urban design.

The plan outlines specific actions that Grantsville may take to realize sustainability. They include:

- achieving a balance between resources used and resources generated;
- assuring that resources are as clean (or cleaner) at the end of use as at the beginning;
- assuring that the viability, integrity and diversity of natural systems are restored and maintained;
- achieving enhanced local and regional self-reliance;
- creating a sense of community and maintaining historic cultures; and
- assuring that each generation preserves its legacy for future generations.

### Project Methodology

The project was sponsored by the Department of Geography of the University of Utah in Salt Lake City. Twenty-six undergraduate and graduate students prepared the plan as part of a two-semester Community Planning Workshop. The student group included the County Planner for Toole County, who is also responsible for community planning in Grantsville. Another member of the group was a professional engineer who contributed to the geologic sections of the plan. Both of these individuals were working on advanced university degrees.

The student team worked under the direction of an adjunct professor, who is a professional planner and serves as a Community Development Advisor at the University's Center for Public Policy and Administration. Staff members and elected officials of both the city of Grantsville and the

surrounding Toole County and members of the Grantsville historic committee and the Grantsville Soil Conservation District Commission provided information and assistance. Local citizens provided information on community characteristics and desires in a telephone survey of 152 heads of households and in questionnaires completed by 55 high school seniors.

### **Identifying Community Characteristics**

The team members conducted extensive research into the characteristics of the community as a basis for developing specific recommendations. Data on the population and demographics of the community, which is located about 30 miles southwest of Salt Lake City, indicates that the city has a population of about 1,100 families, containing approximately 4,720 persons. Data used for a social-cultural analysis covers community activities, crime, housing, social services, and public facilities. A comprehensive environmental analysis includes detailed data and discussions on topics such as: seismic conditions, which present significant hazards; ground water hydrology, which affects the supplies of water available for irrigation during the dry summer months; and land and climate characteristics, particularly soil conditions that affect agricultural productivity. The environmental analysis also discusses wildlife habitats, wetlands, air quality, and alternative agricultural approaches.

Additional research provided data and discussions of local public facilities and safety, covering the police and fire departments, health care, provisions for emergency response and evacuation, and natural resource consumption. An analysis of the local economic base identified a work force of 1,965 persons, of which 618 persons or 31% of the residents work in the community. The economic analysis identified agriculture as an important local industry and the Toole Army Depot as an important local employment center. The analysis reported a high level of retail "leakage" as a result of residents traveling to the town of Toole and Salt Lake City for shopping, medical services, and entertainment. A further analysis of transportation and circulation covered the range of street types, travel destinations, modal splits, and traffic hazards.

The students documented the city's history, from the earliest pioneer days as a way stop for wagon trains, including the famous Donner Party, and an early Mormon community up to the present time. Students conducted a visual survey of the community to identify current visual assets and liabilities and an imageability test in which residents recorded their perceptions of the key visual landmarks in the community.

### **Plan Recommendations**

The Grantsville General Plan for a Sustainable Community identifies a series of goals and recommendations for remedial activities to make the community more sustainable. It recommends the adoption of urban growth policies as means of preserving the small, rural character of the town and to preserve the natural environment. These policies focus on encouraging infill development and controlling urban sprawl. Economic recommendations strongly encourage the development of agriculture as the local base industry, utilizing prime farmland within and adjacent to the city limits. The plan urges the community to expand its local retail capacity in order to reduce the levels of retail leakage. The community is encouraged to preserve environmentally sensitive areas and manage local ecosystems in cooperation with other government authorities. The recommended response to local natural hazards includes avoiding development in areas that may be particularly susceptible to earthquake motion, ground liquefaction, and flooding.

More detailed recommendations for agricultural development discuss a series of farm and cropland management alternatives based on the construction of new irrigation systems. The plan recommends using approximately 1,400 acres of local agricultural land for growing high value specialty crops for local consumption, including a variety of fruits and vegetables. Aquaculture (raising fish for commercial use) is recommended as an alternative agricultural activity.

The plan includes specific recommendations for providing more affordable housing, reducing crime, and increasing the availability of community recreational activities and social services as well as considerations related to the development of public facilities and the local culinary water system, improvement of emergency preparedness, and methods for handling solid and hazardous wastes and community recycling and composting.

Recommendations for physical improvements in the community are presented in the plan. The city can enhance its transportation functions by improving signage at community entryways, constructing a new median island on Main Street, the major thoroughfare, renewing tree plantings on neighborhood streets, constructing bicycle and pedestrian trails, and providing additional public transit to adjacent communities. The creation of an historic district in the town center, including the development of appropriate design guidelines, and the preservation and nomination for the national historic register of significant properties is recommended. Specific urban design recommendations

include establishing urban growth boundaries, the use of infill development within the town center, and providing design features to reinforce the community's identity.

A separate implementation section includes specific recommendations for revising the city's General Plan and zoning ordinance, developing a Capital Improvements Plan, reconstruction of the local transportation systems, the use of land trusts and transfers of development rights to preserve farmland, the creation of an agricultural cooperative to facilitate the expansion of local farming operations, and specific measures to promote historic preservation. The appendix contains detailed descriptions of local soil characteristics, a description of approaches for insurance mitigation of natural hazards, and an analysis of pollution and energy savings from mass transit. A bibliography provides a list of useful references, as well as a listing of names of useful persons and organizations to contact for information and technical assistance.

In addition to their report on the general plan, the student team developed a 1" - 500' base map for Grantsville, with a series of overlays identifying public utilities and current land use. This map is available for use in future community planning activities.

The proposed plan was well-received by the local community. The Grantsville Planning Commission held a series of facilitated follow-up meetings with representatives from different sectors of the community. The city planners are using the information generated in these meetings, along with the original student plan, as a basis for the development of a new city General Plan. The new plan will be presented to the Grantsville Planning Commission and City Council.

Although the project did not have high levels of community participation, it presents a potential model for university/community partnerships for sustainable community development.

### **Vermont National Bank's Socially Responsible Banking Fund (SRB Fund), Brattleboro, VT**

**Contact:** David Berge, Director; P.O. Box 804; Brattleboro, VT 05302; Tel.: (802) 258-4090 (800) 772-3863

**Scope:** Loans in Vermont; depositors across the US  
Date: 1989 and in 12 countries

**Participants:** Affordable housing organizations, environmental and conservation projects, educational

organizations, family farms, and small and dual bottom line businesses

**Project Type:** Alternative lending/investment, community economic development

**Methods Used:** Loans to the project participants

**Lessons Learned:** To make unconventional loans work, it is important to spend time on the front end structuring the loan most suited for the borrower.

The Socially Responsible Banking Fund is the first statewide commercial bank program in the nation that allows customers with any type of bank account to specify that their deposits be used only for socially responsible loans. The goals of the SRB Fund are to humanize three sets of relationships: depositors' relationships with their own money, the relationships between the bank and community organizations, and the relationships among depositors, community organizations and borrowers.

As of July 1995, the SRB Fund is managing 9,600 accounts with over \$84 million in deposits and \$50 million in outstanding loans. Most of these accounts belong to individuals and families living in Vermont, but the SRB Fund has also attracted depositors from 42 states and 12 foreign countries. Municipalities, schools, non-profits, and small businesses have deposits in the SRB Fund. The savings, checking, individual retirement accounts and money market accounts or certificates of deposit pay the same interest as Vermont National Bank's other accounts and are insured by the Federal Deposit Insurance Corporation.

The Fund was created in 1989 by Vermont National Bank in response to a request for such a fund by a group of Brattleboro residents. Depositors remain active participants and help direct the bank to organizations and businesses in their communities that are potential customers of the SRB Fund. According to David Berge, Director of the Fund, "We try to get people to understand their relationship with their money. Where they spend and invest is important and has an impact on their community."

### **Investing in Vermont's communities**

The SRB Fund makes loans in five areas: affordable housing, environment/conservation, agriculture, education and small business. Within these areas, priorities include lending to organizations and projects that provide permanently affordable housing, projects committed to the long-term responsible use of land, and businesses that provide innovative models for other environmental companies. Another priority is providing

financing for land acquisition, equipment or working capital for projects involving innovative and sustainable models of family farming or agricultural enterprise.

The SRB Fund staff works with the SRB Fund Advisory Board (a group of 12 community representatives) to identify priorities within each of the lending areas and to identify projects that serve the immediate needs of individuals and organizations while providing long-term benefits to Vermont's communities. The Advisory Board reviews applications for loans and meets every six weeks to consider applications in the five areas described above.

Loan officers in all 31 of the bank's branches are authorized to make SRB Fund loans. The SRB Fund provides technical assistance to loan officers making customized SRB Fund loans, pushing as much lending activity as possible out to the branches so that the people arranging the loans are closer to the businesses and organizations that are borrowing the money.

The SRB Fund has had an exceptionally low delinquency rate on its commercial loans. At the time this was written, the delinquency rate for commercial loans was 0.53% for 30 to 59 days and 0.0% for over 90 days. This success can be attributed in part to the Fund's flexibility in creating loans that are attuned to the specific circumstances of each borrower. For example, many small businesses need small loans but conventional banks will only make personal loans - usually with higher interest rates than commercial loans - at this level. The SRB Fund solves this problem by making commercial loans to small borrowers. The SRB Fund will also structure loans to borrowers that have businesses with seasonal fluctuations (such as farming) so the borrower makes the entire year's payments during months with best cash flows.

With the town of Townshend, the SRB Fund created a revolving loan fund, the Pilot Loan Program, to create jobs and strengthen the local economy. Under the Pilot Loan Program, businesses can borrow from \$5,000 to \$25,000 over five years. The businesses receiving loans can also receive technical assistance from the Townshend Small Business Advisors Pool, a group made up of local professional volunteers who counsel the businesses. A town committee helps identify and screen prospective borrowers, and the SRB Fund reviews applications, makes final lending decisions and services the loans. Dick Jackson is a member of the town committee because "If Townshend doesn't have jobs, the young folks will have to leave town to get work. For too long our best and brightest haven't had job opportunities here in town."

The strength of the partnership is the Pilot Loan Committee's knowledge of the small businesses in Townshend and the SRB Fund's expertise in banking issues. Walter Meyer, another committee member, agrees that "all Vermont towns are in need of new jobs. If we want to create these jobs, we have to do it for ourselves. No one else is going to do it for us."

### **Keys to success**

By keeping ninety-nine percent of its loans and investments within Vermont, the SRB Fund recirculates money within communities and strengthens local and regional economies. Many borrowers come to the SRB Fund because they have trouble getting loans elsewhere. According to Berge, "We'll go out of our way to make a project work. Within the fund we have the ability to set the borrowers' rates based on their project. We may drop the rate, or lengthen the term to help it go. Support comes from the top with the clear message that we offer flexible lending."

A key element in the success of the SRB Fund is the fact that senior management at the bank has been fully committed to the Fund since its inception. The bank made available the necessary resources in terms of both people and funds for marketing and equipment to get the SRB Fund off the ground.

Much of the work of the SRB Fund is done in conjunction with other organizations that often act as intermediaries between the Fund and loan recipients. For example, the SRB Fund Community Advisory Board recommended a priority in the agricultural lending area for organic farms and community-supported agriculture projects. As a result, the Northeast Organic Farming Association (NOFA) conducted a needs assessment that showed organic farmers in Vermont have trouble getting money to buy equipment and for short-term operating funds. Now the SRB Fund will lend money to NOFA, which then provides loans and technical assistance to organic farmers.

Another intermediary the SRB Fund works with is Working Capital, a non-profit program that strengthens micro-businesses and communities by providing group-based support, loans and technical assistance to self-employed persons with limited access to resources. In Vermont, Working Capital has formed a partnership with the SRB Fund to provide the capital for its loans.

One of the successes of the SRB Fund is that it draws money to Vermont National Bank; about 75-80 percent of the money in the fund is new to the bank and not transferred from existing accounts. When asked what has been responsible for

the SRB Fund's success, loan officer Arne Hammarlund responded, "First of all, it was something that was needed in Vermont. People are concerned with what is being done with their money, where it is going from the deposit side. It allows businesses, environmental groups, and affordable housing groups to deal with a bank that has some historical knowledge dealing with those kind of organizations and is willing to work with them creatively." The SRB Fund is the only bank in the state filling a crucial need for many organizations and small businesses.

## **Appalachian Regional Recycling Consortium Radford, Virginia**

**Contact:** Patricia Therrien; Regional Marketing Manager; Appalachian Regional Recycling Consortium; 1612 Wadsworth Street; Radford, VA 24141; Tel.: (703) 639-9314; Fax: (703) 831-6093

**Scope:** Regional, rural townships

**Inception Date:** 1992

**Participants:** Local governments, industry, entrepreneurs, local recycling coordinators

**Project Type:** Waste management, recycling/reuse, economic development, public education

**Methods Used:** Demonstrations, regional processing services, seminars, workshops

**Lessons Learned:** The overall program benefited by starting up with a service that communities clearly wanted; a regional scale helps rural places gain critical mass.

### **Summary of Project**

The Appalachian Regional Recycling Consortium (ARRC) is a cooperative recycling service created through an inter-agency agreement among the Lenowisco, Cumberland Plateau, Mount Rogers, New River Valley, Fifth, Central Shenadoah, and West Piedmont Planning District Commissions (PDCs). Initially funded by the Appalachian Regional Commission (ARC), the ARRC was established in 1992 to serve the twenty-one counties and five cities in the ARC region of Virginia. Since that time the actual service area has been expanded to include the counties of: Allegheny, Bath, Bland, Botetourt, Buchanan, Carroll, Craig, Dickenson, Floyd, Franklin, Giles, Grayson, Highland, Lee, Montgomery, Patrick, Pulaski, Russell, Scott, Smyth, Tazewell, Washington, Wise, and Wythe. The cities served by the program are

Covington, Clifton Forge, Radford, Galax, Bristol, and Norton.

The ARRC's primary goal is to assist these rural local governments in addressing the unique challenges they face as they work to reduce their waste stream and comply with Virginia and Federal recycling mandates in an effective and efficient manner. Low population density, increased distance to "markets," the low or negative value of many recovered materials, and the lack of positive experiences with regionalization are the primary challenges.

ARRC's comprehensive services to local government, industries, recycling coordinators, and entrepreneurs include: regional recycling services; industrial technical assistance; recycled product development / business assistance; workshops and seminars; educational information; recycling equipment information; market information; recycled product sourcing; and regulatory and legislative updates. Specific programs used to deliver these services include the:

- Recycling Business Assistance Program (RBAP);
- Recycling Industrial Technical Assistance Program (RITA);
- Regional Equipment Sharing Program / Mobile Tire Shredding Program; and
- Southwest Virginia Waste Exchange.

These programs interrelate and reflect ARRC's overarching strategy to use an integrated systems approach to combine the vital issues of environmental sustainability, economic development, and the need for mutually beneficial in-region market development to increase recovered materials utilization. ARRCs general services, which benefit the 520,000 residents of the Appalachian region of Virginia, are funded with approximately \$150,000 annually. Of this, \$60,000 is applied to general operating expenses and \$90,000 to one year of Phase I Tire Shredding Project expenses.

### **In-Region Market Development**

Federal and state recycling mandates and the concern for preserving natural resources by maximizing the usable life of products made from them have resulted in an increasing supply of recovered materials ready to be processed or remanufactured into new products. Even though much of the technology already exists, in rural areas the lower volumes of recovered materials, combined with the distance to "traditional" recycling markets and the low or negative dollar value for materials in those markets, make comprehensive recycling programs difficult to justify. This phenomenon has

created both the need and an excellent opportunity for new "in-region" business development. ARRCs Recycling Business Assistance Program and Recycling Industrial Assistance Program are designed to meet these challenges. The programs are supported by \$63,000 in funding provided by the Environmental Protection Agency Region III, the Appalachian Regional Commission, the Virginia Water Project and \$29,000 in matching funds from other sources.

### **Recycling Business Assistance Program (RBAP)**

The ARRC Recycling Business Assistance Program was established to:

- promote, create and expand markets for the beneficial utilization of recovered materials,
- support the development of innovative recycling technologies,
- stimulate economic development; and
- create employment opportunities.

Services to entrepreneurs include product feasibility studies, market surveys, recovered material sourcing, incentive and grant information, business plan development assistance, finance package assistance, site location assistance, regulatory information, equipment availability, new and used, leasing information, local government contacts, and state agency contacts. RBAP also provides support to entrepreneurs challenged by considerations unique to innovative, "non-traditional" businesses working with recycling technologies: Financial institutions, for example, are frequently reluctant to become involved with a business that handles "solid waste" due to perceived liability issues.

To date the RBAP program, conducted by ARRC staff, has assisted over 45 entrepreneurial clients since the programs inception in October 1994. The program currently has 14 active clients.

### **Recycling Industrial Technical Assistance (RITA)**

The purpose of RITA Program is to promote the utilization of locally recovered materials by local industries and to provide integrated solid waste management assistance. The program's industrial technical assistance services include: waste audits, pollution prevention information, technical assistance for process modification, and material sourcing.

The basic strategy of RITA is to provide the information and assistance necessary for industries to successfully reduce the volume or toxicity of the waste they produce and / or to

include recovered materials as a substitute for part of their manufacturing feedstock. In addition to being environmentally responsible, products with recovered material content are a requirement for many federal and state contracts. Incorporation of recycled materials in manufactured products can help make industries more competitive, both locally and internationally. An increase in sales due to the competitive edge offered by manufacturing recycled content products can lead to job retention and expansion for the region.

Through RITA, over 12 industries have requested services ranging from waste audits to market referrals since the programs inception in October 1994.

### **Regional Equipment Sharing/Tire Shredding**

Perhaps the great success of ARRC grew out of its very first initiative. When local participating governments were surveyed shortly after ARRCs inception, it was determined that scrap tires were the material with which most localities needed assistance. Providing a regional tire shredding service for southwestern Virginia became the initial major focus of the ARRC.

A support grant for initial development of the Mobile Tire Shredding Project was provided by the Center on Rural Development (CORD) in 1993. This grant and the technical assistance provided by CORD, made it possible to bring this program to the implementation stage. The program circulates tire shredding equipment to each participating locality on a regular schedule, shreds the tires on-site, assists the localities by providing information on local beneficial utilization projects and works on market development.

In January 1994, the ARRC finalized a Cooperative Agreement with the Virginia Department of Environmental Quality, Waste Division (DEQ). As a "current flow" demonstration project, the financing to implement the Regional Mobile Tire Shredding Program is provided from the Waste Tire Fund. The Regional Tire Shredding Project was originally planned to be implemented in three phases. Funding was received in January 1994 from the DEQ for Phase I (total funding for Phase I is \$465,000, 1993 to 1996) and the Mobile Tire Shredding Project began shredding tires in April 1994. Phase I equipment currently shreds approximately 25,000 tires each month and is serving 16 localities at fourteen locations throughout southwestern Virginia. Phase II of the program, slated to begin in early 1996 with DEQ-committed funding of \$650,000, will serve an additional twelve localities. Phase III of the program is not expected to be implemented at this time.

Phase I and Phase II equipment combined is expected to shred approximately 750,000 tires each year.

At this time the program has shredded 300,000 tires in the region of which approximately 50% has been used in local projects. Civil engineering strategies such as erosion control berms, sub-grade fill for roadways, and alternative daily cover have beneficially utilized this commodity. Phase II shredding equipment will yield a product that has a current "market" value as high as \$30 per ton, whereas Phase I equipment yields a product that does not have a current market value.

### **Southwestern Virginia Waste Exchange (WEX)**

In the conservation hierarchy of integrated solid waste management, source reduction (reducing the volume or toxicity of waste generated) and reuse are considered "higher priorities" than recycling. A waste exchange system that incorporates the three strategies is one way to expand materials reuse opportunities. Large, multi-state waste exchanges that facilitate the efficient transfer of large volume, continuous supply, or "high value" commercial / industrial by-products and "waste" materials exist across the country.

To meet the need of local businesses, individuals and recycling coordinators, ARRC is establishing Southwestern Virginia Waste Exchange to provide a mechanism for the effective exchange of smaller quantities of one-time or "lower value" materials on a local scale. Through a \$12,000 grant from the Virginia Department of Environmental Quality, the ARRC is establishing a locally-focused, transferable electronic waste exchange database. There is no limit to the number of items that may be listed, nor is there a fee to do so. Custom searches and "match searches," between materials available and materials wanted, can be conducted. A newsletter to augment the database that lists materials available and wanted, premiered July 1995.

Challenges encountered in delivering ARRCs programs include: the diverse needs requiring multiple response options; the changing regulatory climate; dwindling funding sources; and, the habituated reluctance of state governments and local inspectors to support alternative beneficial utilization of materials.

The Appalachian Regional Recycling Consortium is positioned to continue assisting Southwestern Virginia by working to combine the environmental realities of waste reduction, pollution prevention, resource conservation and recycling with the economic realities of jobs creation, retention and expansion through sustainable partnerships.

## **Sustainable Community Roundtable Olympia, Washington**

**Contact:** Steve Hall, Assistant City Manager; City Of Olympia; P.O. Box 1967; Olympia, WA 98507-1967; Tel.: (360) 753-8447; Fax: (360) 753-8165

Dorothy P. Craig; Sustainable Community Roundtable; 2129 Bethel St., N.E.; Olympia, WA 98506; Tel: (306) 754-7842; Fax: Same; E-mail: dpcraig@igc.apc.org

**Scope:** City/county/region

**Inception Date:** 1991

**Participants:** Community members, businesses, civic and government organizations, Native American Tribal Councils

**Project Type:** Comprehensive community development, sustainable indicators, public education

**Methods Used:** Legislative initiatives, public dialogues, educational events, community involvement activities, publications

**Lessons Learned:** The concept of sustainability can guide planning and policymaking as well as reshape governmental decision-making; participatory planning processes work. Public education and outreach is essential for collaborative ventures. The process needs to be ongoing, with feedback on progress and celebrations of success.

### **Background**

In 1991, Olympia, the capital of the state of Washington, accepted a challenge from the State Department of Ecology to help define what it would take to become a sustainable city. Located at the southern end of the metropolitan region extending south from Vancouver B.C., Olympia and neighboring cities of Lacey and Turnwater are the hub of a rapidly growing area around south Puget Sound. Population of this 84-square mile North Thurston County urban growth area is increasing at 3.5% per year, and is projected to reach 184,000 by 2015. The area faces the familiar challenges of rapid urbanization: suburban sprawl, the development of prime agricultural land and wildlife habitat, water pollution, and traffic jams. Increased housing costs, competition for jobs, homelessness, and drug abuse are some of the economic and social consequences.

Instead of addressing each of these problems independently, Olympia is beginning to employ a more holistic approach,

thinking of the city as an ecosystem where everything is connected and interdependent. Known for its award-winning initiatives such as its residential, curbside recycling and volunteer Stream

Team efforts, Olympia was already on the path to sustainability when the city first introduced the concept of sustainability on Earth Day 1991 by mailing a newsletter to all residents and sponsoring an all-day celebratory event. The City initiated a Sustainable Community Roundtable to coordinate a region-wide educational process and embarked on an internal process using sustainability as a theme for policy-making and employee education.

Thus began an ongoing process of articulating a common vision of sustainability for the region, with an annual assessment of progress and celebration of accomplishments.

### **Olympia's Sustainable City Initiative**

In 1993 the City adopted a Sustainable City Philosophy whose preamble reads:

"The City of Olympia acknowledges its responsibility for leadership in creating a sustainable community - locally, regionally, and globally. A sustainable community is one that persists over generations and is far-seeing enough, flexible enough, and wise enough to maintain its natural, economic, social, and political support systems."

Since then Olympia has used "sustainable community" as the integrating theme for much of its planning. For example:

- Sustainability criteria have been applied to major policy decisions such as the new Comprehensive Plan adopted under the State's Growth Management Act, the recently adopted water supply plan, and stormwater management plans.
- Sustainability performance indicators for City policies and programs are being drafted, and the City plans to publish them in an annual "State of the City" report at the beginning of each year's budget process.
- The City is preparing an employee education program based on a survey assessing employees' knowledge about and interest in sustainability concepts.

### **Sustainable Community Roundtable**

The Sustainable Community Roundtable, initiated by the City of Olympia in 1991, was incorporated as a nonprofit organization the following year. It uses innovative participatory processes to facilitate the transition to sustainability in South Puget Sound. It works with individuals, governments, businesses, and civic organizations to integrate planning and action around social, environmental and economic issues. In 1993 the Roundtable received an award for citizen participation from the Washington Chapter of the American Planning Association and the Planning Association of Washington.

The Roundtable has convened a series of public forums aimed at demonstrating the interrelationships between social, environmental and economic issues and sponsors the "Nights of the Roundtable," evening presentations on innovative sustainability initiatives around the country and the world. Roundtable members are working with other communities to set up a computer network and to set up a Cascadia Sustainable Communities Network, a coalition of community, business and government organizations, dedicated to increasing regional identity.

In 1995, the Roundtable released its second State of the Community report which reviews Olympia's progress in becoming sustainable. The first edition, published on Earth Day 1993, was one of the first of its kind. The updated report addresses the interrelated issues of human culture: environmental issues, resource consumption, social equity and justice, governance and the economy. It describes a vision of sustainability, identifies trends in using selected indicators, highlights positive steps toward the vision and gives very specific guidelines for what individuals and the community can do. It asks important questions about the potential impact a proposed program or policy might have on elements of sustainability and acts as a screen or matrix for decision-making.

### **Accomplishments**

#### **The report, Steps in the Right Direction, highlights:**

- Cooperative growth management planning by Thurston County and incorporated cities has resulted in: 1) a regional land use and transportation strategy aimed at developing urban core areas at a density that will support public transportation; 2) protecting wetlands, agricultural and forest lands; and 3)

planning in advance for public services and utilities needed for the projected population.

- Representatives of 17 diverse interests are collaborating to create a Nisqually River Management Plan that takes into consideration the environmental, economic, cultural, and historical significance of the entire river basin.
- To promote waste reduction and recycling, the Port of Olympia, Thurston County, City of Olympia, and Economic Development Council have initiated a collaborative venture called ReDAC (Recycling Development and Action Committee) to encourage new and expanded secondary material manufacturing businesses.
- A Green Jobs Program, initiated by the local Energy Outreach Center with support from the City of Olympia and local businesses, aims to save energy and water, reduce housing costs, and create jobs.
- Community Supported Agriculture is expanding with around 1000 participants in 1994.
- To help families in need, a downtown Family Support Center provides services from a dozen agencies: job placement, counseling, and health and legal services.

## Challenges

The greatest challenges have centered on funding, creating a viable organization, and finding ways to communicate the concepts and implications of sustainability.

Both the City of Olympia's Sustainable City Initiative and the Sustainable Community Roundtable have worked with minimal budgets. The City program has been developed with existing staff resources and several small grants from state agencies while the Roundtable has been supported by local fundraising and small budget allocations from the City of Olympia and the City of Lacey. Both Olympia and the Roundtable are currently cooperating on a project funded by the U.S. Environmental Protection Agency to continue refining the Roundtable's regional indicators and to develop parallel indicators to guide City policy and budget decisions. The regional Olympia Air Pollution Control Authority has provided additional funds for a more detailed look at air quality indicators.

The City publishes information on Sustainable City activities in its monthly newsletter to residents. City staff frequently refer to sustainable city goals in their public involvement and education on land use, transportation planning and resource

management. The Roundtable relies primarily on the State of the Community report. Members have made presentations to local organizations and elected officials. As part of the USEPA-funded indicator project, Roundtable members are working with eight community groups and businesses to explore the relevance and use of indicators in their activities. The Roundtable plans to publicize the "Steps in the Right Direction" through a traveling exhibit, community event and possibly a video.

The efforts of the City of Olympia and the Sustainable Community Roundtable are a prime example of long-term vision, partnership, and integrative thinking. They provide a model for other communities seeking to undertake similar processes.

## Community Minigrants Program West Virginia Counties

**Contact:** Caroline Carpenter; Claude Worthington Benedum Foundation; 1400 Benedum-Trees Building; Pittsburg, PA 15222; Tel.: (412) 288-0360; Fax: (412) 288-0366

**Scope:** Statewide

**Inception Date:** 1991

**Participants:** Foundation, community groups, residents

**Project Type:** Comprehensive community development, community economic development

**Methods Used:** Locally-controlled minigrants, community organizing

**Lessons Learned:** Process is as important as product. Broad based participation leads to greater commitment.

The Community Minigrants Program is designed to enable residents of West Virginia to implement locally-controlled community development on an increasing scale. The project has spread to 15 geographical areas of West Virginia. Close to 2,000 residents have participated in skill-building workshops and 200-250 community-based projects have been implemented.

## History

Community Minigrants began in 1990 in McDowell County, the poorest county in West Virginia, in the heart of the coalfields. Caroline Carpenter of the Benedum Foundation had received a proposal from a non-incorporated town in

McDowell for \$500 to convert a trash dump into a playground - the kind of grant that foundations do not make, but that West Virginia communities obviously needed. (Benedum is a Pittsburgh-based foundation that makes grants only in West Virginia and southwestern Pennsylvania.)

Carpenter had read about peer group microenterprise lending strategies for individuals, and thought, "Why not do this with community based organizations? Set up a structure to let them make their own peer review decisions about use of funds for community development projects, without a formal intermediary." Carpenter contacted the local economic development authority, staffed by Addie Davis who was "born and raised in McDowell County and very community oriented." Carpenter comments, "We probably couldn't have done it with a traditional economic development authority." A pilot program was developed with a \$25,000 initial grant providing \$5,000 for a series of training workshops and a pool of funds for minigrants of \$500-\$2,000.

### **The Community Minigrants process**

The minigrant process initiated in McDowell County has been continually refined based on the experiences of the participants. The process involves forming and training community based groups to do local community development projects. The initial organizing and skill building occurs in two phases, after which a group may continue to apply for minigrants of \$500-\$2,000 to accomplish specific projects.

The project spreads through word of mouth. Local residents contact Benedum when they think their community is ready to participate. The geographical area, the local steering committee, and the specific projects are always self-selected.

The first phase of the community minigrant process involves the development of a core group of up to 40-50 people. This group meets with Benedum and with other West Virginia residents who have participated in the process. Following this introduction, the core group of 40 chooses its own steering committee and a fiscal agent to apply for the Phase I grant. The Foundation trustees after review allocate \$3,500 to support 3 workshops on community economic development; the funding covers logistics, food and facilitators.

The second phase begins with five workshops. Training covers specific skills in developing proposals, grant writing, budgeting, conflict resolution and building the organization. Benedum has three stipulations at this point the only requirements the Foundation imposes:

- The same three people from a community-based project must attend at least 4 of the 5 sessions to be eligible for a minigrant.
- The group and the project must be community-based.
- The project must be achievable in 6 months.

Each community based organization chooses one representative to sit on the grants committee. The committee reviews proposals and conducts site visits to monitor the project. Each community group decides what project it wants to do, based on priorities in that geographic area.

### **Playgrounds, rag rugs, planting trees**

Some groups have focused on youth opportunities, such as fixing up a playground or establishing a summer science camp. One local group set up a conflict resolution program and, over the course of a year, trained all of the 3rd and 4th-graders in the county in conflict resolution.

A group in the TriCounty Partnership area started a project called "The Common Thread," a non-profit business that makes rag rugs. The project began because the group wanted to establish a scholarship fund, and decided to start a business doing something indigenous to the area to raise money. The Common Thread used its minigrant to set up looms in a public space; community members can drop by whenever they are available to put in a few hours of work on the rugs. Carpenter notes that many of the projects allow for similarly broad community participation.

The TriCounty committee, with 270 people participating in the training sessions, has completed 54 minigrant projects. One minigrant purchased curtains for a stage at a local church so a community theater group could produce plays in a very rural area. The three productions were each attended by 300-400 people who had never had access to theater.

Carpenter sees that there is an environmental aspect of many Community Minigrants projects simply because they seek to replace the unsustainable mining and resource extraction that has devastated many of these communities both environmentally and economically. Some projects have a more overt environmental focus, such as recycling. One project in Elkins, a county seat, planted trees on Main Street. "Because of the group process, people from throughout the county say they have a sense of pride and ownership of those trees, because they have helped get them there," Carpenter notes.

## **Building skills and moving beyond minigrants**

Skill building is essential to the project and is what makes it sustainable, even if Benedum Foundation funding were to end. Carpenter talks about a group in Kimball in McDowell County: the community wanted a new fire engine, costing about \$100,000. When told that was not within the scope of the minigrant program, they built a playground. Through the minigrant process, however, "they learned that they could get together and fundraise then on their own, within six months, they went out and raised the \$100,000 for the fire engine."

The skills learned by participants in the McDowell County group (called "McAction") have enabled the group to do many new projects over the years, while participants have also moved on to serve on boards of other organizations within the community and to work with local government agencies. The committee in Randolph County went further, deciding to establish itself as a permanent development organization and incorporating as the Mountain Partners in Community Development.

Carpenter cautions that the process is extremely labor and time intensive. A particularly important aspect is the development of facilitators; initially, some were too directive and "wanted to tell communities what to do." The West Virginia Center for Economic Options now monitors and assists facilitators to help people develop their own skills and organizations.

## **Creative and effective grantmaking**

In 1993, Caroline Carpenter received the Robert W. Scrivner Award for "creative and effective grantmaking" from the National Council on Foundations in recognition of the Community Minigrants Program. Carpenter stresses that beyond the three stipulations from the Foundation, the entire process is controlled by community members, not by the funder's demands. Carpenter notes that the process "is based upon the culture of capacity and builds relationships, norms and trust. It helps people claim their responsibilities and shape their own ideas. The success is created by local community residents and provides them the ability to go forward as they see fit." A Lincoln County Steering Committee member echoes: "Emphasize that it is the community that is in charge. . . Community people are doing this and we want to do it right."

## **The Campaign for a Sustainable Milwaukee Milwaukee, Wisconsin**

**Contact:** Bill Dempsey, Lead Organizer; 1001 E. Keefe Avenue Milwaukee, WI 53212; Tel.: (414) 964-9497

**Scope:** Milwaukee metropolitan area

**Inception Date:** 1993

**Participants:** Labor, environmental, religious and community organizations, and elected officials from city, county and state governments

**Project Type:** Process-oriented planning, community economic development, coalition building

**Methods Used:** Community organizing and policy development

**Lessons Learned:** People will invest time in an effort if there is a sense that their lives can really change because of it.

The Campaign for a Sustainable Milwaukee is a broad-based community effort to define and implement an alternative economic development plan for the Milwaukee metropolitan area. Unions, community organizations and political leaders are working together to create and retain family-supporting jobs, build healthy communities and restore natural environments. Sustainable Milwaukee's four task forces address major priorities: jobs and training, credit, transportation and the environment, and education.

### **"Rebuilding Milwaukee from the ground up"**

The groups and individuals who joined to form Sustainable Milwaukee have come together to overcome a series of forces that many had been working to overcome individually. These issues include job flight out of the Milwaukee region, deteriorating wages and working conditions in many of the jobs that remain, divestment from Milwaukee by financial institutions, the destruction of Milwaukee's natural environment, and public policies at every level that subsidized the same forces that were destroying the community.

In October, 1994, Sustainable Milwaukee held a Milwaukee Community Congress, attended by more than 200 community activists, union members and elected officials, to debate and ratify a plan to address these and other problems. Key elements in the plan, Rebuilding Milwaukee from the Ground Up, include campaigns to create good, family-supporting jobs

in the Milwaukee area and to improve mass transit within the region.

### **Supporting community efforts**

One example of how Sustainable Milwaukee has made a difference thus far is its involvement with Esperanza Unida, a well-known, community-based economic development organization located on the South Side. Esperanza Unida has been working for many years to meet the needs of low income central city Milwaukee residents. One of the organization's accomplishments has been the creation of training businesses that provide services to central city neighborhoods including asbestos removal, metal fabricating, auto repair, and day care.

One barrier to employment for people in Esperanza Unida's neighborhoods is that residents have not been able to obtain certified vocational training. There is a technical college in Milwaukee, but central city residents, many of whom speak Spanish as their primary language, were not able to use the resources of the technical school. To change this situation, four of Sustainable Milwaukee's active members who are also board members of the technical college worked with the school and with Esperanza Unida to create a certified technical training site at Esperanza's neighborhood center. The technical college is now providing resources in a central city neighborhood, residents are using these resources, and many low-income residents have received certification and obtained jobs as laborers building roads for the State of Wisconsin.

Rich Oulahan, executive director of Esperanza Unida, calls Sustainable Milwaukee "the most significant development I've seen in Milwaukee in years. I've never seen so many people working together to focus on the root cause of our social problems."

### **Choosing meaningful issues**

One key element in the early success of Sustainable Milwaukee is that it has identified specific issues to work on that are meaningful to people and that focus on making Milwaukee more livable for all residents, especially those with low incomes. Sustainable Milwaukee spent months bringing people together to ask them what they wanted and what could they do together to make a difference. As a result, more than 100 people showed up for a recent Sustainable Milwaukee general meeting.

According to Bill Dempsey, the lead organizer of the campaign, "there is a sense among those getting involved that their lives can noticeably change as a result of this effort."

Instead of simply criticizing the ineffectiveness of government and business to meet the need of communities, Sustainable Milwaukee decided to define the issues that are important to people and build a campaign to make people's goals a reality.

### **Living wage campaign**

The Living Wage Campaign was chosen as a priority because the Milwaukee area has a higher percentage of jobs - 50.8 percent paying less than \$20,000 a year than nearly any other metropolitan area in the country. Sustainable Milwaukee is working to pass a Living Wage Ordinance that would guarantee a \$7.70 wage floor with health care benefits for all service workers hired through city contracts.

The bill to implement the Living Wage Ordinance received a unanimous vote out of the Public Improvements Committee of the Milwaukee City Council in June, and awaits a vote before the full council. Once this bill is passed into law it will be used as a launching pad to convince county, school district and private sector employers to live up to the same standards.

### **Central city transit campaign**

Transportation is another key issue and opportunity for collaboration. Sustainable Milwaukee is bringing together low income people who could benefit from a good mass transit system with environmentalists who are working to reduce pollution in the region.

The Milwaukee County bus system has experienced falling ridership, rising fares, and decreasing investment in the bus system in the context of a worsening regional economy. There is no rail, subway or light rail system in the county except Amtrak, which only travels between major cities. Many low-income, inner city residents currently do not have access to reliable transportation to the suburbs, where many jobs are located.

Sustainable Milwaukee intends to show that a good mass transit system is critical for the regional economy, and that the only way to create such a system is through government intervention. Priorities are support for light rail development and full funding of central city buses. Sustainable Milwaukee is also becoming involved with the process of allocating the hundreds of millions of dollars of federal transportation funds allocated to the state of Wisconsin.

### **Sources of support**

The major financial support for Sustainable Milwaukee has been a \$150,000 grant from the Joyce Foundation. The

Unitarian Universalist Veatch Program was another important supporter. Sustainable Milwaukee decided not to ask member organizations for substantial amounts of money in order to avoid sapping their other efforts, in reality or in appearance. However, many organizations, including elected officials, have given in-kind donations of supplies and staff time to support the campaign.

A key coalition partner has been Progressive Milwaukee, an organization that works to get progressive political candidates elected to office in the Milwaukee metropolitan area. At least 14 elected officials from city, county and state governments who are affiliated with Progressive Milwaukee have participated in Sustainable Milwaukee. The involvement of public officials has given the campaign a sense that its goals can become a reality, because those with the ability to make them happen are involved.

So far, there has been almost no political or other opposition to the Campaign for a Sustainable Milwaukee. The biggest obstacle to moving the plan forward, staff members say, has been the lack of enough staff to work on the campaign.

## **Lander Valley: 2020 Lander, Wyoming**

**Contact:** Paula McCormick; Executive Director; Lander Area Chamber of Commerce; 160 N. First Street; Lander, WY 82520; Tel: (307) 332-3892; Outside Wyoming: (800) 433-0662; Fax: (307) 332-3893

**Scope:** Town/county

**Inception Date:** 1992

**Participants:** Residents, ranchers/farmers, businesses, civic organizations, nonprofit organizations

**Project Type:** Communitywide visioning, comprehensive community planning, public education

**Methods Used:** Public education, town meetings, newsletter, task forces

**Lessons Learned:** Importance of anticipatory planning, access to information, economic diversification, and inclusive meetings

### **Background**

Lander is a town of 7500 residents located in Fremont County near the picturesque eastern slope of the Wind River Range of

the Rocky Mountains in west central Wyoming. Over the past twenty years, like many western towns, particularly those supported by one industry, it has experienced boom and bust. For years its economy was largely supported by an iron ore mine but all that changed in 1983 when the mine closed: 500 jobs were lost, hundreds of homes went on the market, and half the businesses closed. By 1990 Lander's population had been reduced by almost twenty-five percent.

Recently, however, this situation began to turn around. From 1990 to 1992 Lander grew by 2.4%. In 1993, a book, *The 100 Best Small Towns in America*, rated Lander fifth. This report created a sudden interest in Lander from a number of areas. By October 1994 informal statistics indicated that approximately 18% of Lander's population had arrived in the past three years from other towns in Wyoming, from the Midwest, and from California, Nevada, Arizona, New Mexico, and Texas. Many of these new residents had come from towns that were becoming too expensive or crowded. Paula McCormick, the director of the Chamber of Commerce, reported a 600% increase in requests for information about Lander since 1990.

### **Population growth and the economy**

With this population influx, the economy has begun to grow and diversify. Tourism is increasing, while agriculture and government agencies continue to form the more traditional economic base. Major local employers include a new bronze foundry which employs around 60 people, government agencies such as the Wyoming State Training School and the county courthouse, the Lander Valley Regional Medical Center, and many businesses related to the growing tourism boom. A Main Street Beautification project has redone streets and sidewalks and worked with business owners to improve their storefronts in order to attract visitors. In addition several environmentally-based organizations are headquartered here: the National Outdoor Leadership School (NOLS), the Wyoming Outdoor Council and the Wyoming Nature Conservancy.

The new visibility has been a mixed blessing. On the one hand it attracts those seeking to relocate to improve their quality of life. On the other hand it produces a sudden population growth which, without careful planning, threatens to alter the community and change the small town atmosphere, access to recreational areas, and clean environment that attracted people in the first place.

Communities that grow at 2% a year can thrive but those experiencing a rate of 7%, such as that of Jackson, Wyoming,

face serious challenges: affordable housing, land use, traffic congestion, air and water quality, and many other issues related to population pressures. Lander Valley: 2020 was formed to prevent this situation from occurring. Spearheaded by the Chamber of Commerce and run by a volunteer Steering Committee and volunteer Task Forces, it is showing that a combination of fortunate demographic trends and the dedicated involvement of some of its citizens can make possible a positive vision for the future.

### **The 2020 planning forums**

The goal of Lander Valley: 2020 is to develop a vision of what Lander Valley is to be in the next 25 years. The process Lander chose to plan for growth while preserving its valued quality of life began two years ago. Citizens invited the Sonoran Institute to help plan and facilitate a visioning process using a consensus-based approach to organize people and ideas.

The first Successful Communities Workshop, held in April 1994, was attended by 200 people. Participants were asked to discuss what they liked about living in Lander, what changes the Valley is likely to see in the near future, and how the community could work together to make sure that these changes work for the people of Lander.

The attendees themselves were demographically representative of Lander: 21% of the participants had lived in Lander for less than five years, 30% were natives or had lived there more than 30 years, and 21% had lived there 10-20 years; 18% were over 60 years of age, 45% between 40-60; and 37% between 20-40; 17% were employed as professionals, 15% as business owners, 9% as ranchers, 5% by the government, and 14% were retired.

When asked what they valued about living in the Lander Valley, the participants listed its open spaces provided by viable ranching and farming concerns, diverse locally- owned small businesses, a good educational system, high quality health care, clean air and water, and an abundance of wildlife. In response to a question as to what was needed in order to maintain these values in the future, close to 70 ideas were suggested, among which were:

- intensive combined city/county land use planning with the participation of more residents;
- increased business development, including more restaurants and retail stores;
- more greenways, parks, and recreation centers for youths;

- protection of farmers/ranchers, for the benefit of the community, land and the economy;
- improved air quality and solid waste recycling center;
- increased tourism as a viable growth industry;
- increased interest in and appreciation of the Wind River Indian Reservation; and
- improved library services and better educational opportunities.

### **Growth and quality of life**

In order to translate this vision into action, ten task forces, representing a cross-section of interests, were formed. A second 2020 workshop was held in October of 1994 to update the progress of the task forces. Lill Erikson, director of the Corporation for the Northern Rockies, a nonprofit organization created to help develop sustainable economies and to protect local values, spoke about other communities that are also dealing with increased growth problems.

In the spring of 1995 the Lander Valley: 2020 Steering Committee sponsored two events: an informational meeting about the community planning process, called "Groundwork for Growth"; and a second Successful Communities workshop. Approximately 100 community residents attended "Groundwork for Growth" to learn about approaches that other towns and counties were using to accommodate rapid population growth and the importance of consensus. A representative from the Dubois Town Planning Commission spoke about the Upper Wind River Development Permit System, a permitting system that is less restrictive than zoning and basically affects businesses rather than ranchers. A speaker from Jackson commended Lander for looking ahead before growth got out of control, saying that Teton County's population tripled between 1970 and 1990 and that the county, without an updated land use plan, has experienced myriad problems. A representative from the Wyoming Open Lands Project spoke on private, voluntary options for open land protection. A questionnaire handed out at the end of the meeting revealed that a high percent of the participants did feel that some type of land use planning was necessary.

"How do we improve our quality of life as we grow?" was the topic for discussion in the second Successful Communities Workshop held in May 1995 and facilitated by Luther Propst of the Sonoran Institute. Small discussion groups developed a list of key growth and planning issues and then presented the three most important to the forum. These were categorized and prioritized and then used as a basis upon which short- and long-term action steps were identified.

Every event planned to date has been widely publicized to encourage participation. Reports on each of the meetings have included demographic information on the attendees. This documentation is not only helpful to illustrate the diversity of participation but also serves to demonstrate to those with other opinions that voices from their areas of interest have been heard. In mid-1995 the first 2020 newsletter was published and disseminated through direct mail.

### **Challenges**

The greatest near-term needs are for leadership and funding. Long-term planning is a labor-intensive activity and

momentum plays a key role. For a small town, funds are limited and widespread citizen participation critical.

As of mid-1995, three task forces remain: agricultural preservation, natural resources and land use planning. Each one requires a substantial commitment of time.

To date, this effort has moved forward on a modest budget of several thousand dollars. Grantmaking proposals are being submitted to government agencies, but otherwise local residents are the only ones supporting the costs of the meetings, newsletter, mailings and other organizational needs.

# Appendix D

## State Leadership on Sustainable Development

This appendix includes examples of initiatives at the state level throughout the United States. Their presentation in this report is for informational purposes only and should not be construed as endorsement by the Sustainable Communities Task Force or the President's Council on Sustainable Development.

The text in this appendix is an excerpt of *"Seeds of Change: State Efforts Leading the Way Towards Sustainability"* written by Patricia Scruggs. For more information, please contact the author at 0426 SW Dakota, Portland, OR 97201, 503 246 6148.

### Introduction

Sustainability efforts in the United States are steadily increasing. While we still debate the exact definition or set of principles that define this term, we can agree that people now recognize the need to integrate economic, environmental, and social issues and that they are applying the concepts to their own region in ways they believe will work best for them.

### Kentucky Sustainable Practices Initiative

Contact: Alex Barber, Natural Resources and Environmental Protection Cabinet, 14 Reilly Road, Frankfort KY 40601, 502 564 2150, fax 502 564 4245

The Kentucky Initiative is a collaboration of multiple, complementary efforts with the goal of producing a comprehensive program. The efforts are integrated under the leadership of the Governor and the Cabinets of Natural Resources and Environmental Protection and of Economic Development. These efforts span geographic regions of the states as well as a wide array of sustainability issues, including agriculture, economic development, education, environmental protection, forestry, and biodiversity, plus comprehensive policies and strategic plans.

Although each effort may focus on a specific segment of sustainability, they all use the central principles of sustainable development to guide their operations. They look long term, integrate economic, environmental, and social concerns, and involve a wide range of stakeholders in all stages of deliberation. In October 1994, the report *"Bringing it Home: Sustainable Practices in Kentucky"* was written to summarize

these efforts.

Highlights of recent advancements in these programs are as follows. The KY Roundtable on Sustainable Development is now being completed and administrative and research support has been secured for at least one year. KY Outlook 2000 continues to progress with trends information completed; comparative risk issues have been formalized and are being evaluated; and future scenarios are being developed. The Economic Development Strategic Plan has more than 800 Kentuckians from all walks of life contributing to 50 task groups making recommendations for the future. Its Biodiversity Task Force has just completed 13 facilitated public meetings across the state to generate input for policies on maintaining biodiversity for the future. The International Marketing Association intends to produce a directory of environmental businesses and jobs, and to promote new work for those businesses. The Environmental Technology Consortium will work on promoting and encouraging technologies that contribute to environmental protection and a sustainable future. The 1995 Regional Sustainability Forum will bring together representatives from states and cities in this region to discuss and learn how to promote partnerships for sustainable development.

### Minnesota Sustainable Development Initiative

Contact: John Wells, Minnesota Environmental Quality Board, 658 Cedar Street St. Paul MN 55155, 612 297 2377, fax 612 296 3698

In early 1993, Governor Arne H. Carlson and the Environmental Quality Board asked 105 business, environmental, and civic leaders to map out a sustainable, long-range vision for Minnesota. For this effort, "meeting the needs of the present without compromising the ability of future generations to meet their own needs" was the guiding principle.

Seven 15-member teams discussed how the state could adopt sustainable approaches to agriculture, energy, forestry, manufacturing, minerals, recreation and settlement. Through this collaborative process, the Initiative crafted some 400 proposals for fundamentally changing the way Minnesotans create economic opportunity, protect their natural heritage, and sustain their communities.

The 1995 focus of the Initiative is to develop a strategic plan to begin implementation of the key concepts set forth by the teams. The Governor is expected to appoint a sustainable development roundtable to guide this phase of the Initiative in conjunction with the Environmental Quality Board. This phase's efforts also include preparation of a proposed sustainable development act and a land use for sustainable communities planning framework.

### **Colorado Sustainability Project (CSP)**

Contacts: Heidi VanGenderen, CSP, 327 Hawthorn Hollow, Boulder, CO 80304, 303/440-6280; and Anne Grady, Dept. of Health and Environment, APCD Admin B1, 4300 Cherry Creek Drive South, Denver CO 80222, 303 782 5493, fax 303 692 3106

The Colorado Sustainability Project (CSP) is an effort established to facilitate the creation and enactment of a sustainability plan that benefits Colorado's economic, social, environmental, and human well-being. The Project will help build the political will necessary to implement change through inviting participation from a broad cross-section of citizens, leaders, and experts who share a concern for the future of Colorado. The Plan will create a set of sustainability principles, establish a clear vision of Colorado's future, specify a Blueprint for Sustainability, develop a set of indicators, help build political support, and monitor progress.

### **Sustainable Maine Project**

Contact: Craig Freshley or Susie Schweppe, PO Box 676, Portland ME 04104-0676, 207 781 3947, fax 207 781 7058

Sustainable Maine (SAM) is a growing statewide coalition of public, private, and nonprofit organizations and individuals. The group represents a broad range of interests, including the environment, education, job training, business, government, community, labor, science and technology, forestry, agriculture, economic and human development, and the religious community. It was originally organized to assist the Maine Economic Development Council meet its sustainability mandate in 1993. The group, however, recognized the broader and longer term need for this organization and is evolving into a permanent and independent organization.

### **Missouri Sustainability Projects**

Contact: Steve Mahfood, EIERA, PO Box 744, 325 Jefferson Street, Jefferson City MO 65102, 314 751 4919, fax 314 635 3486

Missouri has multiple sustainability projects within the state, loosely coordinated by the Missouri Environmental Improvement and Energy Resources Authority (EIERA). They include:- Statewide Governor's Sustainability Roundtable Information Forum held in November 1994 .- St. Louis Area Sustainability Council, an on-going effort with multiple committees. - Springfield Area Sustainability Congress, an on-going effort addressing various topics of sustainability.- Kansas City ECO, a community wide effort addressing the future of the region.

### **Montana Consensus Council**

Contact: Matthew McKinney, Montana Consensus Council, State Capitol, Helena MT, 59620-0801, 406 444 2075, fax 406 444 5529

The Montana Consensus Council was created by executive order and is currently an instrument of state government. The mission of the Council is "to promote fair, effective, and efficient processes for building agreement on natural resources and other public policy issues important to Montanans." It provides a forum to address the challenges of the state related to jobs, education, and the environment in order to promote sustainable communities. It seeks to foster innovative and cooperative approaches for building consensus on public issues.

### **Sustainable North Carolina Project**

Contact: Frances Lynn, Environmental Resource Program, University of North Carolina - Miller Hall, Chapel Hill NC 27599, 919 966 7754, fax 919 966 5692-+

The Sustainable North Carolina Project is a five-year university-lead effort to explore avenues for achieving economic and social progress while protecting North Carolina's environment and conserving its natural resources. In the past two years, the Environmental Resource Program (ERP) at UNC has implemented its education and outreach effort through numerous projects (see Products and Outcomes Section). This effort culminated in a statewide conference in March. The Project has published reports, held workshops and

forums, and gathered community input.

### **Virginia Task Force on Sustainable Development**

Contact: Nicole (Nikki) Beyer, Division of Legislative Services, 910 Capitol Street, Richmond, VA 23219, 804 786 3591, fax 804 371 0169

By resolution in 1994, The Virginia General Assembly created a sustainable development task force. The charge of the task force was to assess current sustainable development initiatives in the Commonwealth and other areas, develop a statewide strategic plan for sustainable development, and recommend appropriate actions which state and local governments, citizen groups, and nonprofit organizations, especially in rural areas of the Commonwealth, might consider for implementation.

The task force is composed of 18 members: six delegates, four senators, and six citizens appointed by the Governor representing both government, economic development, environmental, and community-based organizations in all regions of the state.

### **Delaware Estuary Program (Delaware, New Jersey, Pennsylvania)**

Contact: Jim Walsh, Bureau of Land and Water Conservation, 400 Market Street, 11th Floor, Harrisburg PA 17101, 717 787 5267, fax 717 787 9549

The Delaware Estuary Program (DELEP) is a multistate effort to address the long-term vitality of the region using the concepts of sustainable development. The Estuary covers 22 counties and over 500 municipalities in three states (Delaware, New Jersey, and Pennsylvania). The Program was established to promote partnerships in the region, educate and inform agencies and organizations about sustainable development, and establish a network to foster programs, workshops, and

technical assistance to achieve sustainability in the region.

### **Governor's Commission for a Sustainable South Florida**

Contact: Bonnie Kranzer/Dione Carroll, Commission for a Sustainable South Florida, 1550 Madruga Avenue, Suite 220, Coral Gables FL 33146, 305 669 6973, fax 305 669 6974.

The Governor's Commission for a Sustainable South Florida is a 42-person commission with state and regional agency, legislative, business (including agriculture), local government, tribal, public interest, and nonvoting federal members. The Commission was established to recommend a five-year plan containing strategies, actions, and measures of success for achieving positive change that enhances the ecological, economic, and social systems upon which South Florida and its communities depend. In addition, it seeks to promote sustainability in the Everglades ecosystem.

### **NY Sustainable Development Initiative**

Contact: Columbia Business School, 2880 Broadway, New York, NY 10025, 212 854 3409, fax 212 316 1473 Southern California Council on Environment and Development (SCCED)

Contact: Kathleen Gildred, 1341 Ocean Avenue #253, Santa Monica, CA 90401, 310 455 1603, fax 310 455 3011 Sustainable Wisconsin

Contact: Barbara Markoff, 3343 North Gordon Place, Milwaukee, WI 53212, 414 964 5961, fax 414 964 5950 Beldon Paulson, Center for Urban Community Development - UW Milwaukee, 929 North Sixth Street, Milwaukee, WI 53203, 414 227 3270

# Appendix E

## Indicators Resources and Programs

This appendix includes examples of initiatives on indicators throughout the United States. Their presentation in this report is for informational purposes only and should not be construed as endorsement by the Sustainable Communities Task Force or the President's Council on Sustainable Development.

This inventory was compiled by Walter Corson under the auspices of the Global Tomorrow Coalition. To suggest additional programs, please contact Dr. Corson at 1399 Orchard Street, Alexandria, VA 22302, 703 683 5730.

### Introduction

Communities and regions around the world are using environmental and social indicators, defining goals, and setting quantitative targets to assess their quality of life and monitor progress toward ecological and societal sustainability. The indicators and goals cover a wide range of environmental, economic, social, cultural, and political dimensions of sustainability. Indicators and numerical goals can be used to compare current conditions with desired performance, to show trends over time, to allow comparisons between different regions, to help judge the sustainability of current practices, and to define and publicize new standards and measures for assessing progress toward a sustainable future. (For a discussion of the dimensions of sustainability and an analysis of indicators being used to measure sustainability, see Walter Corson, "Measuring Sustainability: Indicators, Trends, Performance" available from the author.)

A number of urban areas are developing indicators and goals to measure the quality of life and assess progress toward sustainability. In the Western Hemisphere, these areas include Berkeley, Los Angeles, Pasadena, San Jose, and Santa Monica, California; Boulder, Colorado; Cambridge, Massachusetts; Chattanooga, Tennessee; Chicago, Illinois; Greenville and Spartanburg, South Carolina; Jacksonville, Florida; Kansas City, Missouri; New York City; Philadelphia, Pennsylvania; Sarasota, Florida; Seattle and Olympia, Washington; Toronto, Ontario; and Quito, Ecuador. European cities with similar programs include London, Rouen, Stockholm, Vienna, and Zurich.

In 1986, the World Health Organization initiated the Healthy Cities network, a system of mutual support in Europe that has stimulated progress on urban issues around the world. The

project has defined criteria for a healthy city that include the meeting of basic needs, environmental quality, public health, community relations, participation in decision-making, access to resources, economic viability, and preservation of cultural and biological heritage. The Healthy Cities movement now includes more than 1,000 communities worldwide. In 1990, the U.S. Department of Health and Human Services published the Healthy People 2000 National Health Promotion and Disease Prevention Objectives, which contains goals and quantitative targets relevant to many of the dimensions of sustainability listed above. Brief summaries of urban and regional programs in North America that include indicators and goals are given below, along with contacts for further information.

In the United States, several states are using indicators and setting quantitative targets. Colorado has developed indicators and assessed socioeconomic, political, and technological trends; Illinois has analyzed critical trends, Washington's Environment 2010 Plan includes indicators and qualitative goals; Oregon's Benchmarks program has identified 272 indicators with goals to measure performance; Minnesota's Milestones program has defined 20 goals and 79 indicators to gauge progress; and Tennessee has compiled data for 26 environmental indicators. Brief summaries and contacts for these and other state-level programs are given below. This inventory concludes with summaries of several surveys designed to measure environmental, economic, and social factors that influence the quality of life in communities and regions.

### BERKELEY, CALIFORNIA

A Sustainable City Plan for Berkeley. December 1992. Includes 71 specific recommendations for action in seven areas: land use; open space, greening, and agriculture; transportation; housing; energy, resources, and pollution; social justice; and sustainable economics. (Although the plan does not contain explicit indicators, they could be specified for many of the recommendations.) Contact: Urban Ecology, P.O. Box 10144, Berkeley, CA 94709. 510/549-1724.

### BOULDER, COLORADO

Boulder Valley Comprehensive Plan. The plan is based on a vision that urban development must be harmonious with the

natural environment. The city is committed to policies and programs that preserve open space and wetlands, manage transportation needs, facilitate recycling, protect clean air and water, and conserve energy. In October 1993, the City Council adopted six goals as part of the City's Integrated Planning Project: limit population and employment growth, maintain and enhance the quality of the natural and built environment, decrease traffic congestion by developing alternate transportation modes, encourage affordable housing, maintain a sustainable, dynamic, flexible economy, and cooperate with other area jurisdictions to foster a regional perspective and solve problems of mutual concern. A draft strategic plan dated 3-23-94 includes the objective of identifying performance indicators for monitoring the local economy. Contact: City of Boulder, Environmental Affairs, P.O. Box 791, Boulder, CO 80306; or Office of Policy & Program Analysis, City Council, Boulder, CO 80306, 303/441-3147.

## **CALIFORNIA**

Building Sustainable Communities in Southern California. April 1994. Gives data for Southern California (focusing on Los Angeles County) between 1980 and 1993 for more than 50 indicators grouped in eight categories: population (total population and average annual growth, employment, housing units); economy (per capita income; unemployment rate; average income, number of jobs, and percent growth in each of 10 employment sectors); air quality (number of days and extent that federal ozone standard was exceeded); transportation (energy use per person, pollutants emitted by mobile sources, cars per 1000 people, use of cars and public transit); energy (percent use by sector, sources of electricity); water (amount used, recycled, and obtained from local or remote sources); waste (trash produced, recycled, and landfilled; hazardous waste generated); equity (in terms of housing stock, lead poisoning, vehicle use and income). Contact: Southern California Council on Environment and Development, 1341 Ocean Avenue, #253, Santa Monica, CA 90401. 310/821-2722.

## **CAMBRIDGE, MASSACHUSETTS**

Sustainability Profile for the City of Cambridge. September 1992. Data has been compiled for 1990 or 1991 for the following factors: energy and water use, waste generation, transportation, population, agriculture, and local employment. Some data for energy, water, and transportation were collected back to 1983. Contact: Institute for Resource and Security Studies, 27 Ellsworth Avenue, Cambridge, MA 02139. 617/491-5177.

## **CHATTANOOGA AND HAMILTON COUNTY, TENNESSEE**

Revision 2000 Goals and Recommendations. May 1993. Contains 27 general goals and more than 120 specific recommendations in five categories: places (including specific locations, environment, transportation, historic preservation, beautification); work (including economic development, tourism, job training, workplace); government (including leadership, neighborhoods, crime and safety, citizen involvement); people (including education, health, housing, social services); and play (including parks, recreation, culture and arts). Contact: Sisie Tillman, Chattanooga Venture, 850 Market Street, Chattanooga, TN 37402. 615/267-8687.

## **CHESAPEAKE BAY**

1987 Chesapeake Bay Agreement. Includes goals and priority commitments in the areas of living resources, water quality, population growth and development, public information and access, and governments. The Agreement resulted from a coordinated effort by the U.S. Environmental Protection Agency; Washington, DC; Maryland; Virginia; Pennsylvania; and the Chesapeake Bay Commission. Contact: Maryland Department of Natural Resources, Tawes State Office Building, Annapolis, MD 21401. 410/974-2926. CHICAGO, ILLINOIS

Chicago's Sustainability Indicators, The Neighborhood Works, October-November 1993. For 1992, more than 160 indicators cover the following factors: land area, energy, transportation, air pollution, water quality and quantity, solid and hazardous waste, income and employment, housing, crime, education, arts and culture, parks, and community participation and government. Gives trend data for several of the indicators. Contact: The Center for Neighborhood Technology, 2125 West North Avenue, Chicago, IL 60647. 312/278-4800.

## **COLORADO**

Sustainable Development in Colorado: A Background Report on Indicators, Trends, Definitions, and Recommendations. June 1994. Prepared by Daniel D. Chiras. Lists 41 socioeconomic and environmental indicators, of which data for 33 are presented in tabular and graphic form. There are three groups of indicators: social (crime, health, education and literacy; economic (employment); and environmental (air quality, water quality, energy and resource use, toxins and hazardous waste, solid waste, agriculture, forests and habitats,

population). The report includes indicator data for the past five years or more. Of the 16 socioeconomic indicators evaluated, 11 were judged to be moving away from sustainability; 4 suggest movement toward sustainability, and one showed no clear trend. Of the 17 environmental indicators evaluated, 13 were deemed to be moving away from sustainability, and 4 suggest progress toward sustainability. Contact: Sustainable Futures Society, 7652 Gartner Road, Evergreen CO 80439.

Choices for Colorado's Future: An Environmental Scan. December 1993. The Scan analyzes trends and forces affecting Colorado, including social trends (e.g., population growth, migration, health, education, crime, social services); economic trends (e.g., economic product, income, income distribution); political trends (which include environmental issues such as land use policy, water supply and quality, and waste disposal); technological trends (e.g., biotechnology, information processing, automation and computer applications in the workplace); and human development indicators. The Scan omits indicators of resource use and environmental quality, which are available from other sources. Contact: The Colorado Trust, 1600 Sherman Street, Denver, CO 80203. 303/839-9034.

## CONNECTICUT

Social State of Connecticut. November 1994. The report is intended to provide an on-going assessment of the social health of the state's citizens, which will assist policy-makers and enhance public awareness of social problems faced by the state. The index of social health for the state combines in one measure indicators of eleven social problems, including infant mortality, child abuse, teen-age births, teen-age suicides, high school completions, unemployment, average weekly wages, health care costs, violent crimes, access to affordable housing, and the income gap between rich and poor. Contact: Fordham Institute for Innovation in Social Policy, Fordham Graduate Center, Tarrytown, NY 10591. 914/332-6013.

## DELAWARE

Delaware's Environmental Legacy: Shaping Tomorrow's Environment Today. A Report to the Governor and the People of Delaware. January 1988. Contains 122 environmental recommendations covering six goal areas: air quality, water resources, wastes, ecological habitats, land use, and education about environmental ethics. An annual report released in 1989 documents progress made in implementing the recommendations. Contact: DNREC (Department of Natural Resources and Environmental Control), P.O. Box 1401,

Dover, DE 19903.

## GREENVILLE COUNTY, SOUTH CAROLINA

Community Indicators: A Report Card for Greenville County. August 1993. Includes 63 indicators in nine categories: population, economics, education, family, health, public safety, mobility, voter participation, and environment. Does not include direct measures of resource use such as energy and water use or waste generation. Gives data and characterizes trends for 59 indicators between 1987 and 1992: 21 indicators showed improvement, 23 worsened, and 15 exhibited no clear trend. The community will be asked to establish targets for the indicators. Contact: Community Indicators, Community Planning Council of Greenville County, 301 University Ridge, Suite 5300, Greenville, SC 29601-3672. 803/476-3333.

## ILLINOIS

The Changing Illinois Environment: Critical Trends. Summary Report of the Critical Trends Assessment Project. 1994. The project was established to describe ecological changes in Illinois. A source-receptor model comprises the basis for analysis. Sources are human activities that affect the environment; they include manufacturing, transportation, urban dynamics, resource extraction, electricity production, and waste systems. Receptors include forests, agro-ecosystems, streams and rivers, lakes, prairies and savannas, wetlands, and human populations. Results of the analysis are contained in a seven-volume technical report that draws three general conclusions: (1) the emission and discharge of regulated pollutants over the past 20 years has declined, in some cases dramatically; (2) the condition of natural ecosystems in Illinois is rapidly declining as a result of fragmentation and continual stress; (3) data designed to monitor compliance with environmental regulations or the status of specific species are not sufficient to assess ecosystem health statewide. The next report of the project is planned for 1996. Contact: Critical Trends Assessment Project, Office of Research and Planning, Department of Energy and Natural Resources, 325 West Adams, Room 300, Springfield, IL 62704-1892. 217/785-0138.

## JACKSONVILLE AND DUVAL COUNTY, FLORIDA

Life in Jacksonville: Quality Indicators for Progress. November 1994. Includes 74 indicators that reflect trends since 1983 in nine areas: the economy, public safety, health, education, the natural environment, travel mobility,

government and politics, the social environment, and culture and recreation. Does not include direct measures of energy or water use. Of the 74 indicators, 35 showed improvement, 23 worsened, and 16 exhibited no clear trend. Progress was most evident for indicators of travel mobility and culture and recreation; conditions worsened for public safety and for government and politics.

Of the 72 indicators for which targets for the year 2000 have been established, the extent to which current data for the indicators approached or exceeded the target level (a measure of performance expressed as a percentage of the target figure) varied from a high of 123% (for septic tank permits) down to a low of -86%\* (for net job growth); the average performance rating for all 72 indicators was 64%. Of the nine areas, the natural environment had the highest average rating of 96%; the social environment received the lowest average rating of 29%. Of the 72 indicators, 42% (30) had values that were at least 80% of the target figure. Contact: Lois Chepenik, Jacksonville Community Council, 2434 Atlantic Boulevard, Suite 100, Jacksonville, FL 32207. 904/396-3052.

### **KANSAS CITY, MISSOURI**

FOCUS Kansas City Planning Issues Matrix. February 1993. The matrix consists of seven "linkage themes" and five "community building blocks" that together comprise a potential framework for establishing goals. The linkage themes include role and market, technological change, environment, personal well-being and quality of life, diversity, investment, and governance; the community building blocks include jobs and employment, resources and capital, institutions and culture, knowledge and education, and neighborhoods and people. The project has assembled indicator data for nine topical areas: population and demographics, housing and households, development patterns, infrastructure, community services, economics, natural environment, urban fabric, and public finance. Contact: FOCUS Kansas City, City Planning & Development Department, 15th Floor, City Hall, 414 East 12th Street, Kansas City, MO 64106-2795. 816/274-1841.

### **KENTUCKY**

"Kentucky's Legislative Leadership Marches Toward Sustainable Development." By John Rose, President of the Kentucky Senate and Joe Clarke, Speaker of the Kentucky House of Representatives; From Rio to the Capitals, May 1993. In 1988, the Kentucky General Assembly created a state center for hazardous waste reduction. In 1991, the Assembly

enacted comprehensive solid waste legislation that established a 25% goal for solid waste reduction between 1993 and 1997, instituted priorities for solid waste management, and created a recycling authority to develop markets for recovered materials. The 1992 General Assembly enacted legislation that defined sustainable development economic goals; it also created the Long-Term Policy Research Center to help decision-makers consider "the long-term implications of policy, critical trends, and emerging issues which may have a significant impact on the state." Contact: Natural Resources and Environmental Protection Cabinet, Office of Communication and Community Affairs, 4th Floor, Capital Plaza Tower, Frankfort, KY 40601, 502/564-5525; or the Long-Term Policy Research Center, 502/564-2150.

### **LOS ANGELES COUNTY, CALIFORNIA**

Report of the Southern California Conference on Environment and Development, June 14, 1993; and Preparatory Conference, April 22, 1993. The report includes 59 challenges (or goals) for sustainable development in ten categories: air quality, climate change, and transportation; energy resources and efficiency; watershed management; public health; hazardous and solid waste; ecosystems and biodiversity; education, values, and ethics; environmental equity; economic development; and liveable urban communities. Also lists 60 barriers to sustainable development in each of the ten categories.

Building Sustainable Communities in Southern California. A Conference of the Southern California Council on Environment and Development. The report includes current and earlier data for Southern California (focusing on Los Angeles County) for 56 indicators in eight areas: population (total population, employment, number of housing units, average annual population growth); economy (per capita income, unemployment, employment and average income by sector); air quality (number of days ozone standard exceeded, maximum ozone concentration as percent of standard); transportation (annual energy use per person, pollutants emitted per day by mobile sources, cars per 1000 people, annual per capita vehicle miles traveled, annual per capita trips on public transit, percent of trips by walking and by bicycle); energy (percent of energy use by sector, sources of electricity); water (total use, per capita use, percent recycled, percent from local supplies and from remote sources); waste (pounds of trash produced, recycled, and landfilled per person per day; percent of trash recycled; percent of families recycling; total hazardous waste generated); equity (pre-1940s housing stock by region, percent of income paid for rent, lead

poisoning rate, percent of vehicle miles traveled by highest and lowest income groups). The trend data shows improvement for per capita income, air quality, and solid waste recycling; and worsening for unemployment, water use, and hazardous waste generation. Contact (for both reports): Southern California Council on Environment and Development, 1341 Ocean Avenue, #253, Santa Monica, CA 90401. 310/821-2722.

## **MAINE**

Goals, Indicators and Benchmarks Matrix. Report of the Environmental Goals Committee, Maine Economic Growth Council. October 31, 1994. The report contains two broad goals: (1) balancing the use of natural resources to provide for current and future needs; and (2) supporting sustainable communities by sharing common resources, economic and social systems, and values. The natural resources management goal covers six areas: data bases, economic opportunities, research, conservation, tourism, and stewardship. Thirty-six indicators are suggested for measuring progress towards 17 benchmarks, three of which contain specific percentage targets. Four areas are covered under the second goal of supporting sustainable communities: encouraging development of non-traditional "communities of shared interest", enhancing regional ecosystems, increasing citizen participation, and encouraging state policies for sustainable economies and employment. This goal is defined by 25 possible measures of progress toward eight targets, three of which are quantified. While little specific data is included, the plan provides a framework for sustainable management strategies. Contact: Maine Economic Growth Council, c/o Maine Development Foundation, 45 Memorial Circle, Augusta, ME 04330.

Maine's Progress Towards a Sustainable Future: 1990. Includes 78 indicators of progress towards sustainable development in Maine. Examples of indicators include miles of rivers that fail to meet federal standards; number of vertebrate species that are endangered, rare or threatened; percentage of teens who use drugs; and number of households below the poverty line. Contact: Jo D. Saffeir, Mainewatch Institute, P.O. Box 209, Hallowell, ME 04347. 207/688-4191.

## **MASSACHUSETTS**

Excerpt from Toward a U.S. Green Plan: Thinking About a U.S. Strategy for Sustainable Development. By Phillip A. Greenberg. October 1993. Massachusetts has adopted pollution prevention legislation intended to reduce by half the

volume of hazardous waste produced in the state by 1997. Companies using stipulated amounts of hazardous materials must submit a plan for using less hazardous materials and/or reducing wastes. Contact: Department of Environmental Protection, One Winter Street, Boston, MA 02108. 617/727-3160.

## **MINNESOTA**

Minnesota Milestones: A Report Card for the Future. December 1992. Includes 20 general goals and 79 indicators with quantitative targets for the years 1995, 2000, 2010, and 2020, designed to measure progress in a number of areas, including economic viability and well-being, health, education, community safety, community services, housing, environmental quality, recreation, participation in government, and government effectiveness. For 25 of the 79 indicators, the data show changes from 1980 to 1990; 13 of these demonstrated progress toward the targets, 6 exhibited movement away from the targets, and 6 displayed no clear trend. Of the 12 indicators measuring trends in natural resources and the environment, five improved, one worsened, and six showed no clear trend. The extent to which current data for 49 of the indicators approached or exceeded the designated target level (a measure of performance expressed as a percentage of the target figure) varied from a high of 110% (for hazardous waste generation) to a low of 0% (for highway litter); the average performance rating for all 49 indicators was 75%. The average rating for 13 environmental indicators was 69%. Of the 49 indicators, 61% (30) had values that were at least 80% of the target figure. Contact: Minnesota Planning, 658 Cedar Street, St. Paul, MN 55155. 612/296-3985.

## **NEW JERSEY**

Communities of Place: The New Jersey Interim State Development and Redevelopment Plan. 1991. New Jersey has a comprehensive development plan that attempts to integrate environmental and natural resource management with other state development plans. Issues specifically mentioned include growth management, air and water pollution control, protection of biological diversity and lands, energy efficiency improvements, and recycling and waste management. The state's Interim Development and Redevelopment Plan has nine goals and accompanying strategies for their accomplishment, ranging from providing adequate housing to conserving natural resources. If implemented throughout the state, the Plan could generate 40% less water pollutants and consume 80% less environmentally fragile land. Contact: New Jersey

State Planning Commission or Department of Environmental Protection, 401 E. State Street, Trenton, NJ 08625-0402. 609/292-2885.

## **NEW YORK CITY**

Annual Report on Social Indicators 1994. Includes indicators covering 50 topics grouped in 8 categories: demographics, economy and employment, public safety, health, education and culture, poverty and social services, housing and infrastructure, and environment. Contact: Eric Kober, Department of City Planning, 22 Reade Street, Room 4N, New York, NY 10007-1216. 212/720-3322.

## **NORTH CAROLINA**

The Future of North Carolina: Goals and Recommendations for the Year 2000. 1983. Results of a 1982 conference that produced 44 broad goals and 107 recommendations for action covering 16 topics. The goals and recommendations are grouped under four general headings: people (education, health, housing, poverty); economy (private investment, labor force development, public investment, information and technical assistance); natural resources (environmental protection, resource production and conservation, natural heritage, resource management); and community (physical development, recreational and cultural resources, security, government). Contact: North Carolina Department of Administration, 116 West Jones Street, Raleigh, NC 27603-8003. 919/733-7232.

## **OKLAHOMA**

Central Oklahoma 2020: Select Community Indicators. 1993. The 2020 project developed quality of life indicators that facilitate evaluation of community initiatives. The indicators are grouped in seven categories: overall quality of life (based on 77 measurements in 6 categories); economy (economic well-being, employment, economic restructuring, erosion of the middle class); labor force (educational achievement, test scores, drop-out rates); social factors (teenage pregnancy, children in poverty, single parent families, children with working parents); desirable community (public safety and crime, the environment, health, housing, acceptable disparities among races, age groups, and counties); demographics (growing diversity, aging community); and arts and recreation. Contact: Arthur Sargent, Executive Director, Community Council of Central Oklahoma, 125 NW 5th Street, Oklahoma City, OK 73101. 405/272-0049.

## **OLYMPIA AND THURSTON COUNTY, WASHINGTON**

State of the Community: A Report on Progress Toward a Sustainable Society in the South Puget Sound Region. April 1993. Defines and gives data for 12 primary indicators and 25 secondary indicators in eight categories: resource consumption (water use, energy use, solid waste, food production); natural environment (biodiversity, air and water pollution, open space); economy (economic diversity, jobs in value-added manufacturing, distribution of wealth); social environment (poverty, voter registration, library use, crime, violence, dispute resolution); education (high school graduation, literacy rate); health (birth weight, deaths from stress and immune system failures, health insurance coverage); transportation (drive-alone commuters, bike paths, fuel-efficient vehicles); and population. Gives trend data for most of the primary indicators. Of the ten indicators for which a clear trend was evident, two showed improvement, while eight worsened. Data is also given for carbon dioxide emissions, material recycling, unemployment, domestic violence, single parent families, affordable housing, and community participation. Numerical goals are suggested for water and gasoline consumption, carbon dioxide emissions from energy use, solid waste, and percent of drive-alone commuters. Contact: Sustainable Community Roundtable, 2129 Bethel Street, N.E., Olympia, WA 98506. 206/754-7842.

## **OREGON**

Oregon Benchmarks: Standards for Measuring Statewide Progress and Government Performance. Report to the 1993 Legislature. December 1992. Includes 272 indicators pertaining to people, quality of life, and the economy, with data for some indicators from 1970-1992, and numerical targets for 1995, 2000, and 2010. Areas covered include health, education and worker training, housing, crime, transportation, cultural activities, environmental quality, civic and political participation, government effectiveness, economic viability and diversity, income, employment, and energy use. A number of the 272 indicators are designated as critical measures of Oregon's human, environmental, and economic well-being. Of the 37 critical indicators for which trend data is given, 17 showed progress toward the targets, 13 reflected movement away from the targets, and 7 displayed no clear trend. Of the five critical environmental indicators, two improved, two worsened, and one showed no trend. Of the 51 critical indicators that included both current data and a target value for the year 2000, the extent to which the data approached or exceeded the designated target level (a measure

of performance expressed as a percentage of the target figure) varied from a high of 101% (the percentage of forest land and agricultural land preserved) to a low of -41%\* (teen-age pregnancy rate); the average performance rating for all 51 indicators was 69%. The average rating for six environmental indicators was 78%. Of the 51 indicators, 53% (27) had values that were at least 80% of the target figure. Contact: Oregon Progress Board, 775 Summer Street, NE, Salem, OR 97310. 503/373-1220.

### **PASADENA, CALIFORNIA**

The Quality of Life in Pasadena: An Index for the 90s and Beyond. 1992. The Index is designed to reveal periodically how the city rates in areas reflecting the community's overall health. The report contains 112 indicators (including 56 indicator categories and 68 sub-categories) covering ten areas: environment; health; alcohol, tobacco, and other drugs; education; economy and employment; housing; arts and culture; recreation and open space; transportation; and community safety. The environmental indicators include air quality, water conservation, energy efficiency, recycling and solid waste, trees, and environmental education. Many of the indicators are compared with other local, state, and national data. Quantitative targets have been set for more than a third of the 112 indicators; the targets were drawn from the Pasadena General Plan and the Healthy People 2000 National Health Promotion and Disease Prevention Objectives. Pasadena is part of California's Healthy Cities Project. The report gives trend data for more than half of the 56 indicator categories. Of the 21 indicators showing clear trends, 13 were positive and 8 negative. Of the 6 environmental indicators, 3 improved and 3 showed no clear trend. The extent to which current data for 18 of the indicators approached or exceeded the designated target level (a measure of performance expressed as a percentage of the target figure) varied from a high of 138% (for vehicle deaths) down to a low of -210%\* (for syphilis cases); the average performance rating for the 18 indicators was 57%. Of the 18 indicators, nine had values that were at least 80% of the target figure. Contact: Pasadena Health Department, 100 North Garfield Avenue, Room 136, Pasadena, CA. 91109. 818/405-4562.

### **PHILADELPHIA, PENNSYLVANIA**

Green City Philadelphia: An Urban Environmental Platform for the Nineties. 1992. Contains 59 specific policy recommendations or goals in eight categories: parks and open space, preservation and shelter, solid waste and recycling, water, environmental health, food and agriculture, air and

transportation, and energy. (Although the platform contains few specific indicators, they could be specified for many of the recommendations.) Green City Philadelphia is a community-wide process involving representatives from over 60 businesses, government agencies, community and non-profit organizations, and academic institutions. Contact: Pennsylvania Environmental Council, 1211 Chestnut Street, Suite 900, Philadelphia, PA 19107. 215/563-0250. PORTLAND, OREGON City of Portland Energy Policy. April 1990. The policy's overall goal is to increase energy efficiency in all sectors of the City by 10% by the year 2000. The policy includes 89 specific short- and long-term objectives in nine categories: the role of the city; energy efficiency in city-owned buildings, in residential buildings, in commercial and industrial facilities, and through land use regulations; energy efficient transportation; telecommunications as an energy efficiency strategy; energy supply; and waste reduction and recycling. The Energy Office's program, Businesses for an Environmentally Sustainable Tomorrow (BEST) helps local businesses improve energy efficiency, save water, recycle materials and reduce waste, and identify efficient transportation alternatives. Portland participates in the multi-city Urban Carbon Dioxide Reduction Project and the Green Lights Program to improve municipal lighting systems. Contact: Energy Office, City of Portland, 1030 Portland Building, 1120 SW 5th Avenue, Portland, OR 97204. 503/796-7223.

### **SAN FRANCISCO, CALIFORNIA**

"Policy Options that Contribute to Energy Sustainability", December 1992. Includes 58 options in nine categories: environmental protection, self-reliant resources, waste management, efficient resource delivery, community design, appropriate housing, transit alternatives, efficient production of goods and services (includes urban forestry and water conservation), and participatory society (includes education and family planning). The city's Bureau of Energy Conservation has helped renovate energy systems in city facilities and develop commercial and residential energy conservation ordinances. Contact: Bureau of Energy Conservation, 110 McAllister Street, Room 402, San Francisco, CA 94102. 415/864-6915.

### **SAN JOSE, CALIFORNIA**

Incorporating Concepts of Sustainability within Large Urban Areas: The San Jose Experience. By Mary Tucker. The city's Environmental Services Department has adopted an integrated

services approach that includes specific goals for water pollution control, water reclamation, integrated waste management, energy management, air quality, and water conservation. Contact: Environmental Services Department, 777 North First Street, Suite 450, San Jose, CA 95112. 408/277-5533.

“Toward a Sustainable San Jose”, Saving Cities, Saving Money. By John Hart. Describes the city's programs for saving energy in heating, cooling, and lighting; by promoting efficient driving; and by discouraging solo driving and promoting all other means of transportation. Also reviews programs for controlling specific pollutants, conserving water and reducing wastewater flows, conserving and recycling materials, and setting efficient patterns of land use and transportation. Contact: Resource Renewal Institute, Fort Mason Center, Building A, San Francisco, CA 94123. 415/928-3774.

### **SANTA MONICA, CALIFORNIA**

Santa Monica Sustainable City Program. September 20, 1994. Based on eight guiding principles, the report identifies 16 indicators with targets for the year 2000 and describes 58 programs in four major areas: resource conservation (7 targets and 29 programs for solid waste, water and wastewater, and energy); transportation (2 targets and 5 programs); pollution prevention and public health protection (3 targets and 17 programs); and community and economic development (4 targets and 7 programs). Data for 1990 and 1993 are given for 10 of the indicators; six showed improvement, one worsened, and three showed no change. The report outlines four steps for each of five program areas: defining the program, raising community awareness and initiating networking, integration with city policies and programs, coordinating implementation, and supporting community dialogue on sustainability. Contact: Dean Kubani, Environmental Programs Division, City of Santa Monica, 200 Santa Monica Pier, Suite E, Santa Monica, CA 90401. 310/458-8972.

### **SARASOTA COUNTY, FLORIDA**

2020 Foresight: Sarasota County Design Charette. April 1993. Contains 25 guideline principles or goals in seven categories: land use (includes transportation and environment); mobility and communications (includes transportation, education, and democratic process); ecology; neighborhood (includes governance, social needs, and job creation); community (includes education and citizen involvement); agriculture and aquaculture; economics (includes recycling and incentives for

self-sufficiency). Contact: Jean Meadows, Extension Agent IV, Home Economics, Cooperative Extension Service, 2900 Ringling Boulevard, Sarasota, FL 34237. 813/951-4240.

### **SEATTLE AND KING COUNTY, WASHINGTON**

The Sustainable Seattle 1993 Indicators of Sustainable Community: A Report to Citizens on Long-Term Trends in Our Community. November 1993. The project defines sustainability as the area's “long-term cultural, economic, and environmental health and vitality”. The report includes 40 proposed indicators selected for data development and grouped into four broad areas: environment (biodiversity, air quality, topsoil loss, wetlands); population and resources (population growth, water use, solid waste, energy, transportation, land use, food); economy (employment, income, poverty, housing affordability, health care spending); and culture and society (infant health, crime, community service, voting, literacy, library use, participation in the arts). The report gives trend data for 20 of the indicators between 1980 and 1992, and characterizes the trends as • moving toward sustainability (4 indicators), • moving away from sustainability (11 indicators), or • neither toward nor away (5 indicators). Future targets for the indicators are being considered. Contact: Sustainable Seattle, c/o Metrocenter YMCA, 909 Fourth Avenue, Seattle, WA 98104. 206/382-5013.

### **SPARTANBURG COUNTY, SOUTH CAROLINA**

Critical Indicators II: Measuring Spartanburg County. 1991. An earlier report was published in 1989, and a third report is in preparation. Highlights indicator trends and makes comparisons between Spartanburg, the upstate region of 12 counties, and the entire state. The 46 indicators are grouped in five categories: education, family, economy, health, and crime. Omits environmental and natural resource indicators. Of the 31 indicators in the 1991 report that could be compared with those in the 1989 report, 7 (23%) showed improvement, while 24 (77%) were worse. For each indicator, a percentage improvement or worsening was computed. For example, adult education enrollment and infant mortality rates improved by 64% and 36%, respectively; while child abuse and aggravated assault rates worsened by 60% and 125%, respectively. Contact: Spartanburg County Planning and Development Department, 366 North Church Street, Spartanburg, SC 29303. 803/596-3570.

## TENNESSEE

“State of the Environment: Preview 1994”, The Tennessee Conservationist, Fall 1994. Assesses the status of environmental quality and gives data for 26 indicators in eleven areas: drinking water supply; water quality (percentage of households on public sewer system, lakes and streams not impaired by pollution); air quality (number of unhealthy air events, areas with air pollution problems, number of times ozone standards exceeded, sulfur dioxide levels); hazardous chemicals (hazardous waste generation, toxic chemical releases); lead (blood lead levels, use of leaded gasoline); radiation concerns (low-level radioactive waste generation); solid waste (adequacy of garbage collection, solid waste generation, number of active landfills, average tons of waste buried daily); land use (type of use, composition of forest cover); Superfund cleanup (inventory of hazardous substance sites, number of sites with cleanup activities); underground storage tanks (progress in replacing old tanks, number of leaking tanks); wildlife (number of species by class, non-native exotic species, plant diseases, endangered species). While no specific goals are stated, trend data from the 1980s to 1994 are given for 19 of the indicators. Eleven of the indicators improved, seven worsened, and one showed no trend. The report concludes with a summary of state performance measures in 14 areas. Future reports will address specific programs, goals, and areas of improvement. Contact: Bureau of Resources Management, Tennessee Department of Environment and Conservation, 401 Church Street, Nashville, TN 37243-0454. 615/532-0736.

## TEXAS

Clean Texas 2000. Summarized in Partners for Livable Communities, The State of the American Community (Washington, DC, 1994). Cities, industries, and the state government are forming working partnerships and setting goals for recycling, water quality, and pollution prevention. Goals for the year 2000 include statewide reduction of hazardous waste generation and toxic releases by 65% or more, reduction of solid waste going to landfills by 40% or more, and education of the public about what they can do to protect the environment. Contact: Texas Water Commission, 1700 North Congress, Austin, TX 78701. 512/463-7674.

## TORONTO, ONTARIO

Selected Healthy City Indicators: A Research Agenda. Final Report to the Healthy City Office, City of Toronto. October 1991. Identifies 136 indicators of a healthy city in nine

domains of city life: transportation, housing, production, work and employment, consumption, family and social organization, education and literacy, medical and health services, and public safety. Within each domain, the report includes measures of the three healthy city parameters of sustainability, equity, and empowerment. Contact: Healthy City Office, 20 Dundas Street West, Suite 1036, Toronto, Ontario, Canada M5G 2C2. 416/392-0099.

## VERMONT

A Plan for a Decade of Progress: Actions for Vermont's Economy. First Annual Report of the Vermont Partnership for Economic Progress. December 15, 1993. Describes a ten-year economic plan containing 71 recommendations to encourage a diverse and sustainable economy without compromising the integrity of the environment. Recommendations for action cover four economic sectors: agriculture and other resource-based industries, education, goods and services, travel and recreation. Preliminary benchmarks include 112 indicators in 19 categories: the economy and employment, job growth by county, leadership stability, taxes, transportation, economic development, energy, telecommunications, science and technology, agriculture and other resource-based industries, education, goods and other services, travel and recreation, health and literacy, housing, social welfare, child care, crime, and environment. Contact: Vermont Partnership for Economic Progress, Office of Policy Research, 109 State Street, Montpelier, VT 05609. 802/828-3326.

## VIRGINIA

Blueprint for Sustainable Development of Virginia. January 1994. The Virginia Environmental Endowment has launched a cooperative effort to create a sustainable development vision and strategy for the state, with the participation of business, community, and academic leaders. The Blueprint includes 33 specific recommendations covering eight priority areas: managing growth, building sustainable industry, preventing pollution, sustainable energy, protecting air quality, protecting historic sites and natural areas, managing water resources, and strengthening communities. The report calls for development of a comprehensive information data base for use at both state and local levels; several of the recommendations refer to numerical goals. Contact: Environmental Law Institute, 1616 P Street, N.W., Washington, DC 20036. 202/328-5150. The Northampton Economic Forum: A Blueprint for Economic Growth. December 1992. Gives details of the planning process for promoting sustainable development in Northampton County, Virginia. Describes a vision, nine development

premises, five goals and milestones, six strategies, and an action agenda. Contact: The Nature Conservancy, Virginia Coast Reserve, Brownsville, P.O. Box 158, Nassawadox, VA 23413. 804/442-3049.

## WASHINGTON, D.C. METROPOLITAN REGION

Report of the Partnership for Regional Excellence. July 1993. The Partnership has endorsed a set of goals that include creating a process for solving metropolitan problems; conserving natural resources; using land, energy, and fiscal resources efficiently; developing a coordinated transportation system; creating balanced development patterns for urban and suburban areas; establishing greenbelts and open space wedges to confine urban growth; ensuring availability of affordable housing; protecting air and water resources, farmlands, forests, parklands, and historic places; protecting public health; maintaining strong neighborhoods; maintaining economic vitality; and developing a social climate supportive of measures to alleviate problems associated with growth and transportation. The Partnership identified three areas most in need of regional responses for implementing the goals: land use, transportation, and environment; economic development; and quality of life. Contact: Metropolitan Washington Council of Governments, 777 North Capitol Street, N.E., Washington, DC 20002-4224. 202/962-3256.

## WASHINGTON STATE

The 1991 State of the Environment Report. July 1992. Includes indicators and action agendas with qualitative goals for air, water, land, fish and wildlife; and twelve "cross issues" including energy, recycling, and hazardous waste. A Citizen's Guide to Washington's Environment, October 1990. Provides an overview of the state's natural environment, and gives data for a number of priority areas including air and water pollution, waste disposal, wetland loss, loss of forest and farmland, pesticide use, and the state's contribution to global warming. Contact: Washington Environment 2010, Washington State Department of Ecology, P.O. Box 47600, Olympia, WA 98504-7600. 206/438-7701.

\*Note: In the performance ratings for Jacksonville, Oregon, and Pasadena, a negative percentage (marked with an asterisk) resulted when the current indicator value was more than twice as large as the target value.

### Quality of Life and Environmental Indicator Surveys

Recent surveys have analyzed some of the environmental,

economic, and social factors that influence the quality of life in urban areas and states, and that affect whether they can maintain acceptable living standards and remain ecologically and socioeconomically sustainable over the long run. Several of these surveys are described below.

Cities: Life in the World's 100 Largest Metropolitan Areas. (Washington, DC, Population Crisis Committee (now Population Action International), 1990.) Ten criteria were used to rate each city's standard of living: public safety, food costs, living space, housing standards, communications, education, public health, peace and quiet, traffic flow, and clean air. For each indicator, a rating between 1 (worst) and 10 (best) was assigned; for each city the ten ratings were totaled to give an overall urban living standards score with a possible maximum of 100. City scores ranged from a high of 86 (for Melbourne, Montreal, and Seattle-Tacoma) to a low of 19 (for Lagos, Nigeria). The results show a negative correlation between living standards and urban growth rate: the 50 cities with the highest living standards had an average population growth rate less than half that of the 50 lowest-ranked cities.

Urban Stress Test. (Washington, DC, Zero Population Growth, 1988.) Using a five-point scale, the study rated 192 U.S. cities on 11 categories using 30 indicators to assess social, economic, and environmental conditions. The categories are: population change, crowding in housing, educational attainment, violent crime, community economics, individual economics, birth rates and infant mortality rates, air pollution, hazardous waste sites, water quality and availability, and quality of sewage treatment. In each category, a score of 5 represents a "most stressful" condition; a rating of 1 denotes "least stressful." Each city's scores were averaged to give a combined overall urban stress score. These scores ranged from a high of 4.2 (for Gary, Indiana) to a low of 1.6 (for Cedar Rapids, Iowa). The study shows a positive correlation between the stress scores and population size: the average scores for cities with fewer than 100,000 people was 2.5; the average for cities of a million or more was 3.8.

Children's Stress Index. (Washington, DC, Zero Population Growth, The ZPG Reporter, May 1993.) The survey includes 239 U.S. metropolitan areas, 493 counties, and 195 cities. For every locality, the Index contains scores for ten categories affecting human well-being, including indicators reflecting the well-being of children. Scores range from 0 (worst) to 10 (best). Scores for the ten categories were computed from a total of 70 social, economic, and environmental indicators; the categories are: population change and crowding in housing,

family economics, community economics, maternal and child health, education and access to cultural facilities, air quality, water quality and use, toxic releases and sewage treatment, energy use and transportation. The Index lists each area's final score (the combined total of the ten scores listed above), as well as each area's rank compared to all others of its type. Scores for metro areas ranged from 74.1 for Burlington, Vermont (best) to 36.4 for Bakersfield, California (worst). The study shows a negative correlation between metro area size and the stress index: areas with less than 250,000 people had an average score of 53.8; areas with a million or more had an average score of 42.3.

**Green Cities Index.** Compiled by the World Resources Institute in the 1992 Information Please Environmental Almanac. (Boston, MA, Houghton Mifflin, 1992.) Using 24 indicators of environmental quality, the study rates and ranks 64 U.S. cities on eight different categories: waste, water use and source, energy use and cost, air quality, transportation measures, toxic chemical accident risk, environmental amenities, and environmental stress. The top-ranked city was Honolulu, Hawaii with a score of 10.5; the lowest-ranked city was Santa Ana, California with a score of 43.4.

**Green Metro Index.** Compiled by the World Resources Institute in the 1994 Information Please Environmental Almanac. (Boston, MA, Houghton Mifflin, 1993.) The study rates and ranks the 75 largest U.S. metropolitan areas. The Index is based on federal data for eight environmental measures covering air and drinking water quality, past and present toxic emissions, energy use for heating and cooling residences and commercial buildings, and transportation patterns. The top-ranked metro area was New York-Northern New Jersey-Long Island; the lowest-ranked area was Youngstown-Warren, Ohio.

In addition to the Green Metro Index, the 1994 Almanac compares U.S. states and Canadian provinces on per capita energy use, toxic chemical releases, per capita water use, and greenhouse gas emissions. For the 50 U.S. states and 12 Canadian provinces and territories, the Almanac provides current data for more than 60 indicators covering population, income, energy, transportation, water, solid and hazardous wastes, pollutants, biodiversity, and environmental and natural resource expenditures.

**The Livable Cities Almanac.** By John Tepper Marlin. (New York, HarperCollins, 1992.) Rates 110 U.S. cities and metropolitan areas using data from the federal government and from state, county, and city officials. Each city is rated on

eight criteria: death rate, public safety, economic health, environment, health services, recreation, school-health education and services, and disclosure (an indicator of responsiveness to the survey's request for information). Three rating categories were used: ● best (excellent), ● middle (good), and ● worst (poor). If these categories are assigned values of 3, 2, and 1, respectively, the highest-rated city is Minneapolis-St. Paul, MN (22); the lowest-rated city is Baton Rouge, LA (7).

**America's Top Rated Cities: A Statistical Handbook.** Five volumes: Northeastern, Eastern, Central Southern, Western. October 1993. Universal Reference Publications, 1355 West Palmetto Park Road, Suite 315, Boca Raton, Florida 33486. 407/997-7557.

**Places Rated Almanac: Your Guide to Finding the Best Places to Live in North America.** By David Savageau and Richard Boyer. Second edition. New York: Prentice Hall, 1993. Ranks 343 metropolitan areas on ten criteria: living costs, job outlook, housing, transportation, education, health care, crime, the arts, recreation, and climate.

**1991-1992 Green Index: A State-by-State Guide to the Nation's Environmental Health.** By Bob Hall and Mary Lee Kerr. Washington, DC: Island Press, 1991. For each U.S. state the Index gives 256 indicators covering natural ecosystems, the built environment, and human health. The data covers 13 categories: air and water pollution, energy, transportation efficiency, hazardous and solid waste, community health, workplace health, agricultural pollution, forestry and fish, recreation and quality of life, state policy initiatives, and leadership in Congress. The study gives a total green index score and overall rank for each state. The total score is the sum of the state's ranks for all 256 indicators, with each indicator carrying equal weight; the state with the smallest combined score has the highest overall rank. The first-ranked state is Oregon with a score of 4,583; the last-ranked state is Alabama with a score of 8,658. In a more recent study titled "Gold and Green" (in the Institute's journal, *Southern Exposure*, Fall, 1994), Hall and Kerr use indicators to evaluate each U.S. state's economic performance and its environmental stresses. The 20 economic indicators include annual pay, job opportunities, business start-ups, and workplace injury rates; the 20 environmental measures range from toxic emissions and pesticide use to energy consumption and spending for natural resource protection. The study shows that states with the best environmental records also offer the best job opportunities and climate for long-term economic dev.

**Contact:**  
Institute for Southern Studies  
P.O. Box 531

Durham NC 27702  
919/419-8311.

# Appendix F

## Resources for Sustainable Communities

The add to the information presented in this appendix, please send them to the PCSD office, re: resource additions, preferably via email [pcsd.comments@erols.com](mailto:pcsd.comments@erols.com).

General Sustainable Communities Resources

Sustainable Communities Awards Programs

Resources for Community Capacity Building

Resources for Partnerships for Design

Resources for Economic Development and Jobs

Resources for Safe and Healthy Communities

General Sustainable Communities Resources

### **Center for Neighborhood Technology**

2125 W. North Avenue  
Chicago, IL 60647  
312 278 4800  
web [www.cnt.org](http://www.cnt.org).

Publishes *The Neighborhood Works: Building Alternative Visions for the City*, \$30 for one year, bi-monthly subscription; and conducts policy analysis on a broad range of sustainable communities issues.

### **Center for Policy Alternatives**

1875 Connecticut Avenue  
NW, Suite 710  
Washington, DC 20009  
202 387 6030  
fx 202 986 2539  
email [info@cfpa.org](mailto:info@cfpa.org)  
web .

Works with state legislators throughout the United States on a wide range of issues including campaigns on creating community capital and mobilizing participation for tomorrow's communities.

### **Center of Excellence for Sustainable Development**

U.S. Department of Energy  
Office of Energy Efficiency and Renewable Energy  
Denver Regional Support Office  
1617 Cole Blvd  
Golden, CO 80401

800 357 7732  
email [sustainable.development@hq.doe.gov](mailto:sustainable.development@hq.doe.gov),  
web .

*Communities by Choice: An Introduction to Sustainable Community Development*, published by the  
**Mountain Association for Community Economic Development**

433 Chestnut Street  
Berea, KY 40403  
606 986 2373  
web site <http://www.maced.org>.

### **Community Sustainability Resource Institute**

174 Weston Road  
P.O. Box 981  
Arden, NC 28704  
704 681 1955  
fx 704 687 0441  
email [sustain@primeline.com](mailto:sustain@primeline.com).

### **CONCERN, Inc.**

1794 Columbia Road, NW  
Washington, DC 20009  
202 328 8160  
fx 202 387 3378  
email [concern@igc.apc.org](mailto:concern@igc.apc.org).

### **Context Institute**

PO Box 946  
Langley, WA 98260  
360 221 6044  
fx 360 221 6045  
web .

### **EcoCity**

Cleveland,  
2841 Scarborough Road  
Cleveland Heights, OH 44118  
216 932 3007 (fax same)  
email [ecocleveland@igc.apc.org](mailto:ecocleveland@igc.apc.org).

Publishers of the *EcoCity Cleveland Journal*, \$20 for one year, monthly subscription.

### **Friends of the Earth**

U.S. Community Support Project  
1025 Vermont Avenue, NW, Third Floor,

Washington, DC 20005-6303  
202 783 7400 x211  
email [foe@foe.org](mailto:foe@foe.org)  
web <http://www.foe.org>.

### **Global Environmental Options**

900 Park Avenue  
New York, NY 10021  
212 439 6042  
fx 212 794 4378,  
.

### **Greening Cities: Building Just and Sustainable Communities, by Joan Roelofs.**

The Bootstrap Press  
777 United Nations Plaza, Suite 3C  
New York, NY 10017  
email [cipany@igc.apc.org](mailto:cipany@igc.apc.org)  
800 316 2739.

### **International City/County Management Association**

777 North Capitol Street, NE, Suite 500  
Washington, DC 20002  
202 962 3680  
fx 202 962 3500  
web .

For a publications and services catalog call 800 745 8780, or  
(if outside the United States) 301 498 1227.

### **International Council on Local Environmental Initiatives**

U.S. Office  
15 Shattuck Square  
Suite 215  
Berkeley, CA 94704  
email [iclei\\_usa@iclei.org](mailto:iclei_usa@iclei.org).

International headquarters  
City Hall, East Tower, 8th Floor  
Toronto, Ontario, M5H 2N2, Canada  
416 392 1462  
fx 416 392 1478

Publishers of The Local Agenda 21 Planning Guide, a guide that presents the planning elements, methods, and tools being used by local governments to implement sustainable development in their communities (send \$35 plus \$8 postage to the United States, in U.S. dollars); and Tools for a Sustainable Community: One-Stop Guide for Local Governments (send \$5.00, payable to ICLEI-USA c/o Josh Wolfe to the U.S. office or by sending an email to [jwolfe@iclei.org](mailto:jwolfe@iclei.org)).

### **Joint Center for Sustainable Communities**

a partnership between the National Association of Counties and the U.S. Conference of Mayors to promote the leadership of mayors, county commissioners, and their staff in pursuing sustainable development locally. Contacts: Nick Keller, Co-Director for the National Association of Counties, 440 First Street, NW, Washington, DC 20001, 202 942 4224, fx 202 737 0480, email [nkeller@naco.org](mailto:nkeller@naco.org), web ; or Carol Everett, Co-Director for the U.S. Conference of Mayors, 1620 Eye Street, NW, Washington, DC, 20006, 202 293 7330, fx 202 429 0422, email [cever78204@aol.com](mailto:cever78204@aol.com), web .

### **Making Cities Livable Conference**

P.O. Box 7586  
Carmel, CA 93921  
408 626 9080  
fx 408 624 5126  
Publishes the Making Cities Livable Newsletter.

### **Millennium Communications Group, Inc.**

1150 18th Street NW, 8th Floor  
Washington, DC  
20036  
202 872 8800  
fx 202 872 8845  
email [info@millencom.com](mailto:info@millencom.com)  
web site .

**Minnesota Sustainable Communities Network** email update on sustainability-related activities. The list is moderated by staff of the sustainable communities team at the Minnesota Office of Environmental Assistance (OEA). Join by sending an email message with your name, organizational affiliation (if any), address, phone (optional) and fax to. Let them know if you don't want your name listed in the MnSCN member directory.

### **National Association of Counties**

440 First Street, NW  
Washington, DC 20001  
202 393 6226  
fx 202 737 0480  
<http://www.naco.org>.

### **National Association of Towns and Townships**

444 North Capitol Street, Suite 294  
Washington, DC 20001  
202 624 3550.

### **National Conference of State Legislatures**

1560 Broadway, Suite 700

Denver, CO 80202  
303 830 2200  
fx 303 863 8003  
<http://www.ncsl.org>

### **Sustainable Communities Network**

resources under the following issues areas:

- creating community
- Smart growth
- growing a sustainable economy
- protecting natural resources
- living sustainably
- governing community

For more information contact: CONCERN, Inc., 1794  
Columbia Road, NW, Washington, DC 20009, 202 328 8160,  
fx 202 387 3378, email [concern@igc.apc.org](mailto:concern@igc.apc.org), or Community  
Sustainability Resource Institute, 174 Weston Road, P.O. Box  
981, Arden, NC 28704, 704 681 1955, fx 704 687 0441,  
email [sustain@primeline.com](mailto:sustain@primeline.com).

### **Sustainable Community Roundtable**

2129 Bethel St. NW  
Olympia, WA 98506  
360 754 7842  
email [roundtable@olywa.net](mailto:roundtable@olywa.net)  
web site .

### **Urban Ecology**

405 14th Street, Suite 701  
Oakland, CA 94612  
510 251 6330  
email [uecommdes@igc.apc.org](mailto:uecommdes@igc.apc.org).

\$30 membership for The Urban Ecologist newsletter;  
publications and books also available.

### **Worldwatch Institute**

1776 Massachusetts Ave. NW  
Washington, DC 20036  
202 452 1999  
fx 296 7365  
email [wwpub@worldwatch.org](mailto:wwpub@worldwatch.org)  
web site .

Publishes the annual State of the World report, Vital Signs, the  
Environmental Alert Book Series, Worldwatch Paper Series  
(\$5.00 each; any combination of 2-5 copies \$4.00 each; 6-20  
copies \$3.00 each; 21+ copies: \$2.00 each), and the bimonthly  
World Watch magazine (one year, \$20). Many of the Paper  
Series topics address sustainable communities issues -- check  
the web site for a listing.

### **Yes! A Journal of Positive Futures**

P.O. Box 10818  
Bainbridge Island, WA 98110-0818  
206 842 0216  
fx 206 842 5208  
\$24 for one year, four issues.

### **Sustainable Communities Awards Programs**

**All-America City Award** sponsored by the National Civic  
League with a \$10,000 prize provided by the Allstate  
Foundation. Awards goes to vibrant, resourceful places where  
neighborhoods pitch in together; places with a diverse  
collection of talents and people who dwell not on problems of  
the past, but on opportunities of the present and possibilities of  
the future. National Civic League, 1445 Market Street, Suite  
300, Denver, CO 80202-1728, 800 233 6004, 303 571 4343,  
fx 303 571 4404, email [mailto:ncl@csn.net](mailto:mailto:ncl@csn.net), web .

### **America's Most Livable Communities and Entrepreneurial American Leadership**

presented once  
every decade to recognize exemplary achievements of public  
and private leaders that are responsible for improving the  
quality of life in communities across the country. Partners for  
Livable Communities, 1429 21st Street, NW, Washington, DC  
20036, 202 887 5990, fx 202 466 4845.

### **Annual Engineering Excellence Awards Competition**

recognizes engineering achievements that reflect the highest  
degree of ingenuity, owner satisfaction, technological  
advancement, environmental enhancement, increased public  
safety, and other factors, state winners and national awards.  
American Consulting Engineers Council, 1015 Fifteenth  
Street, NW, Washington, DC 20005-2605, 202 347 7474, fx  
202 898 0068.

**Community Spotlight Award** recognizing exemplary  
community achievement in natural catastrophe damage  
mitigation to protect people, homes, and businesses. Presented  
by the Insurance Institute for Property Loss Reduction and the  
International City/County Management Association. Contact  
the Insurance Institute at 73 Tremont Street, Suite 510,

Boston, MA 02108-3910, Attn: James Russell, 617 722 0200 x 215, fx 617 722 0202.

**Environmental Excellence Awards** for projects, processes, and individuals in the following categories: non-motorized transportation, habitat, water quality and wetland preservation, historic and archaeological preservation, roadside vegetation management, air quality improvement, noise abatement, community cohesion, environmental leadership, environmental research, and environmental process. Contact James Shrouds, 202 366 2074, Federal Highway Administration, U.S. Department of Transportation.

**Evergreen Award for Pollution Prevention**, U.S. Environmental Protection Agency, Region 10. Award honors environmental leaders in the business community who have demonstrated that preventing pollution is a sound business practice. For more information, contact Carolyn Gangmark at 206 553 4072, email gangmark.carolyn@epamail.epa.gov, or John Palmer at 206 553 6521.

**Great American Main Street Awards**, a national competition that recognizes exceptional accomplishments in revitalizing America's historic and traditional downtowns and neighborhood commercial districts. Bill McCloud, National Main Street Center, National Trust for Historic Preservation, 1785 Massachusetts Avenue, NW, Washington, DC 20036, 202 588 6140, 1 800 944 6847, fx 202 588 6050.

**National Awards Program for Energy Efficiency and Renewable Energy**, U.S. Department of Energy. Awards given in the following categories: building technology, energy and environmental sustainability, industrial technology, transportation technology, and utility technology. Project Descriptions available from the National Technical Information Service, 703 487 4650.

**National Excellence Awards for the City Summit**, 25 examples of excellence in building healthy communities prepared by the U.S. government as best practices for the Second United Nations Conference on Human Settlements, Habitat II. Descriptions available in Communities at Work: Addressing the Urban Challenge available from U.S. Department of Housing and Urban Development, HUD USER, P.O. Box 6091, Rockville, MD 20849.

**National Preservation Honor Awards** for projects, communities, businesses, and individuals contributing to the preservation of historic buildings and areas. \$5,000 prize to each of five winners. National Trust for Historic Preservation,

1785 Massachusetts Avenue, NW, Washington, DC 20036, 202 588 6140, 1 800 944 6847, fx 202 588 6050.

**National Wetlands Awards** recognize outstanding individuals who have demonstrated an extraordinary commitment to the conservation and restoration of wetlands. Sponsored by the Environmental Law Institute and the U.S. Environmental Protection Agency. Contact the Environmental Law Institute 1616 P St., NW Suite 200, Washington, DC 20036 202 939 3800 web .

**Phoenix Awards: National Awards of Distinction for Brownfield Redevelopment** honors individuals or groups who have implemented innovative yet practical programs that remediated environmental contamination at brownfields, thereby stimulating economic development and job creation or retention. Awards given in two categories: public sector projects, and private sector projects. Engineers' Society of Western Pennsylvania 337 Fourth Avenue Pittsburgh, PA 15222 412 261 0710.

**Renew America** 1400 16th Street, NW Suite 710 Washington, DC 20036 202 232 2252 fx 202 232 2617 email renewamerica@igc.org web site .

Renew America is the premiere awards organization recognizing the best domestic sustainable development activities across a broad range of areas including many environmental protection and economic and human development categories.

**The Business Enterprise Trust**, founded by prominent members of American business, labor, academia, and the media recognizes business people of courage, integrity and social vision. Videos, cases and teaching materials are available through Harvard Business School publishing.

**TBET** 204 Junipero Serra Blvd. Stanford, CA 94305 415 321 5100 fx 415 321 5774

email Bet@betrust.org,  
web .

**Resources for Community Capacity Building Resources on community-based public dialogue, planning, priority-setting, improved decision-making, access to information, and community cooperation.**

**Izaak Walton League of America**

Carrying Capacity Project  
707 Conservation Lane  
Gaithersburg, MD 20878  
301 548 0150

**Monitoring Sustainability in Your Community** 1995, describes indicators for monitoring and evaluating community sustainability. Better Local Government: A Resource Guide, a one-stop source for the best books on local government operations. For a copy, call 301 490 2204.

**Building a Sustainable Community: An Organizer's Handbook**, published by the Task Force for Sustainable Community Development, Action Coalition for Global Change. To order, send \$9.00 c/o Ruth Petersen, 177 Bovet Road, Suite 600, San Mateo, CA 94402, 415 341 1126, fx 415 341 1395.

**Common Ground: Achieving Sustainable Communities in Minnesota**, September 1995, a report of the Sustainable Economic Development and Environmental Protection Task Force to the Governor, the Minnesota Legislature, and the Minnesota Environmental Quality Board. Request a copy by contacting Susan Hass or Rolf Nordstrom at the Environmental Quality Board, MN Planning, 658 Cedar Street, St. Paul, MN 55155, 612 296 3985.

**The Journal for Quality and Participation**, \$52 (seven issues per year) w/membership to the Association for Quality and Participation, Subscription Services, 801-B West 8th Street, Suite 501, Cincinnati, OH 45203-1607, 513 381 1959, fx 513 381 0070.

**Local Sustainability: A One-Stop Guide to Resources for Local Governments**, available for \$5 (check made out to ICLEI to "One-Stop") the International Council for Local Environmental Initiatives, U.S. Projects Office, 15 Shattuck Square, Suite 215, Berkeley, CA 94709.  
email 75463.3516@compuserve.com.

**National Civic League**, 1445 Market Street, Suite 300, Denver, CO 80202-1728, 303 571 4343, fx 303 571 4404, email c gates@ncl.org, web site.

**Not Just Prosperity: Achieving Sustainability with Environmental Justice** by Benjamin A. Goldman, February 1994. National Wildlife Federation, 8925 Leesburg Pike, Vienna, VA 22184, 703 790 4100, web site .

**National Environmental Justice Advisory Council (NEJAC)**

U.S. EPA  
Office of Environmental Justice  
401 M Street  
SW, Mail Code: 2201A  
Washington, DC 20460  
202 564 2515.

Model Plan for Public Participation, prepared by representatives of the NEJAC Public Participation and Accountability Subcommittee.

**Signs of Progress, Signs of Caution: How to Prepare a Healthy Sustainable Community Progress Report/Card** by Eric Hellman. Send \$20 (U.S.) to Ontario Healthy Communities Coalition, 415 Yonge Street, Suite 1202, Toronto, Ontario M5B 2E7, 416 408 4841 x343, fx 416 408 4843.

**Strategic Directions for Community Sustainability** published by the British Columbia Round Table on Environment and the Economy, Suite 229, 560 Johnson Street, Victoria, British Columbia V8W 3C6, Canada, 604 387 5422, fx 604 356 9276.

**Study Circles Resource Center**

P.O. Box 203  
Route 169  
Pomfret, CT 06258  
Publishes the free Focus on Study Circles newsletter.

**Sun and Shadow**, quarterly newsletter.  
Center for the Study of Community  
4018 Old Santa Fe  
Santa Fe, NM 87505  
505 982 2752  
fx 505 982 9201.

**Sustainability and Justice: A Message to the President's Council on Sustainable Development**, a collection of analytical pieces and reports gathered as a response to the Bay Area meeting of the PCSD. 44 pp., \$5 from the Urban Habitat Program, Earth Island Institute, 300 Broadway, Suite 28, San Francisco, CA 94133, 415 788 3666, fx 415 788 7324.

**Sustainable Community Checklist**, a workbook designed for rural communities that want to put sustainable development

into practice. \$12.50 for first copy, \$6 for each additional in the same order. Northwest Policy Center, University of Washington, Box 353060, Seattle, WA 98195-3060, make checks payable to University of Washington. Web site provides info on program areas, publications, and current projects at .

**Resources for Partnerships for Design Resources on building design and rehabilitation, community design, sprawl, and smart growth.**

*Alternatives to Sprawl* by Dwight Young \$18, How Superstore Sprawl Can Harm Communities (and What Citizens Can Do About It), by Constance E. Beaumont, \$19 to National Trust for Historic Preservation, Department of Public Policy, 1785 Massachusetts Avenue, NW, Washington, DC 20036, 202 588 6140, 1 800 944 6847, fx 202 588 6050.

*America WALKs*, 156 Milk Street, Boston, MA 02109, 503 228 5441. A national coalition of walking advocacy groups dedicated to fostering real transportation choices through the creation of walkable, livable, sustainable local communities.

**American Association of Retired Persons**, Public Policy Institute, 601 E Street, NW, Washington, DC 20049, 202 434 2277. Provides information on the impacts of housing and transportation policy on aging America. Making Your Community Livable: Programs that Work, community programs helping older people remain in their homes. Free from AARP's Fulfillment Office. Publications lists are also available from that address, including one specifically focused on housing and transportation.

**American Institute of Architects**, 1735 New York Avenue, NW, Washington, DC 20006-5292, 202 626 7300, 800 242 3837, fx 202 626 7518, web .

**American Public Transit Association**, web. Information on conferences, services, and events, Transit News available online, links to other transit-oriented sites.

**Center for Livable Communities**, Local Government Commission, 1414 K Street, Suite 250, Sacramento, CA 95814, 916 448 1198, fx 916 448 8246, hotline 800 290 8208. Participation Tools for Better Land-Use Planning: Techniques and Case Studies, \$10, an informative guidebook describing ways to improve the level and quality of public participation in land-use planning; publication order form available at its web site.

**Center for Renewable Energy and Sustainable Technology**, 1200 18th Street, NW, Suite 900, Washington,

DC 20036, 202 530 2202, fx 202 887 0497, email info@crest.org, web . CREST operates their web site, Solstice, one of the leading internet resources on renewable energy, energy efficiency, and green technologies. They also design and maintain web sites for leaders in sustainable energy and development, and can work with organizations to establish online commerce and sales.

*Cities and Counties Resource Guide: Meeting Today's Energy Need Without Sacrificing Tomorrow's Resources*, U.S. Department of Energy. To order call 303 275 4285.

*Choices for Our Future: Finding Transportation Alternatives for An Aging Population*, November 1995, a final report to the White House Conference on Aging prepared by the Alliance for Transportation Research, Pennsylvania State University, and the Surface Transportation Policy Project. To order contact the Alliance at 1001 University Blvd., SE, Suite 103, Albuquerque, NM 87106-4342, 505 246 6410, fx 505 246 6001, email statr@technet.nm.org.

**Community Transportation Association of America**, 1440 New York Avenue, NW, Suite 440, Washington, DC 20005, 202 628 1480, fx 202 737 9197, web site .

**GreenClips**, a summary of recent articles in the media on sustainable building design, green architecture, and related government and business issues. To request a free subscription, email GreenClips@aol.com. GreenClips archives for reference and research can be found on these web sites <http://solstice.crest.org/sustainable/greenclips/info.html> and web site .

*The Legislative Guidebook*, available from the American Planning Association's Planner Book Service. 312 786 6344, fx 312 431 9985. Cost is \$16.00. The Guidebook appears in a portable document format(PDF) at the project's web site and can be downloaded for free, using Adobe Acrobat reader software. Downloading instructions are available at the site. Also available at the site are summaries of the planning statutes for all 50 states, two annotated bibliographies on planning statute reform, and project newsletters.

**Lincoln Institute for Land Policy**, 113 Brattle Street, Cambridge, MA 02138-3400, 617 661 3016.

**Urban Land Institute**, 625 Indiana Avenue, NW, Washington, DC 20004-2930, 202 624 7000, web site . For a resources catalog call 1 800 321 5011.

**Rocky Mountain Institute**, 1739 Snowmass Creek Road, Snowmass, CO, 81654, 303 927 3851, web .

**Smart Growth Network**, a network of companies and organizations working to promote metropolitan development that serves economy, community, and environment - an emerging trend in development across the country. For membership information, contact Noah Simon, ICMA-Smart Growth Network, 777 North Capitol Street, NE, Suite 500, Washington, DC 20002-4201, 202 962 3591, email [nsimon@icma.org](mailto:nsimon@icma.org). For information on the Smart Growth Speaker Series held regularly in Washington, DC, contact the U.S. EPA, Urban and Economic Development Division, fx 202 260 0174, email [hutch.dan@epamail.epa.gov](mailto:hutch.dan@epamail.epa.gov).

**Surface Transportation Policy Project**, 1100 17th Street, NW, Tenth Floor, Washington, DC 20036, 202 466 2636, fx 466 2247, web site . Sprawl bibliography available from Don Chen at email [dchen@transact.org](mailto:dchen@transact.org). Getting a Fair Share: An Analysis of Federal Transportation Spending, July 1996. Transit-Oriented Communities Case Studies (available quarterly).

**Sustainable Suburbs Study**: Creating More Fiscally, Socially, and Environmentally Sustainable Communities published by the city of Calgary, Planning Information Centre, P.O. Box 2100, Station M, Calgary, Alberta T2P 2M5, Canada, 403 268 5333. Printed version available for \$10, or download it for free at its web site .

**Walkable Communities, Inc.**, 320 South Main Street, High Springs, FL 32643, 904 454 3304, email [burden@aol.com](mailto:burden@aol.com). Helps neighborhoods, towns, and cities become more walkable, livable, and sustainable.

Resources for Economic Development and Jobs Resources on economic development, training and lifelong learning, and financing.

**Aspen Institute, Rural Economic Policy Program**, 1333 New Hampshire Avenue, NW, Suite 1070, Washington, DC 20036, 202 736 5804.

**Corporation for Enterprise Development**, National Office, 777 N. Capitol Street, NE, Suite 410, Washington, DC, 20002, 202 408 9788. CFED South, 1829 E. Franklin Street, Suite 1200-M, Chapel Hill, NC 27514, 919 967 5300. CFED West, 353 Folsom Street, San Francisco, CA 94105, 415 495 2333.

**Federal Empowerment Zone/Enterprise Communities - Urban EZ/EC Task Force**: U.S. Department of Housing and Urban Development, Room 7136, 451 Seventh Street, SW, Washington, DC 20410, 202 619 0314; Rural EZ/EC Task

Force: U.S. Department of Agriculture, Washington, DC, Norm Reid, Deputy Director, 202 260 6332, fx 202 401 7420.

**Environmental Financial Advisory Board**, United States Environmental Protection Agency, Office of the Comptroller/Environmental Finance Branch, 401 M Street, SW, Washington, DC 20460, contact George Ames at 202 260 1020. Provides the Environmental Protection Agency Administrator with analysis and advice regarding environmental finance issues at the federal, state, and local levels to assist EPA in carrying out its environmental mandates.

**Heartland Center for Leadership Development**, 941 O Street, Suite 920, Lincoln, NE 68508, 402 474 7667. Helps small towns and rural communities faced with challenges due to economic changes.

**In Business magazine**, 419 State Avenue, Emmaus, PA 18049, 610 967 4135. \$23 one year subscription (six issues).

**Institute for Local Self-Reliance**, National Office, 2425 18th Street, NW, Washington, DC 20009-2096, 202 232 4108, fx 332 0463; Midwest Office, 1313 Fifth Street, SE, Minneapolis, MN 55414-1546, 612 379 3815, fx 612 379 3920, web site . Published Manufacturing from Recyclables: 24 Case Studies of Successful Recycling Enterprises, to order call the Institute at 202 232 4108. There is a \$3.75 fee for shipping and handling.

**Jobs and the Economy: A National Conference for Funders**, February 21-23, 1996 conference report. Copies available from the Neighborhood Funders Group, 6862 Elm Street, Suite 320, McLean, VA 22101, 703 448 1777, fx 703 448 1780.

**National Rural Development Partnership**, 300 7th Street, SW, Suite 714, Washington, DC 20024-4703, 202 690 2394, fx 202 690 1262. Facilitates the collaboration of federal, state, local, and tribal governments, and the private sector in order to address complex and unique rural development needs.

**The Nature Conservancy**, Center for Compatible Economic Development, 7 East Market Street, Suite 210, Leesburg, VA 20176, 703 779 1728, fx 703 779 1746, email [ecodev@cced.org](mailto:ecodev@cced.org).

**National Community Education Association**, Fairfax, VA , 703 359 8973. Publishes the Community Education Journal.

**Lessons Without Borders**, Contact: U.S. Agency for International Development (USAID) Bureau for Legislative

and Public Affairs, Office of Public Affairs, Washington, DC 20523-0056, 202 647 1850. Facilitates information flow between poor communities in the United States and USAID's successful programs in lesser developed countries.

**Resources for Safe and Healthy Communities** Resources on public safety, brownfields, environmental protection, pollution prevention, and natural disaster prevention and mitigation

**Brownfields Economic Redevelopment Initiative**, U.S. Environmental Protection Agency, Office of Outreach and Special Projects, 401 M Street, SW (Mail Code #5101), Washington, DC 20460, web . Provides states, cities, towns, counties, and tribes with funding to assess, safely clean up, and sustainably reuse brownfields or contaminated sites with potential for redevelopment.

Energy Efficiency and Renewable Energy Clearinghouse (EREC), P.O. Box 3048, Merrifield, VA 22116, 800 363 3732. Funded by the U.S. Department of Energy, free clearinghouse that responds to inquiries on energy efficiency and renewable energy technologies from simple requests to complex technical issues.

**Environmental Justice, Urban Revitalization, and Brownfields: The Search for Authentic Signs of Hope**, December 1996, a report on the public dialogues on urban revitalization and brownfields conducted by the National Environmental Justice Advisory Council, Waste and Facility Siting Subcommittee. Report can be viewed on the brownfields web site under the section on "Recent Reports and Documents". Contact Jim Maas at 202 260 8927.

**Linking Sustainable Community Activities to Pollution Prevention: A Sourcebook**, Beth E. Lachman, Critical Technologies Institute at RAND. Provides an introduction to sustainable community activities and ways in which supporters of pollution prevention can take advantage of such efforts. It includes an extensive annotated bibliography. Cost: \$ 15.00. Order by phone 310 451 7002, fx 310 451 6915, email order@rand.org, or mail: RAND Distribution Services, P.O. Box 2138 Santa Monica, CA 90407-2138. When ordering please include the ISBN number: 0-8330-2500-7.

**Making Mitigation Work: Recasting Natural Hazards Planning and Implementation**, (David R. Godschalk et al., Center for Urban and Regional Studies, University of North Carolina at Chapel Hill, 1997). A limited number of copies will be available for \$30, including postage, from the Center for Urban and Regional Studies, University of North Carolina, Chapel Hill, NC 27599-3410. National Pollution Prevention

Roundtable, 2000 P Street, NW, Suite 708, Washington, DC 20036, 202 466 7272, fx 202 466 7964.

**President's Crime Prevention Council**, 736 Jackson Place, NW, Washington, DC 20503, 202 395 5555, fx 202 395 395 5567. Preventing Pollution in Our Cities and Counties: A Compendium of Case Studies, Fall 1995. Published by the National Association of Counties, National Association of County and City Health Officials, National Pollution Planning Roundtable, Municipal Waste Management Association, and U.S. Conference of Mayors. National Pollution Prevention Roundtable, 202 466 7272.

**Public Technology, Inc.**  
1301 Pennsylvania Avenue  
NW, Washington, DC 20004-17926  
fx 202 626 2498,  
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**Society for Prevention of Violence**  
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Woodmere, OH 44122  
216 591 1876  
Dedicated to reducing the prevalence of violent acts and asocial behaviors in children and adults through education. Their mission includes integration of social and academic skills to encourage those who use them to reach their full potential and contribute to society by being able to make decisions and solve problems through effective and appropriate means.

**Sustainable Ecosystems and Communities Clearinghouse**  
U.S. Environmental Protection Agency, web site provides information on a broad range of community and ecosystem-related issues, tools, and other resources, fax on demand system 202 260 5339 allows callers to select documents from a menu and have them automatically faxed or mailed, bi-weekly newsletter available via email by sending a request to harris.lisa@epamail.epa.gov. For more information, contact Karen Metchis at 202 260 7069 or email metchis.karen@epamail.epa.gov, or Aurelia Pugh-Feaster at 202 260 3614 or email pugh-feaster.aurelia@epamail.epa.gov.

***The Greening of Federal Disaster Relief Policies by Alliance to Save Energy***, Seiben Energy Associates, Ltd., and Nancy Skinner. For information or copies of the report, contact the

Alliance at 1725 K Street, NW, Suite 509, WDC 20006, 202 857 0666, fx 202 331 9588.

**Urban Resources Partnership**, U.S. Department of Agriculture, Under Secretary for Natural Resources and Environment, 14th and Independence Ave. SW, Rm. 217E,

Washington, DC 20250. Provides technical and financial assistance for a collaboration between seven federal agencies, local and state governments, community organizations, and private and non-profit organizations to provide for natural resource and community enhancement.

# Appendix G

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Carole Wacey, U.S. Department of Education

Larry Wallace, Hazel & Thomas

Donna Wise, World Resources Institute

Ben Woodhouse, Dow Chemical Company

# End Notes

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4. U.S. Department of Energy, Energy Information Administration, *Annual Energy Outlook 1997* (Washington, D.C., 1997), p. 112.

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6. U.S. Department of Commerce, Economics and Statistical Administration, "U.S. International Trade in Goods and Services," *Commerce News* (Washington, D.C., 1996).

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16. NYC recycling U.S. Environmental Protection Agency, *Manufacturing from Recyclables: 24 Case Studies of Successful Recycling Enterprises* (Washington, D.C., 1995).

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17. The Trust for Public Land, *Healing America's Cities: Why We Must Invest in Urban Parks* (San Francisco, 1994).

## Appendices

All appendices were factchecked by the individuals who wrote the original publications from which the excerpts were drawn. Case studies were factchecked by the individuals who wrote them on behalf of their community. For inquiries about facts or figures, please contact the individuals or organization listed at the end of each case study.

# Acknowledgments

A talented, committed, and diverse team guided the work of the Sustainable Communities Task Force from its inception to the final drafts of this report. Through countless meetings and seemingly unending discussions, this team crafted the agreements that laid the foundation for the process of the task force's work, the content of the policy recommendations and assertions represented in this final document, and the task force inputs into the council's consensus document, "Sustainable America." The achievements of the task force were borne, in large part, through the labors of Geoffrey Anderson, John Bullard, Rob Coppock, Mencer Donahue Edwards, Carl Elefante, Christine Eustis, Lori Fenimore, Jacqueline Hamilton, Jeffrey Hunker, Nancie Johnson, Keith Laughlin, J. Gary Lawrence, Michael McCloskey, Jerry McNeil, John Mincy, Rebecca Moser, Robert Olson, Rudy Oswald, and Harriet Tregoning.

The task force thanks Robert Olson for his work in drafting the original text of the vision statement, and the participants not listed above who chaired the task force working groups: Sheila Kelly, Pamela Lawrence, Florine Raitano, Larry Root, Margaret Thomas, and Amie Weinberg.

We are grateful for the contributions of Ann James, who served as the task force's first coordinator from fall 1993 to spring 1994, and Corinne McLaughlin, who coordinated the task force during the spring of 1994. Without the talent and hard work of Noah Maffitt, Liza Poinier, and Alissa Schmeltz, the completion of this report would not have been possible. We greatly appreciate their outstanding work on the report's layout, copyediting, and factchecking, respectively. We also thank Melissa Edeburn, Monica Gonzales, Ylang Nguyen, and Amy Todd who provided valuable staff assistance to the task force in its early phases.

The case studies presented in this report were pulled together by task force participants and colleagues in the communities the task force selected. We thank Paul Alsenas, Geoffrey Anderson, Bill Becker, Rita Collins, Beth Conover, Eleanor Cooper, William Edgerton, Mencer Donahue Edwards, Christine Eustis, Tom Harris, Timothy Hayes, Sheila Kelly, Christopher Kelsey, William Kennedy, John Lambie, Jackie Lockett, Rick Luna, Nancy Skinner, and David Warford for bringing us the stories of these communities.

We are most appreciative of the generosity of Patricia Scruggs and Walter Corson who allowed us to reprint their research on sustainable development activities at the state level and community indicators projects, respectively. Similar thanks to Susan Boyd, Benjamin Goldman, and Susanna Mackenzie Euston for their work to develop the community profiles in the states and to Harriet Tregoning and Geoffrey Anderson who administered the contract for their work.

To reflect the expansive scope of the sustainable communities field, the task force invited participation from hundreds of experts, citizens, and business representatives from an incredibly diverse array of fields and communities. Many of these individuals volunteered significant time and energy to contribute to task force working groups, case studies, and special events; we are indebted to them for their contributions and list them below. We apologize, in advance, for any oversights made in this very long list of task force participants.

Finally, we acknowledge Angela Park who, as its coordinator, managed the task force's work and the writing, editing, and production of this report. We thank her for the skill, energy, and dedication she brought to this ambitious endeavor.

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Sidney Beckwith	Beth Conover	Andy Euston
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Dennis Houlihan	Gilah Langer	Chuck McDermott
Bob Howell	Francis Larkin	Marie McDermott
Theodore Hullar	Keith Laughlin	Bill McDonough
Karen Hundt	J. Gary Lawrence	Walter McGuire
Jeffrey Hunker	Pamela Lawrence	Joe McIntyre

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Susan Motley	Joseph Roman	Bill Spriggs
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Constantine Nanopoulos	Larry Root	Beatrice Olvera Stotzer
Tom Nay	Claire Rosacco	Bob Sublett
Robert Olson	Rick Rosan	Tony Souza
Terry Osborn	Matt Ross	Louis Swanson
Rudy Oswald	James Rouse	Pamela Swenson
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