



THE UNIVERSITY
of NORTH CAROLINA
at CHAPEL HILL

Sustainability is

"...meeting the needs of today without compromising the ability of future generations to meet their own needs."¹

For North Carolina, this means managing our economic, social and natural resources to provide the opportunity for every citizen, — now and in the future—to live in a clean, healthy, and appealing environment, to pursue meaningful and rewarding work, and to participate fully in a just and equitable society.

¹ Brundtland Commission,
Our Common Future, 1987

A Sustainable Future for North Carolina

Linking Past, Present, and Future

The concept of sustainability provides a framework for sorting through information and reconciling human needs and values with the goal of protecting the physical and biological world. It is a tool for both responding to existing challenges and also meeting future needs. The idea is simple and flexible enough to be useful for individuals and communities, yet durable enough to identify goals shared by different people, places and economies.

Sustainability inextricably links environmental quality, human health, social justice and economic vitality. Communities and businesses increasingly are pursuing all of these goals in concert. Businesses realize that they must adapt or fall behind. Citizens, planners and elected officials recognize the short- and long-term gains to be made by adopting sustainability, and the costs of failing to do so. Now is the perfect time for the state to adopt a sustainability stance, as development strains the resources that make North Carolina so special. Incorporating sustainability into private and public decision-making can move North Carolina into a more competitive position as it seeks to attract new businesses, accommodate new residents, and serve visitors.

North Carolina's Assets and Challenges

We have the privilege of residing in a state rich in natural wealth and beauty, graced by a mild climate that attracts new settlers and tourists to mountains and beaches, and home to a deep pool of human resources embodied in proud and industrious citizens.

But our state also faces challenges. Our traditional economic base has eroded. The population suffers from inequities in social and economic opportunities, with persistent gaps in income, education, and physical infrastructure between metropolitan and rural populations. The current economic downturn highlights the vulnerability of many regions and sectors. Air pollution and fish kills testify to the environmental degradation that often accompanies rapid growth not guided by sustainability principles.

And yet, the state has many assets in its still-undeveloped land and resources, an active and engaged citizenry, and an educational system that includes world-class universities and the fine community colleges essential for training the state's technical workforce. North Carolina has the potential to become a model of thoughtful planning for restoration, revitalization, and future development.

North Carolina's Stake in Sustainability

A focus on any one dimension of planning alone produces less than optimal outcomes and wastes valuable resources. A comprehensive approach better develops economic assets, maintains strong social structures, and protects the natural environment and human health. We have the resources—natural and human—to provide a better life for more of our citizens, at lower economic, social and environmental cost. The key is planning based on principles of sustainability. The triple bottom line of social, fiscal and environmental responsibility often yields results greater than the sum of the parts.

Process Makes the Difference

The best development and management strategies build on visions and goals from communities. These goals should reflect local conditions and values, yet be consistent with higher common goals shared throughout the state. In voicing local goals, citizen planners must recognize that pollutants move from one community to others, just as economic and social changes in one area can affect lives elsewhere in the state and beyond. Sustainability awareness at the regional and state levels can both support and inform local visions and goals elaborated by community-level processes. Sustainability begins with communities actively seeking the balance of sustainable practices that best suit their values and needs, guided by principles echoed at the regional and state level.

Measuring Sustainability

How may we know when we are moving toward a healthier and more sustainable community? Informal evidence is apparent to the attentive

> more

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If it's sustainable, it...

- Preserves natural resources
- Promotes public health & safety
- Increases competitiveness
- Ensures access to housing, jobs, education & health care
- Protects the environment
- Improves quality of life
- Conserves public funds
- Engages citizens in planning
- Increases choices now & later

Some useful resources:

North Carolina Progress Board
www.ncpb.state.nc.us

North Carolina Rural Economic Development Center
www.ncruralcenter.org/research/sustain.htm

International Council for Local Environmental Initiatives
www.iclei.org

U.S. Department of Energy Smart Communities
www.sustainable.doe.gov

Global Reporting Initiative
www.globalreporting.org

Sustainable Measures
www.sustainablemeasures.com

Credits

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observer: public discussion in newspapers and on the street, vigorous local political activity, new construction and active business districts, tangible improvements in air or water quality, initiatives for environmental stewardship. A common purpose, an open, inclusive process, and a shared sense of a bright future are apparent.

The readily observable, however, must be backed up with carefully measured and analyzed data. Indicators and metrics that accurately track environmental, social and economic trends—and their interactions—reveal progress toward stated goals. When rooted in the best science and policy tools available, and framed in terms clear to all, these indicators show the direction and magnitude of changes, and allow for comparison among places and people.

Well-chosen indicators highlight the intersections of economy, society, and environment as expressed in public health, affordable housing, good jobs with fair pay, quality education for all, access to social and cultural institutions, civic engagement through voting and participatory government, a culture of environmental stewardship, and more.

Meaningful indicators share two common features. Each can be related directly to measurable characteristics of health and the environment, moving sustainability from a concept to a tool for making decisions on future development. And each has implications for economic and social values.

For example, the justification for measuring human health is keeping the total risk to the population from all sources of pollution and all illnesses at an acceptable level. The economic cost of environmental policies to improve health may be high, but failure to act also carries substantial costs in hospital stays and lost workdays.

Health risks, as well as economic costs and benefits, may be spread unequally across a community. A sustainable community finds the best balance between costs and benefits of policies, and equitable distribution of the gains from economic development as well as health effects and social and environmental costs.

Other examples of environmental indicators of sustainability, and their justifications, are:

Wetlands integrity: retain the ability of wetlands to purify water so fewer costly treatment facilities are needed

Nutrient loading to rivers: keep the nutrient flow from banks low enough to protect water quality, biota, and human health

Carbon balance: ensure that carbon dioxide emitted by society is balanced by absorption in plants to minimize health and other costs

Efforts and Accomplishments to Date

Important work already has been done by and in the state. For example, the North Carolina Progress Board has gathered an enormous volume of data; developed indicators; and created a scorecard on eight goals for the state's future. The Department of Environment and Natural Resources established the *One North Carolina Naturally* project to prioritize the protection of undeveloped open spaces. In 2001, the distinguished panel of citizens and officials on the Smart Growth Commission turned a year of study, debate and public consultation into a comprehensive report on the state's role in managing resources and guiding growth. NC Project Green tracks plans and progress toward sustainability at state agencies and on university campuses.

Many non-governmental organizations also are working to foster sustainability. For example, the Sustainable Communities Initiative of the Rural Economic Development Center provides technical aid, venture funding, and leadership development. Save Our State grants annual sustainable business awards, which in 2003 went to UNC-Chapel Hill and four other awardees.

Where Are We, and Where Do We Go Next?

The groundwork has been laid. Now the state needs to move to a higher level of awareness and action. North Carolina's universities can help move the process beyond talk to measurable improvement in lives. Sustainability-oriented research is under way in many academic departments and research centers. In the best tradition of cooperative extension and engagement, staff and faculty have the knowledge, tools, and desire to work with communities and state agencies to animate the process. Academic partners cannot define community goals, but can work with communities and local and state agencies to develop a sound and inclusive process for designing and moving toward a sustainable future.