

Envisioning Worcester's Future:
**Incorporating principles of sustainable development into
local planning practice**
Final Workshop Report
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Introduction

Around the world people are beginning to realize that achieving economic prosperity, maintaining community integrity, and preserving high quality natural resources are not mutually exclusive goals. Moreover, they see the benefits of promoting each of these purposes simultaneously. To do this a community must proactively manage growth rather than merely “let it happen.” This planned development considers a community’s cache of social, cultural, and natural resources, takes responsibility for its ecological footprint beyond its borders, and invests in activities that promote an equitable distribution of the benefits of a prosperous economy. For communities that have the courage to pursue a development strategy congruous with these values, the framework of sustainable development has proven to be a powerful tool for framing community vision, developing and implementing economic development strategies, building coalitions among a variety of stakeholders, and monitoring and evaluating progress.

While international trade policy and environmental policies, such as the Kyoto accords, have served to promote this agenda at a macro level, they are not the only means to achieve sustainability. Sustainable development can also take place at the micro (i.e., local level). Local efforts at sustainable development are not new and most of them originally stemmed from international efforts. The first “Earth Summit” was held in 1987, this was sponsored by World Commission on Environment and Development and intended to promote a global development strategy that “met the needs of the present without compromising the needs of future generations.” In 1992, the United Nations held a conference of the Commission on Environment and Development in Rio de Janeiro. One of the outcomes of this conference was an agenda for sustainability in the 21st Century. Agenda 21 is a comprehensive action plan that engages global, state and local entities to decrease negative human impacts on the environment. There is also a Local Agenda 21 (LA21) which takes the goals of Agenda 21 to the local level. It is based upon the notion that cities and communities are the front lines in promoting sustainable development. Cities and communities around the world adopted LA 21 guidelines as vehicles to sustainability. Portland, Oregon, Seattle, Washington, St. Paul, Minnesota, London, England, Helsinki, Finland, and Barcelona, Spain, are among the cities that have responded in their own unique way to the LA 21 mandates. Though communities are unique and must develop their own frameworks for sustainability, there are some common characteristics for sustainable communities (see Figure 1).

Figure 1. Characteristics of a Sustainable Community

- Sustainable communities promote informed decision-making and broad based citizen participation
 - Sustainable communities maintain natural and cultural assets
 - Sustainable communities promote local and regional economic prosperity
 - Sustainable communities promote a mutually supportive “ecosystem” of businesses by linking businesses and organizations that may benefit by using each other’s waste energy or materials
 - Sustainable communities account for the full environmental, social and economic costs of new development
 - Sustainable communities plan, finance and provide public facilities and services in a timely, orderly and efficient way
 - Sustainable communities use energy-efficient, lowest-cost modes of travel
 - Sustainable communities use physical resources in a way that can be sustained over time
 - Sustainable communities promote livable communities – with adequate open and recreational space, access to jobs, quality housing at all income levels, appropriate transportation options, and more.
 - Sustainable communities preserve community character
- (Adapted from Minnesota’s Roundtable of Sustainable Development)

As Figure 1 indicates, economic, social and environmental themes are all integral to a sustainable development framework. They are not mutually exclusive, nor independent of one another. The characteristics of a sustainable community also imply three other themes: resources, practices, and process. *Resources* are those things a community has or needs to promote sustainability. For example, Worcester has extensive green space and an interesting history from which to build its future. *Practices* are those things a community must adopt to move toward sustainability. The electric or gas company assessing a building’s ecological footprint is such a practice, but linking it to the building development/permitting process is a sustainable practice. *Process* relates to how a community moves toward sustainability both in terms of its physical aspects and its social aspects. A community’s vision of sustainability is not sustainable unless all parts of the community have a part in creating it. Without a shared vision it is impossible to measure progress after a community embarks on the path of sustainability.

Indeed, individuals and groups in Worcester are working toward many of these goals independently. But what if we put our planning and growth efforts into the context of sustainable development? What might a framework for sustainable development look like in Worcester? Our discussion now turns to these questions.

Envisioning Worcester’s Future

On Thursday, September 26, 2002 nearly one hundred people, across a broad spectrum of interests, from Worcester and its surrounding environs, gathered at Worcester Polytechnic Institute to take part in a half-day workshop entitled “Envisioning Worcester’s Future.” The workshop had two primary goals. The first was to develop a common language and present a set

of practical tools for the group to think about sustainable development in Worcester. The workshop's keynote speakers, Steve Cardis and Adrian Hewitt began the process. Mr. Cardis is a Forward Planner for Merton, England, a borough on London's Southwest side. Mr. Hewitt is that Borough's Local Agenda 21 officer in charge of Merton's environmental planning. He acts as a liaison to businesses seeking to locate to the community. London's Borough of Merton is on the forefront of sustainable planning policy and practice. Local ordinances in Merton now require that developments abide by sustainability checklists, protect green space, and work with entrepreneurs, architects, and developers to employ energy efficient, low emission building technologies. Neither a sexy high-tech economy nor the gentrification of working class communities drives Merton's recent success in sustainable development. Rather, it is the creativity of its local government together with concerned citizens, and businesses that have propelled the Borough's policies (for other details please refer to links from WPI's website www.wpi.edu/+ewf).

The second goal of the workshop was to begin a visioning process for sustainable development in Worcester. To enable this vision to become a reality, however, the groups were charged with identifying areas of critical action and steps for implementation where research and policy work could begin in the short, medium, and long term. The workshop participants worked in pre-assigned groups of 7-10. Aided by a facilitator the groups were asked to grapple with four questions in the context of three themes economic, social, and environmental sustainability. These themes were chosen because the sustainable development literature suggests there are three main elements of sustainability: prosperous economies, equitable social benefits, and environmental conservation. To describe these themes as "elements" is somewhat misleading because they are interrelated. The workshop participants were quick to see how the boundaries between economic, social, environmental considerations are blurred and this is reflected in the data that is presented below. Each theme was discussed for half an hour. At the end of the workshop the groups reported back to the plenary.

The questions were designed like a funnel, beginning very broadly and narrowing with each subsequent question. Question one for example, sought to identify factors that comprise some aspect of sustainability (economic, social or environmental). Question two sought to elicit objectives for achieving a factor. Questions three and four sought to identify principles to measure sustainability and action steps to promote it, respectively.

1. What are indicators of a sustainable [economy, society, environment]?
2. Now determine which indicators are most important. Rank the five most important indicators from 1-5, one being the most important five the least.
3. If included in a sustainability framework for Worcester, what might result from that particular indicator?
4. What do we need in Worcester to maximize the positive results and minimize the negative ones?

Statement of First Principles and Steps Forward

The next three sections contain the substantive contributions of the workshop participants. They seek to put forth a set of first principles for a sustainable Worcester and make recommendations for how the community—according to those who were present—would like to see this go

forward. The authors acknowledge that some of the principles and action points suggested by participants may already exist in the Worcester area. The purpose of this process is to put them in the context of sustainability. What changes might need to be made to think about principle or actions as relative rather than discrete? This discussion is outside the scope of the current report but, to be sure, it must be had at a later point in this process.

Economic Sustainability

General Principles:

A sustainable economy:

- Has a diverse base of small and medium sized businesses that are in partnership with the community. Business opportunities match the resources available in the community – such as workforce skills of residents.
- Insofar as possible, meets its needs for goods and services locally, uses raw materials efficiently, through transport, production and development, and is linked to the conservation and preservation of natural resources
- Creates jobs that pay low and moderate income levels a living wage. Creates linkages between business and education and provides resources for local entrepreneurs and innovation
- Is supported by a proactive local government with a vision that provides incentives for sustainable development practices and is well-planned by individuals concerned with long term stability rather than rapid growth

Action Steps:

- Initiate a comprehensive master planning process that:
 - Looks for opportunities to build off of existing economic clusters (e.g., biotech, health);
 - Screens and researches potential businesses for their community development activities;
 - Identifies and plans what ancillary local activities and services will be required to support industry;
 - Develops/maintains strong infrastructure to support business who are invited and come to the city.
- Through public/private partnerships:
 - Develop/enhance local venture capital network;
 - Link Worcester's identity to "green" development;
 - Promote industry "ecosystems;"
 - Develop resources for local entrepreneurs;
 - Create synergy among other community resources such as Consortium Colleges and foundations;
 - Investigate ways for employers to establish a living wage for all employees.
- Provide incentives for:
 - Meeting new goals for energy and resource use;
 - Owners of undeveloped land to keep it undeveloped;

- Brownfield reinvestment and provide incentives for compliance.

Social Sustainability

General Principles:

A sustainable society has:

- Access to health care for all;
- Outstanding public health statistics;
- Quality public schools;
- A positive self-image, promotes a sense of community and engages its residents in dialogue about issues that effect them
- Links between cultural/historical/natural assets and community development;
- Opportunities for individuals to work where they live or at least have shortened commuting distances;
- A vibrant downtown with strong, stable neighborhoods and quality affordable housing;
- The “neighborhood village” concept, which builds vibrant neighborhoods around high quality, public transportation centers
- Income equality among the population;
- Attracts and maintains young population;
- Celebrates diversity and provides high quality, multi-cultural education;
- Lots of opportunities for pedestrians, bicycle transport and other green transportation;
- Plenty of cultural attractions and events that are widely accessible.

Action Steps:

- Initiate a comprehensive master planning process that:
 - Provides standards for development that include where and how;
 - Plans for energy efficiency and sustainability principles when assessing new residential, commercial and industrial developments;
 - Includes developing buildings downtown, not parking lots;
 - Creates neighborhood development plans that are sensitive to residents and jobs;
 - Plans for high-density housing stock near transportation corridors.
- Through public/ private partnerships:
 - Develop campaigns around the Blackstone, the Arts, Revolutionary War history, urban green space, etc, devote resources to promoting and caring for these assets;
 - Develop activities focused on the 24-40 population;
 - Develop links to Blackstone Heritage Corridor;
 - Coordinate efforts with colleges, not-for-profits, and for-profit businesses;
 - Promote development of the Arts District;
 - Coordinate access to health care services for all, especially the most vulnerable populations.

- Provide incentives for:
 - Businesses that support and seek to be active in promoting Worcester's sustainable development agenda;
- Create a new slogan "Worcester: What did you expect? THE BEST!"

Environmental Sustainability

General Principles:

A sustainable environment has:

- Clean air and water
- Green design (master planning, buildings, production processes)
- Ecologically linked industry clusters (industrial ecology) where industries utilize each other's waste materials and energy
- Efficient use of resources, high-quality recycling and solid waste management programs, and renewable energy sources
- Plenty of green space and urban gardens
- Smart growth policies in place
- Uses ecological factors to inform land use decisions and makes all attempts to redevelop brownfield sites
- Reduce dependency on the automobile
- Decreased incidence of disease due to environmental hazards
- Incentives for individuals and businesses to model green behavior and smart growth as part of the public school curriculum

Action Steps:

- Initiate a comprehensive master planning process that:
 - Considers the implications of effluents discharging into sewers and waterways;
 - Incorporates green design principles into building codes;
 - Links current and future housing and transportation needs;
 - Incorporates bicycle lanes into some city streets, especially commuter routes (e.g., Chandler, Grafton Street, Belmont, Salisbury);
 - Incorporates next generation public transportation systems into planning activities (light rail to/from suburbs, dedicated routes in the city).
- Through public/ private partnerships:
 - Promote a "Leave Your Car at Home Day;"
 - Launch "What's in it for me?" campaigns;
 - Create information guides for citizens, property owners, business owners, etc. to see how they can be "model" citizens;
 - Incorporate sustainability training into secondary education and the trades.
- Provides incentives for:
 - Industries to develop clusters based upon their ecological linkages;
 - Transportation firms to consider low emission energy alternatives such as "bio-diesel;"
 - Brownfield redevelopment;

- Phase in zero emission vehicles into the city's fleet.

Summary: Where do we go from here?

More and more people are recognizing the value of our city, as indicated by the recent housing boom. There are several projects of critical importance in various phases of development, too, Union Station, the airport access road, the Arts District, and the Canal District to name a few. If we are to retain those things that make the city special we must adopt a robust and integrative vision of the future, for both in short and long-term. We have to have the courage to promote the type of development that fits with a vision and enforce it. The results from the workshop offer a first attempt to create a framework of sustainable development that the city and surrounding region could realistically adopt.

There is still work to be done before Worcester is ready to adopt an agenda for sustainability. The process that began at the September workshop must continue and participation must occur on a broader scale. The next logical step is to hold a series of community workshops and small roundtables to flesh out the vision further with a variety of stakeholders. As a community, we must move toward a defined sustainability action strategy that establishes targets for sustainability, links these targets to municipal guidance documents (such as building codes and zoning ordinances), identifies other mechanisms, and involves representatives from the entire community. To this end we propose:

Community residents, business people, etc. can:

1. Take advantage of opportunities to learn more about sustainable development;
2. Continue to participate in quarterly fora hosted by the Worcester-area Sustainable Development Initiative;
3. Volunteer to host a community meeting around this topic;
4. Find ways to include sustainable practices in their own lives and work.

The Worcester-area Sustainable Development Initiative's steering committee will*:

1. Engage various stakeholder groups around the issue of sustainable development;
2. Coordinate a yearly sustainability conference;
3. Hold quarterly fora around the three components of sustainable development - economic, social and environmental;
4. Foster relationships among other groups doing this work, locally, nationally and globally.

WPI's Worcester Community Project Center will:

1. Work on developing a clearinghouse of information for people to access;
2. Provide space for fora and organize quarterly workshops.

Greater Worcester Community Foundation can:

1. Help to convene people;
2. Be available as a potential resource for projects that need funding.

* Currently the members of this committee are Dan Benoit, Jackie Brousseau-Pereira, Rob Krueger, David Leach, Robert Levite, and Paul Nigosian.

City of Worcester can:

1. Continue to work towards the establishment of a viable planning department and process;
2. Work towards the creation of a city-wide, long-range, broad-based master plan;
3. Participate in workshops and fora around the topic of sustainable development.