The Civics of Sustainability
An Overview

BY JOEL MILLS

For those working in the field of community sustainability, reading the news these days might seem depressing. The challenges are dramatic. On April 20, 2010, the explosion of a British Petroleum oil rig in the Gulf of Mexico ignited what is now the worst environmental catastrophe in our nation's history, with estimates of the scope of the oil spill reaching as high as sixty thousand barrels per day. The Gulf crisis has highlighted America's continuing dependence on oil, and our ever-expanding carbon footprint.

Currently, even the most energy-conscious Americans have twice the carbon footprint as the average global citizen. The United States comprises about 4 percent of the earth's population but emits about 25 percent of the total global greenhouse gases. In contrast to China, the United States emits more than seven times as much per person. And compared to India, Americans produce more than twenty times as much per capita.

Patterns in consumption and energy use have been trending negative over the long run. Total U.S. emissions have risen by approximately 14 percent in the last twenty years. Most projections lead us to the conclusion that an ever-expanding population will continue to fuel this trend, exacerbating already strained resources. The nation's population reached 300 million in 2006, and it is projected to hit 350 million by 2025. Expansive land use policies and continued growth will put severe pressure on our ability to decrease our carbon footprint and adapt to a changing climate.

Our nation's condition is fragile by most estimates. In perhaps the most disturbing development, recent studies reveal that the American public doesn't grasp the severity of the challenges faced today. A recent Gallup poll revealed that 48 percent of Americans believe the threat of global warming is an exaggerated claim; the poll registered the highest percentage of doubters in the thirteen years the organization has been asking the question.

Addressing the growing urgency of climate change and national renewal will require substantial innovation and adaptation at the regional and local levels. At the local level, municipalities across the country have begun mobilizing to meet the challenge. To date, 1,042 municipalities have signed on to the U.S. Conference of Mayors' Climate Protection Agreement. With more than 81 percent of the U.S. population, cities and metropolitan regions will have a central place in strategies addressing climate change on an effective scale. In recent years, the level of interest in applying new tools to meet our challenges has grown dramatically in the public sector. In February 2009 a broad partnership launched Sustainable New Jersey as a voluntary certification program for the state's municipalities seeking to develop strategies for long-term sustainability. By August of that year, 214 municipalities across the state had signed on to the program. In May 2009, Living Cities released a report that found four out of five big cities now ranking sustainability as a top-five issue. There is little doubt that sustainability has come of age.

The Sustainability Paradigm

In 1987, the United Nations Brundtland Commission offered what may be the definitive explanation of the term: "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs." However, given sustainability's broad meaning, it has been subject to a range of interpretations. In recent years, the term *sustainability* has been widely adopted by both the public and private sectors. In fact, it is so overused that it has given birth to a new lexicon, with words such as "greenwashing" (on the model of "whitewashing") gaining currency to describe the many attempts to co-opt the issue.

This edition of the *National Civic Review* is organized as a survey of community sustainability. It represents a compilation of diverse community experiences that focus on how a range of successful

Published online in Wiley Online Library (wileyonlinelibrary.com)
National Civic Review • DOI: 10.1002/ncr.20022 • Fall 2010

strategies are being applied in community settings and on various scales, from neighborhoods and cities to regions. Each place featured in this edition demonstrates how communities are addressing sustainability within their own context, and each of them has defined its sustainable vision and goals through a unique community narrative. In particular, these cases feature some examples highlighting the critical connection between building civic capacity and achieving success toward becoming a more sustainable place.

> Despite the negative tone of the national news cycle, there are profoundly positive stories developing under the radar, at the local level.

The Importance of Civic Capacity

- Since 2005, the Center for Communities by Design has engaged in pro bono technical assistance projects on sustainability issues with more than forty communities. One of the common statements we hear from communities illustrates the challenge facing local jurisdictions today: "We don't need another plan. We have plans—they all sit on the shelves. We need an implementation strategy." The simple fact is that many communities are struggling to put in place effective structures and processes to achieve success. In some places, the politicized nature of public dialogue is driving apathy and conflict, precluding development of effective partnership and collaboration. Therefore, civic capacity—the ability to leverage all of the collective resources available in a given community toward achievement of public work—is at the heart of any inquiry about today's success stories. Despite the negative tone of the national news cycle, we've found through our work that there are profoundly positive stories developing under the radar, at the local level. These stories have gone largely unnoticed, but many of them offer us unique insights into the opportunities we have to engage in transformative change. In these places, the focus is not only on what gets done but more important how it is done. How can a small city of only sixty thousand residents, like Dubuque, Iowa, leverage its limited resources to become an All-America City and a national model for preservation and sustainability?
- How can a modest rural town such as Greensburg, Kansas, not only recover from a devastating tornado but position itself as a national leader in sustainable development, such that two presidents have referred to it as a model for others?
- How are established communities that have undergone transformative revitalization in previous eras, such as Chattanooga, Tennessee, redefining their processes for modern challenges and developing the next generation of leadership and sustainable community enterprise?

These communities all have great stories to share. In Philadelphia, civic leaders have convened the community to build a grand civic vision for their waterfront. In Los Angeles, a youthful movement of "creatives" and professionals is producing exciting new opportunities for a downtown that was long since considered extinct after enduring the negative impact of decades of city sprawl. In Tampa, a group of design professionals formed the Urban Charrette, an organization dedicated to engaging the community in a common conversation about sustainability. In Chattanooga, a new generation of civic leadership is redefining the "Chattanooga process" for the twenty-first century. Collectively, these narratives offer an illustrative group of potential models and approaches for the rest of us. In accomplishing bold, context-specific goals, they have also produced remarkable similarities in how they approach public work, and as a group they hold critical value for other communities and partners in the field.

These communities excel in their ability to engage the whole community in public work, identify common purpose, and build vibrant partnerships for success. The numbers alone speak volumes about their capacity:

- Greensburg, Kansas, engaged hundreds of people in a town of fewer than fifteen hundred.
- Philadelphia engaged more than four thousand residents in its development of a Civic Vision for the Delaware Waterfront.

DOI: 10.1002/ncr

- Envision Utah involved more than eighteen thousand participants in a two-year regional planning process.
- Chattanooga Stand attracted more than twenty-six thousand residents in the "largest survey-based visioning campaign" in the world.

These communities apply a variety of engagement techniques and formats to produce remarkably supportive public processes. Public involvement tools varied from online engagement to in-person engagement, from public workshops and presentations to surveys and summits—and those are just the examples from one community profiled here. The ability to supply a range of access points and a broad platform for participation enhances their ability to leverage cross-sector partnerships for success. These community processes stress the civic realm over the political realm. They are able to transcend conventional roles and dependency on the public sector by forming broad-based, cross-sector approaches to common issues. In each case, civic efforts held more weight than purely political or governmental responses to the challenge at hand. As a result, they involved a broad approach to community problem solving that leveraged a variety of local resources and assets:

- In Dubuque, Iowa, Dubuque 2.0 was formed as a process to help forge public-private partnerships to build the community's future.
- In Chattanooga, a coalition of nonprofit leaders and citizens wanting to engage the community in a broad visioning process created Chattanooga Stand.
- In the Salt Lake City region, Envision Utah was formed to lead a regional visioning process involving many jurisdictions in discussion of long-term growth strategies.

Keys to Success

A common caveat we hear from communities demonstrates the challenge for localities: "Things are different here. What works other places won't necessarily work here. Things are difficult here. We have some unique challenges." Each community has its own sense of exceptionalism in confronting sustainability issues. Local context is always important, but as these communities illustrate there are also some common ingredients for success.

It takes a vision. As the proverb tell us, "without a vision, the people perish." Successful communities are defining collective visions of their future, and working together deliberatively to realize those visions. All of the communities involved in this edition have engaged in some form of visioning as a preliminary step in doing public work. Philadelphia has a proud claim to being the original city of grand visions. Today, it is renewing that tradition through completion of the Civic Vision for the Central Delaware. The city's Great Expectations process leading up to its last mayoral election demonstrates the power of public processes in framing a city agenda that transcends politics. Dubuque has won a host of awards and received considerable national recognition for leveraging its historic assets to create a model sustainable district. The process was driven by the visioning and planning work the community engaged in over a two-year period, and it continues to empower stakeholders through phases of implementation. Envision Utah formed to help shape a series of growth scenarios for the Salt Lake region, and it has since expanded the work to other regions in the state, taking its visioning and scenario-building framework to a larger scale. Greensburg has redefined its community identity and set forth a bold new direction for itself that is grounded in sustainable principles.

Process and partnerships lie at the center of community success.

- Process and partnerships lie at the center of community success. Successful communities recognize that sustainability is a communitywide endeavor, and they mobilize all of their existing assets in pursuit of public work. These communities have the capacity to build novel partnerships, convene broad-based stakeholders, and involve institutions in cross-sector collaborations to achieve success. They are adept at employing a range of public processes to identify key partnerships for implementation. The Dubuque 2.0 process was designed as a deliberate attempt to create a platform for public-private partnerships, and the city has been successful in partnering with local and national organizations to implement the community's agenda.

- The Chattanooga Stand process engaged twenty-six thousand residents in visioning surveys, using partnerships with local research partners to analyze the results and demonstrate points of convergence among potential partnering interests in the region.

Civic Leadership and Community Renewal

One of the most important developments in many of these communities has been the presence of new civic intermediaries who are playing a critical role in imparting facilitative leadership to the broader community. In the larger urban markets, a new generation of civic leaders is emerging and leading a nascent movement for sustainable regeneration of downtown centers, new thinking about planning and design, and collaborative work on sustainability. These civic intermediaries are playing roles as both conveners and focal points for implementation:

- The Urban Charrette has mobilized dozens of local design professionals to implement important demonstration projects in Tampa, as well as facilitated an ongoing community dialogue about the future of the city.
- Chattanooga Stand describes its core mission as "citizen making" and is actively working to serve as an important connector across the community, empowering citizens to work together. Stand is now "committed to providing the community the information, tools, and resources necessary to identify shared priorities through public dialogue, build stronger connections between residents, leaders and organizations, and collaborate to turn vision into action."
- In Los Angeles, the Downtown Neighborhood Council's Sustainability Committee has organized tree-planting initiatives, worked on urban revitalization and beautification projects, and actively engaged downtown stakeholders in a dialogue about a future vision for the area.

Across these communities, organizations are implementing the mantra of Jane Jacobs that "cities have the capability of providing something for everybody, only because, and only when, they are created by everybody."

Conclusion

We hope that this edition of the *National Civic Review* will make a modest but valuable contribution to current knowledge and understanding about how sustainable communities evolve. Taken collectively, these communities are important examples and models regarding the key attributes of successful communities. More important, they represent an emerging narrative about how America will take on its most pressing challenges during the next half century. These communities are not only renewing and redefining themselves collectively; they are helping to redefine America and are all making important contributions to the emerging narrative of the twenty-first century.

Joel Mills is director of the American Institute of Architects Center for Communities by Design.

DOI: 10.1002/ncr

Optimism and a Thousand Charrettes

BY ASHLY ANDERSON, JOANNE FIEBE, EVAN JOHNSON, AND TARYN SABIA

During the development of Tampa, Florida's Comprehensive Plan in late 2007, our organization, the Urban Charrette, saw an opportunity to engage various stakeholders to help contribute by addressing planning and sustainability for neighborhoods in the city. After countless conversations and meetings, it was apparent that it was time to act and offer leadership in using design as a tool for change. We hosted several Saturday morning workshops and forums to help define our direction. Knowing we needed a process to bring together all the facets of our city, we submitted a proposal to the American Institute of Architects (AIA) Communities by Design for an SDAT (Sustainable Design Assessment Team). The SDAT technical assistance grant provided expertise in two areas essential to Tampa's future: sustainability and design.

Timing: State of Change

Florida's population did not begin to experience rapid growth until the twentieth century. The ascent to being the fourth most populous state took place after World War II, when increased wealth and the automobile allowed millions of Americans to become mobile. This migration brought a vibrancy and energy to Florida that have continued to this day. The perspective of these newcomers was different from that observed in earlier American migrations. According to historian Gary Mormino (p. 11):

> Several generations of Americans helped fulfill the modern Florida dream. Scarred and shaped by the Great War and the Good War, the Roaring Twenties and the Great Depression, these citizens brought to Florida a deeply held system of values enshrining freedom, individualism, and the pursuit of happiness.

Once known as the Cigar Capital of the world, Tampa saw early development filled with cultural clubs, compact neighborhoods connected by more than fifty miles of streetcar lines, a bustling port, and wildlife on the Hillsborough River. Today these historic neighborhoods struggle to maintain their place in the broken urban fabric after being severed by highways. Remnants of brick streets and rail tracks covered by asphalt represent Tampa's coming of age during the rise of the automobile. Ad hoc planning ultimately shaped Tampa's sprawling development pattern, both within the city limits (especially in a series of master planned communities known as New Tampa) and in the suburbs, which spread into the surrounding counties and strained infrastructure systems. This physical disconnection of the built environment contributed to the detachment of Tampa's social and political infrastructure. Organizations worked tirelessly to bring Tampa back to life, but they were confined to separate silos. As a result of poor planning, lack of design, and disjointed civic life, the only thing certain was that Tampa was not sustainable.

As it has for the last fifty years, growth will continue to be the most significant challenge and greatest opportunity for the city. Through 2025, the population of Tampa is projected to grow by 21.6 percent. In recent years, under the administration of Mayor Pam Iorio, the city has begun to proactively address how growth can be used as a means for creating a more sustainable built environment. The new Tampa Comprehensive Plan (the Plan) is the most significant of these initiatives. As the primary policy document shaping growth and development in the city of Tampa, the Plan (Tampa Comprehensive Plan: Building Our Legacy A Livable City) plays a significant role. The Plan represents a change in how the city handles land use decisions, focuses growth, and includes the policy framework for a multifaceted approach to achieving sustainability. In addition, the Plan fosters capacity building of organizations to help move the city of Tampa toward its goal of becoming a truly livable city.

The Urban Charrette, a Tampa-based collaborative of young professional designers, is adaptable, contextual, and holistic in its approach and practice

Published online in Wiley Online Library (wileyonlinelibrary.com)
National Civic Review • DOI: 10.1002/ncr.20023 • Fall 2010

related to issues of sustainability and urban design. In many ways, we are modeled as an ongoing charrette. (We define the term as an intense, collaborative design process.) Through key projects such as the Tampa Sustainable Design Assessment Team (SDAT), we hope to make the Urban Charrette a resilient voice in our community. For example, we organized a project, the result of a charrette, called Conceptual Kiley to draw attention to the neglect of a local urban garden designed by the renowned landscape architect Dan Kiley. It incorporated artists and urban design. The Urban Charrette asked local artists to create sculptural trees to stand in place of those that had been lost, bringing public awareness to the park's past and potential future. The project taught us that we must identify proactive ways to use charrettes in creating a positive culture of change. The Urban Charrette recognized the AIA's SDAT grant as a catalyst for a different form of civic participation. To quote the AIA website, the program brings together architects and other professionals from across the country to "provide a roadmap for communities seeking to improve their sustainability." We believed it was the right vehicle for our organization to continue its mission to bring agencies, organizations, and individual citizens together to discuss the needs of Tampa from different perspectives. Our organization listened earnestly to the community and talked constructively about the collective future and how these groups could have an impact. To get this project off the ground, the Urban Charrette engaged the leadership of the City of Tampa, the Hillsborough County City-County Planning Commission, the University of South Florida, community organizations, and local planning and architecture professionals. The experience and local knowledge of this guiding committee made them an asset to the process. A three-day SDAT visit helped define a vision and framework for a more sustainable Tampa, called Connecting Tampa.

The logistical challenges and fundraising requirements for the SDAT represented an important capacity-building exercise for the Urban Charrette. In addition to brochures and flyers, we sought collaboration with the community beyond the traditional media. We designed a user-friendly social networking platform, and we encouraged the SDAT participants to create a personal profile and contribute to the website Tampa's Sustainable Future. Members of the website facilitated a conversation about sustainability, design, and their community. Evolving beyond the initial conversation, this use of technology to work with a diverse audience has become a clearinghouse for urban design issues in the area.

The project taught us that we must identify proactive ways to use charrettes in creating a positive culture of change.

The Urban Charrette's outreach efforts encouraged stakeholders to share ideas and be active listeners. With a broader format and larger audience, the SDAT gave diverse community groups the opportunity to come together in a single process. Through open conversation, the City of Tampa, organizations, and businesses actively listened to one another. The successes of the SDAT visit and resulting report were not only the insights and actionable recommendations conveyed but the new relationships that were formed. These organizations shared a similar vision for Tampa and saw the value and importance of helping to make SDAT a success for the Urban Charrette and the community as a whole.

Shared Learning

Shared learning is important to our framework because it establishes a collective understanding. We use workshops, visioning sessions, charrettes, and forums not only to educate the public but more important to help us gain deeper understanding of community issues. A successful process encourages the public to contribute meaningful insight. We achieve this by posing relevant questions, maintaining a design focus, and shaping the conversation by way of input on creative solutions to key issues.

The organization continues to use the concept of building a collective understanding in our current programming, including our Open Mic series. This serves as a forum for community discussions. The fundamental optimism of our organization and our focus on design steers this participatory program toward opportunity and away from common complaints. Since SDAT, this monthly series has become a driving force of community interaction for the

DOI: 10.1002/ncr

Urban Charrette. The topics of discussion focus on issues of sustainability at the neighborhood scale. One of our most successful conversations was Community Gardens, which served as a catalyst for local citizens to develop a new garden in the Seminole Heights Neighborhood.

As part of our community design program, the Urban Charrette planned and facilitated a charrette for the Tampa Downtown Partnership: Water Taxi Design Charrette. Every city that resides on the water's edge has the opportunity to distinguish itself through great waterfront design. Port cities such as Tampa are unique communities because of the interplay between the built and natural environments. The relationship of the city's inhabitants to the water's edge captures the spirit of place and encourages ingenuity. The Hillsborough River has played an important role in Tampa's estuary, cultural heritage, and economy. The Water Taxi Charrette was equally important to our education about the river and its impact on the community. It taught us that the river, as an organizing feature, can realize its value once again.

Much like a charrette, shared learning builds consensus through a collaborative process. Our shared learning process allows us to be adaptable as an organization and maintain a holistic perspective on Tampa.

Implementing Design

Exceptional urban design is the foundation of a successful and healthy community. Design, as a tool, is central to the Urban Charrette's mission because it constitutes a foundation for building a collective understanding of Tampa's vision. Consistently talking about quality, contextually sensitive design has helped us build trust with the Tampa community, which in turn has brought the Urban Charrette unique opportunities and partnerships.

The Tampa SDAT has resulted in a new, clearer message for the Urban Charrette, one that raises the level of design awareness by establishing a design vocabulary in order to share a sustainable vision for Tampa's future. Since the conclusion of SDAT, the Urban Charrette has focused on this vision of Tampa by fostering new design partnerships, new types of interactive design demonstrations, and, in response to the final SDAT report, establishing five Tampa-centric sustainability focuses.

As a result of the goals of SDAT, the Urban Charrette initiated a project entitled Street-to-City, a series of self-empowering programs designed to give citizens a perspective on their communities so as to develop the knowledge to improve their environment through design, partnerships, and education. We recognized the need to partner with a Tampa-based institution. The University of South Florida offers graduate-level research for nonprofits and government agencies. The partnership produced not only much needed case-study and best-practices research for Street-to-City but also a multidisciplinary perspective. The Urban Charrette needed information on local, national, and international strategies for neighborhood capacity building; the research team produced unique strategies that can be incorporated into neighborhood educational modules.

Through the Urban Charrette's relationship with the Tampa Downtown Partnership, we offer an urban eating space at the Downtown Farmer's Market each Friday. In turn, the Urban Charrette advertises our upcoming events at the market. One Friday in February we took it a step further. An interactive design demonstration, entitled Mobility Market, started with an impromptu workshop at an Open Mic. Local designers sketched complete street concepts onto a section of downtown Tampa. Those drawings led to a full-scale demonstration of a complete street at the Friday market. Landscaping, bike lanes, cross walks, a bus shelter, mixed zoning, café seating, and on-street parking invaded an otherwise auto-centric streetscape. Many commuters who typically do not experience downtown except through their office windows walked through the demonstration and asked a lot of questions. This tangible, full-scale model started a conversation and offered a new perspective on what citizens should expect from the design of Tampa's streets.

A consensus vision developed during the SDAT visit inspired the Urban Charrette to identify five sustainability focus areas: transit, natural assets and public space, community building through the arts, local economy, and neighborhoods. We translated these place-making devices into easily understood topic areas that help to define a sense of place in

Tampa. Our goal is to incorporate them as organizational features of the mission of each new project to develop a clear path for the future of our design collaborative.

The Urban Charrette recently celebrated its third birthday. Our work has led to lasting community partnerships and a growing presence of quality urban design projects, making us a valued resource for the city. We were asked to participate in the sustainability component for the recent 2018/2022 FIFA World Cup proposal. Neighborhood organizations have asked us to assist them in their planning efforts. We have completed two transit-oriented charrettes, the Tampa Water Taxi Charrette and the TECO Line Streetcar Signature Station Charrette. Most exciting, life is beginning to return to Kiley Gardens. The City of Tampa restored and reopened the park, though funding is still needed for the trees. The Urban Charrette is developing a campaign to foster community support to replant the lost crepe myrtles.

References

American Institute of Architects. "About the AIA. Programs & Initiatives: Sustainable Design Assessment Teams (SDAT)." 2010. http://www.aia.org/about/initiatives/AIAS075425.

Mormino, G. *Land of Sunshine, State of Dreams: A Social History of Modern Florida*. Gainesville: University Press of Florida, 2005.

Ashly Anderson is an allied member of the American Society of Interior Designers.

JoAnne Fiebe has worked as director of planning and development for a Tampa-based construction firm.

Evan Johnson is a certified planner (AICP) and board member of the Urban Charrette.

Taryn Sabia, founder of the Urban Charrette, received the 2008 Creative Catalysts Award for Creating a Livable Community.

DOI: 10.1002/ncr

Defining, Inspiring, and Implementing Sustainability

BY LAURA CARSTENS

Situated in a beautiful, natural location along the Mississippi River, Dubuque is distinctive because of its steep hills and river bluffs—geographic features that many people do not expect to find in Iowa. Dubuque has been gaining recognition as a leader in the sustainability movement, another unexpected attribute of this town of sixty thousand.

Located where Iowa, Wisconsin, and Illinois meet, Dubuque is Iowa's oldest city. It is the regional center for commerce, industry, education, and culture. Our community now takes pride in the slogan "Masterpiece on the Mississippi," but this wasn't always the case.

In the 1980s, Dubuque had double-digit unemployment, declining population, vacant storefronts, and deteriorating neighborhoods. A billboard proclaimed: "Would the last person to leave Dubuque please turn off the lights?"

In the face of decline, community leaders from the private and public sectors came together in four community-visioning efforts over the past twenty years that helped change Dubuque. These leaders focused on grassroots efforts to address planned and managed growth, downtown and neighborhood revitalization, riverfront redevelopment, economic growth, and diversity so as to become a sustainable, green community.

With this transformation, Dubuque is poised for a leadership role in the sustainability movement. Sustainability is often equated with being "green" and the triple bottom line of people, profit, and planet. As a city planner, I believe that sustainability is good environmental planning; think of your community as an ecosystem, where everything is connected to everything else.

This is the approach that the City of Dubuque undertook in 1990–1995, as we engaged the community in a visioning process and then defined a comprehensive plan linking aspects of the community often not discussed in a city master plan or related to one another through a community engagement process—before smart growth and sustainability became national buzzwords.

The Dubuque Comprehensive Plan looks at the city as a whole and the surrounding region, with a policy statement, goals, and objectives established for the physical, economic, and social environments of the community. Since 1995, the plan has reflected the three principles of sustainability: environmental, economic, and social equity needs.

The plan consists of fourteen elements. The *physical environment* includes the elements of land use and urban design, transportation, infrastructure, and environmental quality. The *economic environment* includes the city's fiscal and economic development elements. Unlike many city master plans, Dubuque's also includes the *social environment,* encompassing nontraditional elements such as health, housing, human services, education, cultural arts, recreation, public safety, and diversity.

Each element includes a policy statement, followed by goals, and then objectives for each goal. The goals and objectives are broad in scope; specific programs, sites, or projects generally are not found in the plan. In creating the plan and its subsequent updates in 2002 and 2008, we have engaged the public through comment sessions, focus group meetings, open houses, displays, and public hearings.

The city's commitment to sustainability has led to greater awareness of this environmental planning approach. People have more understanding that our community is like an ecosystem, where everything is truly linked to everything else.

Defining Sustainability: Dubuque's Approach

Defining sustainability at the community level can be accomplished in any number of ways, and the definitions vary from city to city. These definitions generally reflect three components: social, economic,

Published online in Wiley Online Library (wileyonlinelibrary.com)
National Civic Review • DOI: 10.1002/ncr.20024 • Fall 2010

and environmental. A common definition is from the UN World Summit on Sustainable Development: the ability of a community to "meet the needs of the present without compromising the ability of future generations to meet their own needs." Another is the long-term, seventh-generation view of the Iroquois Nation: making decisions based on how they will affect not only our generation but also seven generations to come.

In 2006, the Dubuque City Council identified sustainability as one of its top priorities. From here, the mayor and city council might simply have defined sustainability for the community. Instead, they created the Sustainable City Task Force in 2007 to help develop a vision statement and principles that would further define the sustainability initiative through community involvement and input.

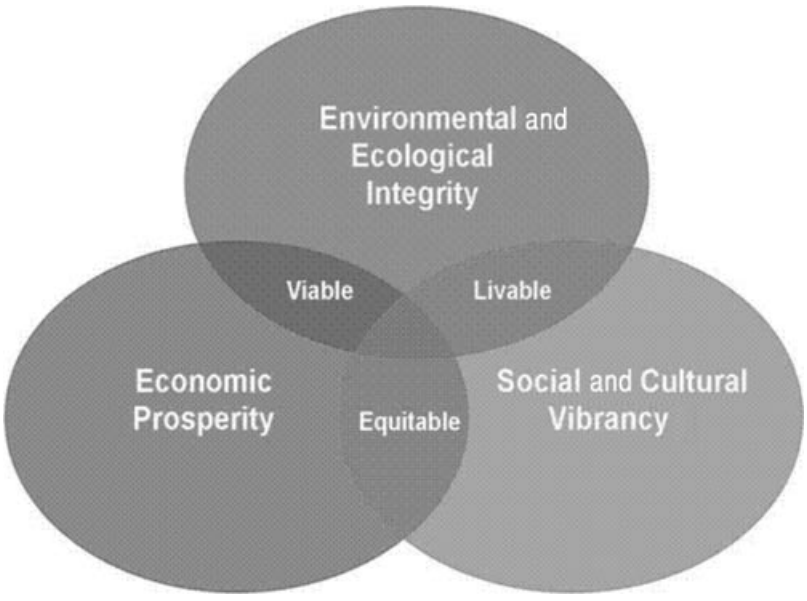
The task force comprised representatives from local government, schools, utility companies, religious organizations, neighborhood associations, youth organizations, nonprofits, environmental organizations, and business stakeholders. The city hired a local firm to work with city staff and the task force. The task force met regularly for two years to develop a process to get input from the citizens of Dubuque about what is important to them and what sustainable initiatives they would like to see incorporated into a vision statement and strategic document.

In 2007, 150 community members participated in stakeholder meetings to discuss targeted visions and ideas. More than twenty presentations were made to community organizations to gather input. The meetings were organized into small business, business associations, and retailers; developers and lenders; nonprofit organizations; large business, industry, utilities, and the Greater Dubuque Development Corporation; institutions, health care, and religious; and transportation organizations. There was also a meeting for the general public.

In addition to public meetings, more than 860 community surveys were collected in 2007. The survey results, along with other data compiled by the task force, were used to help guide development of the sustainability vision statement and guiding principles. Specific strategies and action steps to implement sustainable initiatives were also explored. The Sustainable Dubuque model has three pillars of sustainability, as seen in Figure 1.

The vision statement for Sustainable Dubuque was developed at the grassroots level and adopted by the city council. It is that Dubuque is a viable, livable, and equitable community. We embrace economic prosperity, social and cultural vibrancy, and environmental integrity to create a sustainable legacy for generations to come.

Figure 1. The Three Pillars of Sustainable Dubuque



DOI: 10.1002/ncr

This vision statement is supported by eleven key sustainability principles identified by Dubuque citizens. These principles are not new, and many examples already exist in our community. They are part of the community values that our citizens want to preserve and leave for future generations. These eleven principles are organized here according to Dubuque's three-part sustainability model.

Environmental Integrity

- *Healthy air:* Dubuque is a community that values fresh, clean air; reduced greenhouse gas emissions; and minimized health risks.
- *Clean water:* Dubuque is a community that values water as the source of life and seeks to preserve and manage it in all forms.
- *Native plants and animals:* Dubuque is a community that values biodiversity through preservation, restoration, and connection of nature and people.

Economic Prosperity

- *Regional economy:* Dubuque is a community that values a diversified regional economy with opportunities for new and green markets, jobs, products, and services.
- *Smart energy use:* Dubuque is a community that values energy conservation and expanded use of renewable energy as a means to save money and protect the environment.
- *Resource management:* Dubuque is a community that values the benefits of reducing, reusing, and recycling resources.
- *Community design:* Dubuque is a community that values the built environment of the past, present, and future, which contributes to its identity, heritage, and sense of place.

Social and Cultural Vibrancy

- *Green buildings:* Dubuque is a community that values a productive and healthy built environment.
- *Healthy local foods:* Dubuque is a community that values the benefits of wholesome food from local producers, distributors, farms, gardens, and hunters.
- *Community knowledge:* Dubuque is a community that values education, empowerment, and engagement to achieve economic prosperity, environmental integrity, and social and cultural vibrancy.
- *Reasonable mobility:* Dubuque is a community that values safe, reasonable, and equitable choices to access living, work, and play opportunities.

Inspiring Sustainability: Dubuque's Approach

The City of Dubuque cannot lead the community's sustainability movement alone. Our partners, the Dubuque Area Chamber of Commerce and the Community Foundation of Greater Dubuque, have formed Dubuque 2.0 to conduct a community dialogue on making *sustainability* sustainable, seeking to create jobs and save individuals and businesses money.

Dubuque 2.0 is a venue to present sustainable ideas, share best practices, and measure results from the community's sustainability efforts. It is also a process that encourages public-private partnerships to shape our community's future.

With this initiative, Dubuque is taking a unique approach by supplying our residents and businesses with the tools and information necessary to measure and manage their use of resources. With this knowledge, people can make educated choices to change behavior, reducing their costs and identifying long-lasting sustainable opportunities.

Dubuque 2.0 builds on the city's sustainability plan to make our community economically prosperous as well as socially and culturally vibrant, and to improve our environmental integrity. It centers on community engagement with businesses, schools, nonprofits, and neighborhoods in a comprehensive sustainability process. Dubuque 2.0 presents opportunities to learn about sustainability and change behavior. This initiative seeks to help people and businesses save money and resources, open new markets and improve competitiveness, and reduce our impact on the planet.

Implementing Sustainability: Dubuque's Approach

Since 2006, the City of Dubuque and its partners have undertaken numerous projects to help implement sustainability as a priority:

- Hiring a sustainability coordinator
- Creating and hosting an annual Growing Sustainable Communities Conference
- Creating an asset map of sustainable initiatives in the community
- Adopting the Sustainable Dubuque model
- Developing a green pledge card, partnering with the National Trust for Historic Preservation's Office of Sustainability
- Partnering with IBM to become the first Smarter Sustainable City in North America
- More initiatives are listed on the website (www.sustainabledubuque.org).

In addition to these projects and initiatives, which are part of the Sustainable Dubuque initiative, implementing sustainability at the community level also involves moving forward with plans. As a city planner, I believe that sustainability is sound urban planning. Planners tend to take a broad and long-range view, considering the interrelatedness of the components of the big picture. All planning decisions should be assessed or based on all three sustainability elements. Progress in only one area to the detriment of the others is not fundamentally sustainable.

Implementing sustainability at the community level means that you must plan for sustainability by incorporating sustainability principles into plans, policies, codes, and guidelines. In doing so, you'll overcome challenges in a sustainable, balanced, integrated way, translating vision into action. Here are a few examples of how Dubuque is implementing a sustainable vision.

Sustainable Design

In 2007 the American Institute of Architects (AIA) Center for Communities by Design selected Dubuque to receive technical assistance under the Sustainable Design Assessment Team (SDAT) program. SDAT is AIA's community assistance program focusing on the principles of sustainability. The collaborative SDAT program brings together teams of volunteer professionals (architects, urban designers, planners, and others) to work with community decision makers and stakeholders to help them develop a vision and framework for a sustainable future, furnish a roadmap for communities seeking to improve

Implementing sustainability at the community level means that you must plan for sustainability by incorporating sustainability principles into plans, policies, codes, and guidelines.

their sustainability, and achieve balance among cultural, environmental, and economic systems.

The Dubuque SDAT conference in 2007 focused on five major land use and urban design issues:

- Urban sprawl versus planned and managed growth
- Bluff development versus preservation
- Stormwater runoff versus management
- Traditional development versus sustainable design
- Neighborhood disinvestment versus neighborhood revitalization

Community members worked with national SDAT volunteer consultants to identify ways to achieve economic prosperity, ecological integrity, and social equity.

In 2009, the Dubuque SDAT Report was incorporated into the Sustainable Dubuque Plan as well as the city's new Unified Development Code (UDC). The UDC combined and updated the city's zoning, subdivision, site development, and historic preservation regulations. Although traditional development is still allowed, it is now the exception. Subdivision and site development regulations have been extensively revised to promote sustainable measures, such as conservation subdivision design, solar access, low-impact development, and accommodations for pedestrians, bicycles, and public transit.

Historic Millwork District

In 2009, the National Trust's Office of Sustainability selected Dubuque, Iowa, and Seattle, Washington, to participate in a Preservation Green Lab demonstration project. This project has at the heart of its mission the concept that the embodied energy (energy previously used to create a product or building) found in historic structures needs to be at the heart of a city's sustainability strategy. The Preservation Green Lab in Dubuque will focus on the Historic

Millwork District and uniting historic preservation standards with smart energy systems for adaptive building reuse.

At the turn of the twentieth century, the Historic Millwork District was one of the largest millworking concentrations in the nation. There were dozens of companies, with some twenty-five hundred jobs. Most industries closed in the 1960s and 1970s, however, and the area has sat largely vacant since then.

Today, the Historic Millwork District is seventeen blocks of brick warehouses with more than a million square feet of vacant space; streets with historic pavers, gravel, and railroad tracks down the center; active millworking and metalworking industries; and limited off-street parking or green space. An elevated freeway and railroad tracks on the east and south now separate the Historic Millwork District from the Mississippi Riverfront and the Port of Dubuque, a $400 million brownfield redevelopment of entertainment, office, and commercial uses. Downtown lies to the east. To the north is the Washington Neighborhood, a low-to-moderate-income neighborhood with the city's oldest housing, the highest percentages of rental properties and minorities, and the lowest property values.

Despite these barriers and challenges, we have a vision of sustainable development for the historic district. The vision found in the 2009 Historic Millwork District Master Plan is for "a community reconnected with surrounding neighborhoods, reenergized with housing, retail, offices, galleries, entertainment, and employment, and reimagined as a laboratory for sustainable practices and technologies."

The planning process engaged a twenty-two-member project steering committee, along with city officials, city staff, property and business owners, neighborhood representatives, a grassroots group advocating for district revitalization, artists and preservationists, and the general public. Use of visuals with multiple focus groups and public input meetings to supply information, share ideas, and give feedback characterized the planning process. In addition to the master plan, an economic feasibility and market study was conducted as a reality check on the plan's recommendations and to identify market demand.

Implementation of the Historic Millwork District Master Plan has begun, with completion of a District Energy System Feasibility Study; design of streets, utilities, and streetscape improvements that balance Complete Streets accessibility with historic preservation; and adoption of Architectural Design Guidelines and a Planned Unit Development (PUD) ordinance with custom zoning and sustainable development regulations.

The Historic Millwork District Master Plan incorporates the sound principles of environmental planning and urban planning as a model sustainable district. The framework on the master plan is organized into five infrastructure systems, or layers. These urban ecosystems are water, energy, development, vegetation and open space, and arts and culture. Each infrastructure system sets forth goals and objectives for district revitalization and sustainability.

Blue Infrastructure: Water. Water consists of rain and stormwater, wastewater, and domestic water. The overall goals of the blue infrastructure are to improve water quality, reduce reliance on water supply and wastewater management systems, manage stormwater locally, and reduce the district's "water footprint" (similar to a community's carbon footprint).

Orange Infrastructure: Energy. Energy includes the electrical, heating, and cooling infrastructure. The overall goals of the orange infrastructure are to reduce per capita energy consumption; enhance efficient electrical and HVAC systems that minimize the district's carbon footprint; and create and use locally available, alternative, and renewable energy sources. Possible options are being evaluated: re-creating the historic districtwide heating and cooling system, producing onsite energy, and monitoring energy use.

Gray Infrastructure: Development. Development consists of buildings, parking, streets, and other redevelopment. The overall goals of the gray infrastructure are to use the embodied energy of historic buildings, preserve historic significance, increase the pedestrian experience, create better access to other districts,

organize land use patterns to cluster complementary land uses, find creative parking solutions, and foster opportunities for new construction—all at minimal environmental cost.

Green Infrastructure: Vegetation and Open Space. Vegetation and open space includes vegetation, parks, and open space. The overall goal of the green infrastructure is to create strategic locations for open space, pervious places, gardens, and recreation areas. These green spaces may be developed as private outdoor space on rooftops and in courtyards, and as public space in green corridors.

Red Infrastructure: Arts and Culture. Arts and culture consists of arts and cultural spaces, amenities, and expressions that reinforce the area's identity. The overall goals of the red infrastructure are to nurture the arts community in the district, collaborate and encourage expression of historical and cultural identity, and create a sense of place (art can be everywhere, and architecture is art).

In addition to these integrated strategies, strong partnerships and cooperation between the public and private sectors form the cornerstone for the Historic Millwork District. The strategic partners include private property owners; city, state, and federal governments; downtown development organization; economic development corporation; and the chamber of commerce. Additional partners are local grassroots advocates for sustainability, arts and culture, and historic preservation; nonprofits; the community foundation; AIA Communities by Design; public utilities; and area colleges and universities. National partners are the National Trust for Historic Preservation's Office of Sustainability, the International Council for Local Environmental Initiatives (ICLEI), and IBM's Smarter Sustainable City initiative.

So, what are the factors contributing to a successful sustainability initiative in Dubuque?

First, critical to success is a strong and committed leadership that makes sustainability a community priority. Without the leadership of the mayor and city council, a plan cannot take root.

Second, developing long-standing strategic partnerships is important for integrating the various economic, environmental, and social elements of our sustainability plan.

Third, community engagement at all stages—visioning, planning, and implementation—is necessary for the sustainability plan to reflect the desires and views of the citizens. A top-down approach will not educate or empower our residents and businesses.

Finally, integrated strategies for planning and implementation require communication, feedback, and knowledge. Inspiring sustainability must reach beyond city hall to employers, schools, neighborhoods, and individuals to change behavior.

Laura Carstens has been planning services manager for the City of Dubuque, Iowa, since 1989.

DOI: 10.1002/ncr

Small Physics in Social Change
Chattanooga's Visioning Process

BY JOSHUA H. MCMANUS

Promoting civic engagement regionally is as overwhelming as it is nebulous. Planning agencies, government programs, and private foundations in the Southeast have historically operated with the experience of the individual in mind, and healthy local input keeps regional planning in this area largely sustainable. Soliciting user feedback in institutional processes, though, is different from engaging a whole community—a lesson we learn daily in Chattanooga, Tennessee.

Chattanooga is home to Stand, the world's largest survey-based community visioning effort. It started in 2008 with Mayor Claude Ramsey's call to action. Following an intensive bidding process that brought a Volkswagen manufacturing plant to the city, Ramsey addressed Chattanooga's Rotary Club and asked, What comes next? How could organizations, businesses, and especially individuals leverage this economic driver for the greater local good?

Perhaps it was the tale of the automotive industry's decline, and of midsized cities devastated by it, that fueled Ramsey's request. Whatever the mayor's motivation, the plea didn't fall on deaf ears. Business leaders responded from across sectors, including a group of individuals supporting entrepreneurship locally: Stephen Culp, CEO of Smart Furniture; Wade Hinton, today Volkswagen's chief counsel; and I as cofounder of the nonprofit CreateHere. We share the belief that Chattanooga's legacy will be a surprising one.

Contrary to popular opinion, Chattanooga is a hub for innovation, business development, industry, creative enterprise, and, notably, community visioning. Stand was successful because it followed another effort dating back two decades. Vision 2000, launched in 1984, supported revitalization of the city's downtown corridor and an increase in arts and cultural development citywide. Regionally, Chattanooga is known for civic engagement because of this pivotal moment in our history.

Place making was essential in that effort. RiverCity Company, a local not-for-profit focused on downtown development, was one project launched out of Vision 2000. Among the past decade's work is redevelopment of Chattanooga's Riverfront, long separated from the city by a multilane road and significant environmental degradation. A once-abandoned industrial site is now a popular park; a condemned road is now the world's longest pedestrian footbridge.

From the beginning, Stand's vision was different from Vision 2000. A planning group joined Culp, Hinton, and me and together we committed to "citizen making"—giving the public outlets for civic engagement. It would start with a four-question survey but lead to something far more meaningful. We wanted to build the capacity of Chattanoogans to actively engage in the process.

Over the course of five months in summer 2009, we planned to ask as many residents as possible four simple questions:

1. What do you like about the Chattanooga region?
2. Imagine the best possible Chattanooga region. Describe it.
3. What challenges must be addressed?
4. What actions, big or small, can you take to help?

In setting goals, a timeline, and milestones for distribution of these questions, we looked to our peers. Among the two most influential visioning efforts we researched were Portland's VisionPDX and Calgary's imagineCALGARY, where organizers collected eighteen thousand surveys in under two years. On the basis of these timelines and numbers, we set the aggressive goal of collecting twenty-five thousand surveys in five months.

CreateHere stepped in at this point, furnishing organizational resources to support the planning committee's goal. Stand headquarters was housed in our offices, and a team of designers and writers

Published online in Wiley Online Library (wileyonlinelibrary.com)
National Civic Review • DOI: 10.1002/ncr.20025 • Fall 2010

prepared to launch the visioning effort by producing collateral, including volunteer guides, informational brochures, and a dynamic website featuring the survey and resources for community organizing.

The survey went live on May 3, 2009. Early on, we anticipated most surveys would come from an online push, in addition to strategic partnerships with businesses employing upwards of one thousand people. We were wrong in regard to both assumptions. By the end of the summer, more than 80 percent of the surveys had been collected through face-to-face conversation. Additionally, we found that a top-down approach did little to inspire ownership among respondents, and as such our survey return rate was remarkably low through these outlets.

A group of volunteers and paid field organizers administered surveys at as many public and private events as possible, including Riverbend, an annual music festival where we collected 10 percent of the survey total in ten days; county fairs in outlying areas; National Night Out events; neighborhood association meetings across the Chattanooga Region; and even a rodeo. We connected with churches, schools, interest groups, and media outlets. Though it took a month or so to catch our stride, by June 15 we had collected 6,795 surveys. Our pace would quicken significantly from then on.

Naturally, it was difficult to balance survey collection with the far more important goal of creating a community-owned and meaningful visioning effort. It's often a matter of choosing quantity or quality, but in this case we needed both. In addition to "drop-in" canvassing opportunities, we held open planning meetings and organized events that were Stand-specific, all with the goal of preparing the public for what followed the survey collection phase. Specifically, we connected with three city council members and hosted district barbecues. Although Stand was on the agenda, the goal was to frame smaller neighborhood-focused visioning conversations; survey collection at these events was typically low, but it was important in the process nonetheless.

To give the collection team due justice is impossible, but suffice it to say, it was a grueling summer for every person on our team who picked up a clipboard and asked neighbors the four Stand questions. By July 30, the total number of completed surveys was 13,184; approximately one week later, on August 7, we had 14,623. On August 28, with 19,000 surveys, Stand became the world's largest visioning effort, surpassing imagineCALGARY. Over the next three weeks, the team would collect an additional 6,000 surveys, meeting our goal on September 18 with 25,000. By September 30, the last day of the collection phase, the team had gathered 26,263 surveys—again, 80 percent of them through face-to-face conversations. We hoped that would be just the beginning of the process.

The Results

For the next six months, the data were entered into a database by hand and then coded by the University of Tennessee at Chattanooga's Center for Applied Social Research, after which the Ochs Center for Metropolitan Studies, a local research organization, analyzed the data pool. Each survey response was broken down and coded with any combination of seven rubric themes and countless subcategories. Those rubric themes are place: natural; place: manmade; government; play; people; work; and education. All told, the dataset includes 1.2 million coded pieces of information, representing more than three hundred thousand unique line responses.

> We knew as early as October 1, 2009, that making the enormous dataset digestible was our biggest challenge—even more difficult than collecting the surveys.

The dataset was enormous—overwhelmingly so. We had access to the data only a few weeks before it would be made publicly available in April 2010. We knew as early as October 1, 2009, that making it digestible was our biggest challenge—even more difficult than collecting the surveys. We struggled to identify CreateHere's role in moving the visioning process forward. What would Stand become, compared to other efforts? Would it be a series of recommendations for regional planning, or a resource to guide our own work? The biggest question was, "Should we lead by example or simply make the

data available, encouraging open source information sharing?" We opted to do both.

The process started by encouraging individuals to make conclusions—flexible, not firm—from the data. For example, in the theme of education there are some interesting assumptions that can be made in a cross-question analysis. There were 5,912 responses that identified education in question three, "What challenges must be addressed?" Here are a few of those answers:

- Public Education. I know this is tired but it's gotta be said constantly until something changes.
- Providing each child with a first-class education and educational experience.
- EDUCATION, EDUCATION, EDUCATION

What's more, 3,626 responses included education as part of a "best possible Chattanooga Region." Some of them read as follows:

- Public education that people move here for.
- The region would have the best educational system from preschool to graduate programs in the southeast United States. It would be a model for others.
- Hub of education and job readiness from high school to college graduates.

Finally, there were only 878 responses that included education in the action they could take to help. Here are some responses pulled from question 4, "What actions, big or small, can you take to help?"

- Engage in conversations regarding education and quality of life issues. Encourage others to participate in the conversation.
- Mentor young men and women who are interested in my field.
- I can provide community-centered training and education sessions at various community centers.
- Be an involved parent and participate in my child's school and academic development.
- Support a city/county tax designated for educational milestones.
- Grant-funded project to bring fruit, water, and walking to elementary schools.

The numbers are telling. Although 5,912 responses indicated that education was a challenge, only 878 knew of ways in which they could help. It's no surprise, because education is a daunting issue across the country, especially in Tennessee, where we are ranked forty-one in the United States in student achievement. The goal of Stand now that the collection phase is over is to inspire more people to find meaningful answers to question four—for every reaction, an equal action.

The survey process itself was, for many, an act of civic engagement, and we are using that act of "small physics" to propel greater community action in the future.

The silver lining, despite what the data indicate, is that the survey process itself was, for many, an act of civic engagement, and we are using that act of "small physics" to propel greater community action in the future. People participated and involved their networks, with the promise they would be included in other processes later. This is where visioning can start to focus on citizen making.

As an organization, we've been able to break down a few trends in the dataset at large that speak to the important role citizens will play in Stand's future success. CreateHere has committed to these conclusions, questions, and corresponding actions, all inspired by Stand data:

Our city equals our citizens. Thirty years ago, we wanted to love Chattanooga, and we connected quality of life with natural and manmade environments. Stand responses show that we're ready now to focus on the people populating our region—how they live, work, and play in this place we call home. During the next thirty years, how can we focus on the people of Chattanooga who populate this place? How can we promise high quality of life for the young, the old, and everyone in between?

Beautiful, but we've got baggage. Chattanooga's scenic beauty is a source of pride for citizens,

many of whom remember a time when it was not quite so lovely. We treasure the renewed beauty of our city and need to ensure that planning and growth efforts keep Chattanooga clean and safe—from our parks to our roads, to our houses and offices. How will impending growth affect our natural and built environments and the ways in which we interact with them? How can we preserve the pride we feel in Chattanooga?

Education informs everything. Stand survey results show concern about Chattanooga's future in three key areas: education, crime, and jobs. We crave public safety and access to quality education, and as a city we are ready to say that the safety of our streets and schools determines our opportunities. How can we connect across differences, pairing individuals and resources? How can we make Chattanooga a safe, prosperous, and well-informed city?

Live or work, we've got a place to share. Stand survey results show that our downtown is a valuable asset, regardless of where we live in the region. For many, it is a hub for regional commerce, local business, and impressive attractions. The fact is, downtown is everyone's business. How can we grow the local economy in downtown and in every neighborhood? How can we stimulate urban vitality? What activities keep us here?

Changing culture, serving culture. We know how to recycle, pick up trash, and vote, but our community wants to do more. Complex community problems can't be solved in an eight-hour workday, and the gap must be closed between wanting to volunteer and actually volunteering. How can we foster a spirit of volunteerism in Chattanooga? How can we promote opportunities, small and large, for citizens to give freely of their time and engage?

Stand, Then Deliver

With those commitments in mind, we have also asked organizations, leaders, and citizens to make connections in the data. For this very reason, the complete set is available online through a searchable database, and we spent much of spring 2010 on "data rollout." This included giving presentations to leaders and advocacy groups tailored to their needs, distributing the Ochs Center report on the data, promoting visioning in general for other cities, and producing tangible pieces to encourage local engagement. Among those pieces of pro-engagement collateral is a manifesto called "Renewing the Chattanooga Way," which we made available online, on paper, and on a twenty-five-foot banner to which people could sign their name. It asked Chattanoogans to pledge to be better neighbors, more vocal citizens, and active participants in Chattanooga's legacy of visioning.

Although there was small-scale animation to celebrate the release, we also planned for large community summits in a series aptly named "Stand and Deliver." Because the data indicate education, public safety, and the environment are the most pressing issues facing the community, we will facilitate a summit focused on each one.

Each Stand and Deliver summit starts with production and distribution of ground-setting documents—infographics, best practices, data, and interviews with local experts. These research pieces will be widely available in several formats, and they will play a major role in engaging more than a thousand people in two twenty-four-hour citizen summits. In each theme, citizens will pitch potential projects, produce asset maps, connect with diverse skills sets, and act on the needs and strengths of the proposals. At the end of the summits, groups will have actionable plans to launch projects working to make Chattanooga better.

CreateHere is committed to facilitating a change process that improves education, crime, and environmental issues locally, in addition to supporting existing organizations already making strides in these areas. It's crucial that citizen involvement be designed into every step of this process, from planning to participation to implementation. Stand and Deliver is about each of us supporting our individual and unique ability to do good whether we are an educator, leader, creative young person . . . the list goes on. These projects will be transformative in encouraging connectivity and asking us to promote intersections among issue areas, neighborhoods, and backgrounds.

A Work in Progress

CreateHere is only a few years old, but since the launch in July 2007 we have incubated programs promoting connectivity among arts, economic, and cultural development initiatives. We are a five-year project and intend to close our doors on December 31, 2011. With just over a year to do our work, we have switched gears and are focusing entirely on what the Stand data tell us and where Chattanooga's collective imagination will lead our community.

Needless to say, the hard part has just begun. At the time this article went to press, we were in the planning stages for the first summit, "Stand and Deliver: Crime." The survey collection phase, as with the rollout and now the summits, has been met with both refreshing optimism and deep cynicism. In embracing both of these responses, we have had to return to a few fundamental beliefs in what Chattanooga can and should be. We agree that public institutions should become platforms for community-owned action and residents should become citizens, engaged and enthusiastic. This is at the heart of Stand, CreateHere, and, we believe, sustainable engagement projects around the world.

Joshua H. McManus is cofounder of CreateHere, a place-based cultural change initiative in Chattanooga, Tennessee.

Sustainable Democracy in Downtown Los Angeles

BY ASHLEY ZARELLA HAND, WITH THE SUPPORT OF GUNNAR HAUSER HAND

With municipal budgets declining across the United States, local governments (city and county) must learn to work more efficiently and with far fewer resources. The economic downturn is an opportunity to take a fresh look at how community needs are met and how cities themselves are administered. Sustainable democracy is the incorporation of grassroots organizations into the decision-making process for a more comprehensive and streamlined reallocation of city services. By codifying direct involvement of community members into the betterment of their own neighborhoods, local government can foster a self-sustaining democracy that facilitates participation, empowers action to meet community goals, and offers a relevant forum of civic engagement.

A case study of the Downtown Los Angeles Neighborhood Council (DLANC) Sustainability Committee demonstrates how a city can harness grassroots community organizations and volunteerism, leveraging resources and the principles of sustainability to effect a cultural and structural change to provision of city services and public infrastructure. Needs are not being met, communities want change, and the democratic process must respond or else risk leaving constituents disenfranchised. As cities grow and become more complex, it is necessary to create a more dynamic framework to assess community input and optimize strategic decision making. Sustainability as a concept can refocus city departments, realign decision making to increase collaboration, enhance effectiveness, and narrow budget gaps.

Case Study: Los Angeles

With a sinking credit rating and looming budget crisis, the City of Los Angeles is an extreme example of the impact the current recession has on local governments across the United States. The challenges faced by Los Angeles have made national headlines, and they are indicative of the diminished capacity of local governments to deliver services and meet the needs of diverse communities citywide. We have witnessed the demise of American urban cores, the subjugation of the population to an automobile-oriented culture, and a slow awakening to an alternative transit-friendly lifestyle. Depletion of natural resources and public budgets will remain a critical issue for generations to come. The situation in Los Angeles is not unique to California, but problems here occur in such magnitude, thanks in part to regional interdependence, that best practices at the local level hold valuable lessons for all municipalities.

Background

Like many other U.S. cities, downtown Los Angeles suffered a post–World War II exodus of residential population from the urban core out to the suburbs. The disappearance of a streetcar system and other tragic forms of blight left Downtown Los Angeles on a list of zip codes "not to live in," even as it remained an economic and regional government center. After a decade of residential (mostly new condos and renovated lofts) and entertainment development (Staples Center, Nokia Live, and the Disney Concert Hall), introduction of an adaptive reuse ordinance and changes in perception of downtown areas in general have transformed this nine-to-five central business district into a twenty-four-hour community.

As reported by the Downtown Center Business Improvement District, 39,537 people lived in Downtown Los Angeles in 2008, an increase from 28,878 in 2006. Researchers for Casden Real Estate's "Multifamily Market Forecast" found in 2009 that Downtown LA, with just over thirteen hundred new units, accounted for a fourth of all new units built in Los Angeles County. The residential population is still overwhelmed, however, by a daily influx of more than four hundred thousand people, predominantly single-occupancy-vehicle commuters who work in the downtown neighborhood but leave at the end of the day. As a regional transit hub, the neighborhood sees thousands of people pass through every day, and more will come with continued expansion of public transportation and construction of a new high-speed rail system.

Published online in Wiley Online Library (wileyonlinelibrary.com)

Downtown LA encompasses many smaller neighborhoods, including some of the region's premiere historical and cultural assets. The Broadway Theater District, for instance, has one of the largest concentrations of historic theaters located on one street and is a defining (albeit underused) jewel of Los Angeles. Unfortunately, these nodes of activity are fragmented and physically remote from one another. Separated by freeways and unfriendly streets, these districts lack the connective tissue so necessary to bring them together as one Downtown LA. Although nearly all of downtown is within a two-mile walking distance, perceptions regarding safety and comfort discourage pedestrians, effectively dividing the community. The Civic Center is a virtual ghost town on weeknights and weekends, separating Chinatown from the rest of downtown, and Skid Row is a psychological hole in the map. Yet the broader community has the potential for growth and increased density in the coming decades as more buildings are converted, rehabilitated, and constructed. These land use changes (many of the area's barren parking lots are destined for large development projects) must be matched with upgrades to the transportation system and public right-of-way, our most valuable and plentiful open space. With significant elbow grease and creative thinking, many self-proclaimed urban pioneers have emerged to lead a significant grassroots transformation of downtown into a more livable environment. The recently adopted Downtown Street Standards is an example of a paradigm shift occurring, although slowly, in Los Angeles.

Downtown Los Angeles Neighborhood Council

The Los Angeles Neighborhood Council system was a solution at a time of crisis for the city. The local government was being challenged for its failed representation of neighborhood interests, and entire communities were threatening secession. With a charter revision in 1999, the City of Los Angeles created a system of self-determined neighborhood associations, funded (currently $45,000 annually) by the city but each unique in its bylaws, election procedure, boundaries, and stakeholder definitions. Neighbors worked together to define their neighborhood councils, and the city has now officially recognized and funded eighty-nine organizations.

DLANC was incorporated in 2002 and has participated in a significant share of the recent transformations downtown. In keeping with its bylaws, the neighborhood council represents business, resident, and other stakeholder groups (e.g., artists, arts, cultural and education, homeless, social service providers, private sector workforce, public sector workforce) on a twenty-eight-member publicly elected and city clerk–certified board of directors. There are seven standing committees: affordable housing and social services; arts; education; parks, recreation, and open space; planning and land use; public health and safety; and sustainability.

The Los Angeles budget crisis has exacerbated the relationship between neighborhoods and the city in recent years, and the Department of Neighborhood Empowerment (DONE) has failed to adapt to the needs of the neighborhood councils it administers. DONE has been incapable of furnishing resources and support to the system and even encumbered progress with slow response time and red tape. These setbacks show the failure of the local government to effectively use its human capital, but they constitute ample opportunity as well for the Sustainability Committee and its potential to advance the goals of sustainability for the city and create a more walkable neighborhood.

DLANC Sustainability Committee

Launched in October 2008 by Ashley Zarella Hand with the support of Gunnar Hauser Hand, the Sustainability Committee is empowered by volunteerism and partnerships. Through a planning process, the Sustainability Committee has worked with the community to identify topics of interest or concern, study them, and present research findings with data-driven recommendations for consideration by other neighborhood councils and the city council. By focusing on general issues and resources that are relevant citywide, the Sustainability Committee has developed a "resource toolkit" to help leverage community needs across a variety of organizations and facilitate community involvement in creating a template for the solution.

The Sustainability Committee is structured to support and lend its name to small groups and individuals who want to effect change in their neighborhood. In this sense, the committee is a vehicle to promote

local leadership on sustainability issues. If a community member wants to start a tree planting project on his or her street, help design our website, or just participate in the development of a downtown sustainability plan, the committee is there to facilitate any level of interest. The Sustainability Committee has grown into a network of stakeholders who act as a framework for community-based initiatives that enhance the livability, affordability, and efficiency of Downtown LA.

With basic strategies for education, outreach, and advocacy, city-supported grassroots engagement can expand the capacity of local government to meet identified sustainability goals. These organizations can help the city identify needs, lend more understanding to inform reallocation of services, and disseminate information for increased participation in programs designed to meet sustainability goals.

Education

"Park[ing] Day LA 2008"—a block party sponsored by a variety of local officials, businesses, and nonprofits to celebrate the need for more parks downtown—was one of our first events as DLANC directors. As opposed to the traditional "guerrilla" nature of the event, the Sustainability Committee received a permit for a street closure, laid down AstroTurf, and conducted extensive outreach on city services at our temporary park-for-a-day. By supporting a feel-good event that offered the public education and outreach materials on topics of interest (local basketball leagues, dog parks, open space, recycling), the neighborhood council served as an organization with broad reach that passes along valuable information to the community—not to mention a good time with local music, live art, and a mini dog park. After the event, the Sustainability Committee developed a report to outline the steps to plan a similar event, and others have used this in their own communities elsewhere in the city.

The Sustainability Committee has emphasized knowledge as a key asset for any community. Green living and open space have been pervasive themes in almost all of our projects, and our goal is to empower the community to adopt best practices. The *Urban Garden Guide* (2010) gives downtown residents information on classes and workshops, local gardening supplies, and some guidance as to where people can collect what they need to grow locally. As a kickoff to the Skid Row Tree Planting Project, the Sustainability Committee hosted a "tree fair" and invited tree organizations to promote their programs focused on urban forestry, fruit trees, and community gardens; it also conducted tree survey training for our pilot project volunteers. Hosted in the Central Public Library, this event attracted people interested in tree planting, including representatives from a local grocery store who used resources from this event to kick off their own tree planting project. After the success of the Skid Row pilot, which planted thirty-one trees along the city's industrial backbone, the Sustainability Committee developed a how-to guide on tree planting projects in Downtown LA, which has helped several other tree planting projects get started without reinventing the wheel.

Local government can facilitate a network for neighborhood councils to access information and download best practices and consolidate their outreach at the community level. From the onset, the Sustainability Committee has focused on going through all the required steps of the bureaucracy, documenting the process, and offering our insights for future generations. Too many community-based initiatives are crushed by the complexity of the process, and large local bureaucracies are difficult to navigate. With our reports and experiences in hand, the government, bureaucracy, and people can work together and plan for a better, more effective procedure for efficient implementation of community-based initiatives.

A primary objective has been to develop and maintain a resource toolkit to empower and ignite community engagement in sustainable best practices. To increase participation and ultimately meet regional goals for reduced emissions, for instance, it is necessary to create a walkable urban environment where people are encouraged to get out of their cars and get some exercise by walking from home to work. By educating the community on the benefits of walking, understanding issues around pedestrian and cyclist safety, and determining what will ultimately benefit the neighborhood through research and investigation, individuals are empowered to address a particular concern or topic of interest. The toolkit represents documentation of these efforts, supplying resources for civic engagement.

As a grassroots organization, we find it takes a little creativity to determine the best way to encourage walking, pedestrian and cyclist safety, and an improved streetscape within its means (total 2009–10 committee budget: $6,000). As a professional city planner, Gunnar initiated revision of the DLANC Planning and Land Use Committee's (PLUC) "Development Principles, Criteria, and Guidelines" and formally introduced the concept of "sustainable" development to the Neighborhood Council. As the city-sanctioned neighborhood voice, the PLUC reviews downtown development projects and offers community input. The revised guidelines incorporate standards such as LEED, landscape and building design guidelines for low-impact development (LID), and a starting point for an improved urban environment. The planning committee benefited from a professional planner's volunteer time and developed reasonable community expectations and topics for consideration with a public process. There will always be more work to be done, but this was a positive step toward a more strategic sustainability plan for the neighborhood.

The Sustainability Committee strives to foster individual commitment to best practices at home and in the workplace, which can have a remarkable cumulative effect in a dense neighborhood. Education is the first step in identifying solutions and empowering individual action. By creating a resource for the neighborhood to access local educational opportunities, whether through other organizations or sponsored by the neighborhood council, the Sustainability Committee has helped people understand what they can do to help sustain their community.

Outreach

After several months of surveying participants in the early meetings of the Sustainability Committee, we saw that the neighborhood had concerns and interest in issues as varied as the stakeholders represented. A 2009 introduction to place making and a community charrette by James Rojas and Project for Public Spaces (New York City) gave the Sustainability Committee insights regarding healthy public space. Whether on Skid Row or from the American Institute of Architects (AIA), people all share the need for more green space, hospitable open space, shade, and recreation. Because the scale of the neighborhood is more "human," it can be substantially easier to identify common interests and projects to meet these needs, and grassroots organizations can be in a position to assume the role to meet these needs more efficiently than citywide government can.

Each volunteer brings a network of friends, associations, and specialties that increase the potential of the overall organization to reach more people. We have leveraged these existing networks and forged new relationships to extend our reach. We have partnered with stakeholders to help us understand sometimes complex issues. In turn, the Sustainability Committee has tracked and reported on community feedback to the DLANC Board, city council, city departments, and other stakeholder groups while fostering a positive, inclusive environment for civic engagement.

If the city relied more heavily on neighborhood-level organizations for community feedback, it could potentially eliminate departmental budgets for outreach and public relations and focus on delivery of essential services.

By sharing best practices with other neighborhood councils, the Sustainability Committee has evolved into a knowledgeable resource for the City of Los Angeles and increased the efficiency of our volunteer hours. Our volunteers help us establish needs, identify lacking services, and focus on increasing participation in existing city services (water, energy, waste) that may address those concerns. If the city relied more heavily on neighborhood-level organizations for community feedback, it could potentially eliminate departmental budgets for outreach and public relations and focus on delivery of essential services. By representing anyone with a vested interest in Downtown LA, this grassroots organization has superseded traditional institutional boundaries and engaged a civic-minded population that desires improvement where they live, work, and play.

In addition, as the Sustainability Committee identifies city services that are affordable and practical for stakeholders, the city can begin to eliminate redundant and underused programs to close their budget gaps. If there is no demand, it should not be a city

service supported by public funds. Some needs are also difficult for the city to address and should be handled by networks of other community stakeholders. In turn, the city has given outreach material to the Sustainability Committee to help increase participation in programs in demand in our neighborhood (for example, the new multifamily recycling programs).

The Sustainability Committee has used a variety of its own tools to facilitate outreach to the community, among them maps, emails, a blog and website, bilingual posters and handouts, and office hours. In a community with a diverse population, we cannot always rely on the Internet to get the word out about what is happening in the neighborhood; by establishing one evening of the week, volunteers can set aside some time to come into the DLANC office and work with the Sustainability Committee chairs on their neighborhood initiatives. We have expanded our capabilities by developing templates for outreach to make it easier for us to mobilize when needed. We have offered extensive outreach for other projects and organizations that are addressing our mission, and more community members are taking an active role in spreading the word about what we are trying to accomplish together.

Advocacy

The most significant role of the Sustainability Committee is advocate for the neighborhood. Initially, we focused on bringing in expertise to enhance our capacity and build a reputation in the community as a positive resource. In 2009, the Sustainability Committee applied for an AIA Sustainable Design Assessment Team (SDAT) grant, which gives community assistance to cities looking to establish and attain sustainability goals. The grant brought a team of professionals from across the country to assist the neighborhood council in understanding its potential within the existing framework of the city, leveraging partnerships and existing resources, and ultimately driving a vision for a greener future.

With months of preparation and ongoing community projects, the Sustainability Committee brought in a broad range of stakeholders to participate in the SDAT visit. Organizations that have traditionally dismissed neighborhood councils as misinformed NIMBYs (not in my back yard) were impressed by the professionalism of this process, the caliber of expertise at the table, and our ability to bring people together on common issues. The objective is to create a comprehensive community greening strategy that enables us to guide future development and decision making to more sustainable solutions for both our built environment and public health; the support of these stakeholders is critical to its success.

As a community voice, the Sustainability Committee has empowered individuals to raise issues of interest by creating a forum for discussion and research. In return, we are able to access city leadership with data-driven solutions and recommendations as a city-sanctioned organization. When one community member took time to research the impact of Styrofoam waste on our landfills, documented other municipal policies, and presented his findings to the committee, we wrote a letter requesting an ordinance study to ban this material in restaurants. Upon receipt, the Bureau of Sanitation solicited our research to help them understand the potential impact this might have. By empowering one individual, a volunteer, we efficiently gave the city a basis for evaluating existing city services and ordinances.

Because we are a volunteer-led organization, we focus on maximizing the time the community is willing to give by tapping into what already exists and mobilizing support for initiatives and ideas already conceived. The Sustainability Committee recently supported a Car-Free Friday program meant to encourage people to get out of their cars and onto bicycles. Developed by the LA Bicycle Coalition, the Sustainability Committee viewed this program as a great way to encourage use of public transit and walkable streets and has sent letters to the city council to encourage their support. Because the infrastructure for this program, including business incentives, has already been developed, the Sustainability Committee can focus on increasing awareness to garner more grassroots support.

By becoming a trusted voice of the Downtown LA community, the Sustainability Committee has begun to champion causes long neglected in the city. Using the power of suggestion, we help city government become more informed about local issues. By

generating broader awareness of some of these issues, we also create a more informed public that has the tools to successfully effect a behavioral and cultural shift to a more sustainable or less wasteful lifestyle.

Moving Forward

There are myriad challenges to grassroots engagement, and strong personalities can derail its legitimacy and weaken potential. If structured appropriately for its mission, however, a grassroots organization can be accessible, engaging, and transformative. When DLANC went through its roles-and-responsibilities exercise for the board of directors, everyone was invited, but it was Ashley's leadership that produced a recommendation and implemented results. In this sense, leadership becomes a necessary component to a quality grassroots organization but should be balanced with opportunity for broad participation and decision making. Leaders must delegate and empower others to work toward common objectives. If the leader is the one who ends up doing all your work, then you probably have not inspired many people to become involved. In fact, you have probably been taken advantage of.

Municipal governments should seek to actively promote and engage grassroots organizations in the decision-making process and furnish resources to increase their capacity. By empowering these groups, whether official or quasi-official, local governments can extend the municipality's effectiveness through use of free citizen hours. The return for these citizens is delivering on the change that they seek and feeling a strong sense of community ownership and pride as a result of their impact. With sustainability as a framework, you can engage a wide audience with various interests. Sustainability is an overarching principle to coordinate the community's goals and objectives. The Sustainability Committee can act as a conduit for any individual interest in the community, while the collaborative approach increases productivity and cost-effectiveness with the support of multiple community partners.

Change comes from within, and nothing will change unless we change our own behavior and then that of our households, families, neighborhoods, communities, cities, regions, and states. A few suggestions for how you can lend sustainable democracy to your neighborhood:

Change comes from within, and nothing will change unless we change our own behavior and then that of our households, families, neighborhoods, communities, cities, regions, and states.

Learn from others, and avoid reinventing the wheel whenever possible. Check out what the Sustainability Committee has done in Downtown Los Angeles in only a couple of years, at www.downtownsustainability.com. Use this website as a resource for ideas and a starting point if you are thinking about volunteering your time. Local governments usually offer a lot more than the average citizen is aware of, and their frustration is a result of lack of information. The Sustainability Committee has focused on promoting existing programs and services in a way that strategically maximizes benefits for all.

Get involved with your community through a local chapter of a national nonprofit, business improvement district, or home association. These groups are the foundation for a coalition to promote sustainability. If you think in terms of sustainability, you will see that all our interests are interrelated and can benefit one another. If your local government does not have a neighborhood council system, or if you are unsatisfied with it, work to change it or create a new one. The city department that oversaw LA's neighborhood councils was just merged with another city department thanks to cost-saving measures. This is an opportunity to promote a more efficient and sustainable neighborhood council system.

You can engage all members of the community by recognizing individual skills and supplying a multitude of mechanisms for engagement. As one of the SDAT members, Jim Dier, advised us, we need to sustain a "yes we can" attitude toward civic engagement and avoid the pitfalls of "no." With a little time and enthusiasm, together we can change the world.

References

"2010 Casden Real Estate Multifamily Market Forecast." Marshall School of Business & School of Policy, Planning, and Development, University of Southern California. Retrieved June 28, 2010, from http://www.usc.edu/schools/sppd/lusk/casden/pdfs/multifamily-report-2010.pdf.

Downtown Center Business Improvement District. "Downtown Los Angeles: Demographic Study 2008." Retrieved July 7, 2010, from http://www.downtownla.com/files/DCBID-Downtown-LA-Demo-Study-2008.pdf.

Downtown Los Angeles Neighborhood Council. "Development Principles, Criteria and Guidelines for the Evaluation of Proposed Projects." 2009. Retrieved June 28, 2010, from http://dlanc.com/planning/dpluc-development-principles.

"Downtown Street Standards." City of Los Angeles, 2009. Retrieved June 28, 2010, from http://www.urbandesignla.com/downtown_guidelines.htm.

Ashley Zarella Hand currently works as an architectural designer for the international firm AECOM.

Gunnar Hauser Hand is currently on the board of the Los Angeles Chapter of the American Planning Association and is chair of railLA, a coalition of architects and planners working to bring high-speed rail to California.

DOI: 10.1002/ncr

Creating a Civic Vision for the Central Delaware Riverfront

BY HARRIS M. STEINBERG

The Delaware River is a significant natural resource that begins in upstate New York and empties into the Atlantic Ocean 360 miles to the south. Along its route, the river creates the border between the states of New Jersey and Pennsylvania and serves the Port of Philadelphia. The industry that flourished along the river from colonial times until after World War II gained Philadelphia the reputation as the "workshop of the world." Following World War II, like many older industrial centers in the United States, Philadelphia was dramatically affected by the National Interstate and Defense Highway Act of 1956, relocation of industry to green fields outside central cities, and the movement toward suburbanization. Over time, most of the industry along the Delaware riverfront in Philadelphia closed. Interstate 95 was built along the river in the 1970s and 1980s, severing it from the dense residential neighborhoods adjacent to the river and rendering public access to the waterfront difficult.

At the dawn of the twenty-first century, planning by the Philadelphia City Planning Commission had become an ineffective tool for economic development. The vast postindustrial parcels that lined the river came to be viewed as sites for large-scale land uses that would attract automobile traffic. Rather than protect the river as a public trust, the city encouraged suburban-style land uses along the river. The "central Delaware," a 1,146-acre, seven-mile-long area bounded by Oregon and Allegheny Avenues, the river, and Interstate 95, had become a disparate landscape of shifting uses with an active port, limited and poorly accessible public spaces, and the remains of the industrial past.

Adding to development pressures was the Commonwealth of Pennsylvania's 2004 decision to allow casino gaming in the state, with Philadelphia mandated to receive two five-thousand-slot-machine casinos. It was clear that at least one, if not both, of the Philadelphia casinos would be located along the Delaware River, each with parking for more than four thousand cars. There was no credible process for making informed choices about public space, riverfront access, the quality of development, stormwater management, transit, and the comprehensive impact of growth on the city and region.

Philadelphia's outmoded zoning code caused projects to be subjected to political pressure, with compromises brokered between neighborhood groups and developers. Philadelphia had adopted a prevailing ethos of "any development is good development." By the summer of 2006, development intensity along the central Delaware riverfront reached a crescendo. Fueled by historically low interest rates and a ten-year residential property tax abatement program on construction, the central Delaware was the crux of the development debate in Philadelphia.

Civic Engagement and Physical Planning in Philadelphia

Beginning in 2003, PennPraxis, the clinical arm of the School of Design at the University of Pennsylvania, in partnership with Chris Satullo of the editorial board of the *Philadelphia Inquirer* and Harris Sokoloff of the Center for School Study Councils at Penn's Graduate School of Education, developed a civic engagement process for large-scale urban planning projects. Balancing citizen values with expert best practices to create civic planning principles, the 2003 Penn's Landing Forums successfully engaged the public, design professionals, academics, and government officials in rethinking waterfront development in Philadelphia. The newspaper played a critical role in both convening and framing the public dialogue. Following the success of the forums, the *Inquirer,* the Center for School Study Councils, and PennPraxis produced the 2005 Franklin Conference on School Design, which permitted citizen input into the School District of Philadelphia's $1.6 billion capital program. In 2005 and 2006, PennPraxis partnered with Sandra Shea and the editorial board of the *Philadelphia Daily News* on the Slots and the

Published online in Wiley Online Library (wileyonlinelibrary.com)
National Civic Review • DOI: 10.1002/ncr.20027 • Fall 2010

City series, which tested the physical implications of Pennsylvania's gaming legislation.

These efforts earned PennPraxis a reputation as an honest broker in complex urban planning issues. In the summer of 2006, with development pressures mounting along the central Delaware and with the Philadelphia City Planning Commission moribund, PennPraxis was asked by Philadelphia First District Councilman Frank DiCicco to consider leading a public planning process for seven miles of the riverfront. PennPraxis Executive Director Harris Steinberg, in consultation with PennDesign Dean Gary Hack and Shawn McCaney, a program officer of the William Penn Foundation, agreed to consider the project, under these conditions:

- The process would be citizen-driven
- The process would be open and transparent
- The press would be involved
- The process would advance recommendations for an implementation agency or strategy that would be accountable to the public voice

Councilman DiCicco brought the idea to Philadelphia Mayor John F. Street, who approved the proposal, with the William Penn Foundation agreeing to fund the effort. On October 12, 2006, Mayor Street signed an executive order authorizing the work. A forty-six-member advisory group chaired by the executive director of the Philadelphia City Planning Commission was seated to guide the process. The advisory group included representatives of federal, state, and city offices as well as local business and nonprofit leadership. Importantly, fifteen riverfront civic associations were represented on the advisory group.

Ensuring Public Voice in Creation of the Civic Vision

Philadelphians had lost faith in their government's ability to adequately plan for their communities without resorting to "pay-to-play" politics. To guarantee an open process, PennPraxis partnered with the Penn Project for Civic Engagement, led by longtime collaborator Sokoloff. Accomplishing a transparent process with Philadelphia's factionalized political and development process would be challenging. The press and the public would become the civic force field to ensure the project's success.

The civic engagement process for the central Delaware followed that of the Penn's Landing Forums designed in 2002 by Satullo, Sokoloff, and Steinberg:

- Elicit values that citizens share about the waterfront.
- Educate the public with best practices from other cities.
- Create planning principles that are based on citizen values and best planning practices.
- Test the planning principles through a design charrette.
- Publicly present the design ideas according to values-based, citizen-derived planning principles.
- Create an iterative feedback process between the public and the design team.
- Work with the press to ensure that the process remains open and transparent.

Thanks to the size of the project area, the politicized nature of the riverfront with land speculation over many years, the possibility of two casinos with widespread opposition, and the intensity of public scrutiny as PennPraxis was treading where the city had failed for more than forty years, PennPraxis worked quickly to gain public trust. "Street is outsourcing the job to PennPraxis," wrote Inga Saffron, the *Inquirer's* architectural critic. "Its advantage is credibility; it doesn't answer to any political bosses."

PennPraxis met with almost all fifteen civic associations before the first formal advisory group meeting. Additionally, PennPraxis led three walking tours of the river. I wrote commentary pieces for the local newspapers welcoming citizens to the walks, stating in a *Daily News* commentary that "this is our moment, Philadelphia, let's get to the water's edge." More than three hundred people attended the walks. Thus the role of the public and the press was established, indicating that an open, public relationship might keep politics at bay.

Augmenting the effort was the launch of PlanPhilly.com by PennPraxis. PlanPhilly, an alternative media website dedicated to design and planning in Philadelphia, was to be run by Matt Golas, a professional journalist. Golas hired professional journalists to cover the waterfront planning process

and maintained video records and reporting on all public meetings, events, and issues associated with the project on the website. PlanPhilly also served as the main outreach arm for PennPraxis throughout the process, with an e-mail distribution list that grew to nearly four thousand members.

Values Sessions

The possibility of having two casinos located along the river motivated citizens to participate in the visioning process, with many confused as to the purpose of the planning process. Some felt the process was designed to allow casinos; others thought the PennPraxis-led meetings were anti-casino forums. In December 2006, PennPraxis and the Penn Project for Civic Engagement convened three forums designed to elicit input on what people valued about the river. More than 850 people attended the three sessions, many drawn by the state's pending casino license announcement. Working in small groups with moderators trained by Sokoloff, the conversation focused on civic values and away from casinos. The process was covered by the local media, including radio and TV, with PlanPhilly providing in-depth reporting.

On December 20, 2006, the state awarded two casino licenses in Philadelphia to operators with central Delaware riverfront casino locations. The Street administration favored casinos as an economic development tool, thus igniting a firestorm of community protest.

Best Practices

With values established at the December forums, PennPraxis produced a series of best practices presentations to inform citizen-derived planning principles. More than four hundred people attended presentations in early February 2007 to learn about success stories from Seattle, Boston, New York, and Portland. Experts in ecology, riverfront planning, stormwater management, public works, politics, and riverfront implementation gave presentations demonstrating the breadth of issues involved in creating a world-class waterfront. Panelists were encouraged to write commentary pieces for the *Inquirer* before the session, and a full page of opinion by national experts was published in advance of the public meeting. This again demonstrated the importance of the relationship among the press, the public, and the planning process.

Principle Sessions

In mid-February 2007, PennPraxis and the Penn Project for Civic Engagement held three public forums designed to create planning principles for waterfront development. The forums were again attended by more than four hundred people, with trained moderators working once more with the public in small groups. These forums would create the values blueprint on which the civic vision would rest. Given the gathering storm around the casino design issue, it was increasingly difficult to hold the public's trust without producing design drawings. Many members of the public wanted to ensure that the plans did not include casinos. To retain the project's integrity, PennPraxis remained neutral, arguing that the riverfront vision was not use-specific but rather about creating a template for future growth that could accommodate many types of development.

To retain the project's integrity, PennPraxis remained neutral, arguing that the riverfront vision was not use-specific but rather about creating a template for future growth that could accommodate many types of development.

Arriving at principles was not easy, with opposition to casinos heightening tensions between the process and the public. At the third principle session, held on February 20, 2007, at Furness High School in South Philadelphia, more than three hundred members of the International Longshoremen's Association (ILA) attended and strongly expressed their opposition to casinos and the perceived bias against port growth in the planning process. They were concerned that casinos and other nonriver-dependent development would take away union jobs. They used the public forum as an outlet to express their frustrations.

With facilitation by Sokoloff and mediation by Jim Paylor, national vice president of the ILA, cooler heads prevailed. "There is a lot more development happening or potentially happening on the Delaware besides casinos. This process is not about taking a stand on casinos. It's about reflecting the best way to re-vision the Delaware Riverfront as a whole,"

Paylor told the crowd, enabling the work of the evening to proceed.

Seven principles emerged:

- Reconnect the city to the river's edge
- Honor the river
- Design with nature
- Strike the right balance
- Take the long view
- Protect the public good
- Make it real, Philadelphia

The Design Charrette

With citizen-derived planning principles, PennPraxis convened a design charrette to test the principles. Working closely with lead planning consultant WRT and the staff of the Philadelphia City Planning Commission, PennPraxis assembled five design teams to prepare the first graphic representations of design ideas for the riverfront.

The *Inquirer's* architectural critic, Inga Saffron, followed the selection of the design team. "PennPraxis . . . has selected five internationally recognized designers to lead a three-day brainstorming event in March," wrote Saffron. "All have tackled isolated, former industrial landscapes similar to the Delaware riverfront and found ways to make them accessible and meaningful to the public." The teams included members of the local design community, city and state officials, and the general public. More than eighty people worked together over three days to arrive at planning concepts that would guide the ultimate manifestation of the civic vision.

The teams and their leadership were as follows:

- *Northern reach of the river*. Peter Latz, landscape architecture, Germany. The area included two hundred acres of former industrial rail yards, one casino site, an underused electrical station, and an historic park.
- *Central reach of the river*. Richard Bartholomew, architecture and urban design, Philadelphia. The area included six hundred feet of roadbed that separated the city from the river (I-95 and Columbus Boulevard) and a tangle of highway ramps and interstate connections, Penn's Landing public spaces, and scattered development.
- *Southern reach of the river*. Walter Hood, landscape architecture, Berkeley, California. This area included large postindustrial tracts converted into big-box retail centers, a second casino site, and the working port.
- *Connections to the neighborhoods*. Denise Scott Brown, planning and urban design, Philadelphia. The goal for this group was to provide a framework for extending streets from the adjoining communities, a regional riverfront trail system, and civic gateways.
- *The boulevard*. Gary Hack, planning and urban design, Philadelphia. This group was charged with exploring the potential for creating an urban boulevard. The future of I-95 was a key aspect of the work of this group.

The design teams were asked to respect civic planning principles. Importantly, they were *not* asked to come up with an actual design but to lay the foundation for development of the vision. The workshop was covered extensively by embedded reporters from PlanPhilly.com who furnished live written and video updates to the public from the charrette.

At the March 3, 2007, public presentation of the charrette's ideas, attended by more than five hundred Philadelphians, each leader presented the team's ideas to the public. The concepts that were presented included:

- Create smaller parcel sizes to connect the adjoining neighborhoods to the river through extension of the existing city street grid.
- Take seriously the impact of climate change and sea level rise on planning for the area.
- Reuse industrial infrastructure for "green" energy technology.
- Integrate the industrial past into the public open space system.
- Create high-tech employment centers that connect working-class neighborhoods with the river.
- Create parks every half-mile to ensure that each neighborhood has a place on the river.
- Connect the new parks with a recreational trail system.
- Design a boulevard that includes mass transit and serves as the key organizing element for a new street grid with a hierarchy of streets to disperse traffic.

- At the central section of the project area, cover, sink, or remove the interstate in order to reconnect the city with the river.
- Create civic gateways under the elevated portions of the interstate between the river and neighborhoods.
- Allow a wide mix of uses along the waterfront.
- Manage stormwater through smart ecological infrastructure.

On Monday, March 5, Saffron wrote on the front page of the *Inquirer*: "After three days of intensive workshops designed to generate fresh ideas for Philadelphia's languishing Delaware waterfront, five dozen bleary-eyed planners and architects put aside their maps, satellite photos and sketches on Saturday evening, and jointly called on city and state officials to deal with the highway canyon that cuts off the city from the river of its birth." The next day, March 6, the *Inquirer's* editorial affirmed "Burying I-95: Costly But Worth It."

Refinement, Engagement, and Some Bumps in the Road

After five months, nearly three thousand Philadelphians had participated in the creation of the civic vision. Through effective public outreach, sophisticated civic engagement, and strong press and media relationships, the riverfront planning process captured the public's imagination. Following the design workshop in March 2007, PennPraxis, working closely with the planning firm of WRT as its lead consultant and the staff of the Philadelphia City Planning Commission, refined the vision using the three planning networks that grew out of the charrette:

- *Movement*. SA network of streets across the project with light rail, a central boulevard, and explorations for the future of I-95
- *Open space*. A network of parks and open spaces to connect the public with the river, manage stormwater, and increase park space from 8 to 330 acres
- *Development*. Development guidelines for a pedestrian-scaled, urban extension of Philadelphia to the river

PennPraxis worked with the Penn Project for Civic Engagement to present the planning concepts to community members for feedback in the summer of 2007. The advisory group continued to meet monthly as the vision took shape. All advisory group meetings were open to the public and covered extensively by PlanPhilly, and mainstream and alternative presses.

Casino issues continued to dog the planning process. In May 2007, the Philadelphia City Planning Commission approved the site plan for the casino destined for the northern section of the project area. This caused a rift between the civic associations and the Planning Commission. In June, the advisory group, led by the representative from Society Hill Civic Association, moved to have the PennPraxis vision include drawings with and without the casinos. This helped save the process from collapsing.

During the summer of 2007, members of the development community began to focus attention on the project. The process was coming to be viewed as a new way of planning in Philadelphia, one in which public process and informed civic dialogue were central to decision making. In a city known for transactional planning, this began to concern some consultants experienced in working within the existing system. In particular, some owners and their representatives objected to the proposal for extending a street grid over existing properties.

Working with the Planning Commission staff and members of the city's law department, PennPraxis confirmed that the city had the legal ability to place new streets on the official city plan. At a public meeting of the Planning Commission in October 2007, PennPraxis presented the emerging vision to the commission for informational purposes. The vision included a street grid and network of parks and open spaces. Some development community members attempted to discredit the vision. Members of the press were present, among them Sandy Shea, editorial page editor of the *Daily News,* and Saffron of the *Inquirer*. Both wrote commentaries and editorials in support of the vision. By this time, more than four thousand Philadelphians had participated in the yearlong planning process.

Public Presentation of the Vision

Press coverage leading up to the November 2007 public presentation of the civic vision was extensive. The implicit partnership between the press and public enabled PennPraxis to deliver on its promise

of a citizen-driven, open, and transparent planning. Brad Maule, writing in the widely read local blog PhillySkyline.com, noted: "The people crying foul at this plan are not listening to reason. There is room for *everything* in a periodic, long term transformation of an ugly, post-industrial riverfront into a working, cohesive, coherent, organic riverfront." Chris Satullo, former editorial page editor of the *Inquirer* and a columnist at the time, wrote that "the plan would compel the city to abandon its piecemeal, deal-by-deal method of building its riverfront." On the day of the launch, Saffron, writing again on the front page of the *Inquirer,* said, "The nonprofit group charged with bringing order to the haphazard development of Philadelphia's Delaware waterfront will issue a major policy report tonight that calls on the new mayor to launch an aggressive effort to reshape the auto-dominated strip into a pedestrian-friendly environment." Saffron went on to write that "while the PennPraxis blueprint focuses on the central riverfront, it is also a plea for a thoughtful, preemptive approach to planning."

On the evening of November 14, 2007, PennPraxis presented "A Civic Vision for the Central Delaware" to an overflow crowd of more than fifteen hundred Philadelphians at the Pennsylvania Convention Center. After an animated video flyover of what the waterfront might look like in thirty years, there was a standing ovation from the audience, which represented a cross section of Philadelphia with members of the working class, young professionals, students, and politicians all gathered in one room. The success of the planning process is summarized by Feather Houstoun, president of the William Penn Foundation. Houstoun, who was seated at the front of the capacity crowd that evening and could not see the people behind her, commented to me that "applause for different parts of the vision came from different parts of the rooms, almost like a political convention with different constituencies approving different ideas."

Lessons Learned and an Ongoing Process

Creation of the civic vision for the central Delaware was an active and iterative process that involved citizens, professionals, academics, and policy makers. In designing and implementing such a public engagement strategy, PennPraxis and the Penn Project for Civic Engagement were able to establish and sustain public trust over a thirteen-month public planning process thanks to several factors:

- As an arm of the School of Design at the University of Pennsylvania, PennPraxis was viewed as a neutral party not beholden to special interests.
- The role of the William Penn Foundation was critical to the success of the project. The foundation's investment in the project enabled PennPraxis to implement a process on a scale not previously attempted in Philadelphia.
- The executive order signed by Mayor Street gave the project the imprimatur of city government.
- The Penn Project for Civic Engagement's expertise in designing and facilitating civic dialogue established a respectful methodology for a public conversation.
- Creation of planning principles based on civic values established a common language for a design response that reflected the voice of the public.
- PennPraxis's relationship with the press, both mainstream and alternative, kept the process under close public scrutiny.
- The combination of strong civic participation and continued press support allowed an open and transparent process.

Creation of Civic Vision for the Central Delaware took place against the backdrop of a mayoral election that hinged on political reform. Michael Nutter, the incoming mayor who was elected a week before the public launch of the vision, ran on a platform that included reform of Philadelphia's broken planning and development process.

Following launch of the vision, PennPraxis worked with the fifteen civic associations that participated in the planning process by executive order to create the Central Delaware Advocacy Group. CDAG's mission is to advocate for implementation of the plan. With CDAG, PennPraxis issued *An Action Plan for the Central Delaware: 2008–2018* (http://www.planphilly.com/vision). Nutter's deputy mayor for planning and economic development, Andrew Altman—a planner with waterfront experience—supported the vision, and in June 2008 Mayor Nutter embraced the plan before five hundred citizens. He vowed to reform the Penn's Landing Corporation, the nearly forty-year-old public agency that had failed to develop the waterfront.

"PennPraxis' plan for the Delaware waterfront is expected to turn on a major reconstitution of the faltering agency," wrote Saffron and Marcia Gelbart under a banner headline in the *Inquirer*.

In January 2009, Nutter delivered on his promise to reform the opaque Penn's Landing Corporation. In a *Philadelphia Daily News* editorial that followed the January 30 event, editorial page editor Sandra Shea hailed the creation of the new corporation as "the result of 18 months of a very public planning process, a shining example of consensus building for the common good."

The lessons learned from the process of creating the Civic Vision for the Central Delaware are that transparency, accountability, and integrity are critical to a public planning process. Gaining public trust through sustained civic dialogue is vital to democratic egalitarian city planning. An honest and ongoing relationship among the public, the press, and elected officials can create a place for seeking excellence in the built environment.

References

"Burying I-95: Costly But Worth It." *Philadelphia Inquirer,* Mar. 6, 2007, p. A10.

Maule, B. "14 November 2007: Showtime on the Riverfront." Retrieved Feb. 2, 2009, from http://www.phillyskyline.com/archive_0711b.htm.

Saffron, I. "Welcome Step, and High Time, on Waterfront Master Plan." *Philadelphia Inquirer,* Oct. 6, 2006, p. A6.

Saffron, I. "Brainstorming on the Delaware." *Philadelphia Inquirer,* Feb. 8, 2007, p. B3.

Saffron, I. "City's Biggest Block: The Great I-95 Divide." *Philadelphia Inquirer,* Mar. 5, 2007, p. A1.

Saffron, I. "A Walkable Waterfront." *Philadelphia Inquirer,* Nov. 14, 2007, pp. A1, A12.

Saffron, I., and Gelbart, M. "Call to Reform Penn's Landing Corp." *Philadelphia Inquirer,* June 26, 2008, pp. A1, A10.

Satullo, C. "Citizens Invited to Explore Values, Vision for Waterfront." *Philadelphia Inquirer,* Nov. 11, 2007, p. C7.

Shea, S. "Ending 40 Years of Folly?" *Philadelphia Daily News,* Feb. 8, 2009. Retrieved Feb. 15, 2009, from http://www.philly.com/philly/opinion/39300417.html.

Steinberg, H. "Rethinking the River with Your Help." *Philadelphia Daily News,* Oct. 25, 2006, p. 17.

Harris M. Steinberg is adjunct assistant professor of city planning, School of Design, University of Pennsylvania and executive director, PennPraxis, School of Design, University of Pennsylvania.

Moving Beyond Recovery
Sustainability in Rural America

BY ROBERT BERKEBILE AND STEPHEN HARDY

> There are some things you learn best in calm, and some in storm.
>
> Willa Cather, *The Song of the Lark*, 1915

Rural communities across the country are in crisis and searching for prosperity. Whether caused by a disaster or steady decline, this is a real crisis. How can we reverse the population decline of our heartland, and what is possible in places with bountiful renewable resources, direct connection to the land, and a history of strong action? If, as some suggest, a crisis is a terrible thing to waste, and if the opportunity is properly shepherded, we could be on the precipice of a shift toward the recovery of small-town vitality.

Throughout our history as a country, farmers have worked their fields and fed the country. They understand what it means to care for the land. Our rural communities are close to the natural systems that power a sustainable economy. It is possible to leverage this knowledge and use it as a competitive advantage in a potentially enormous new sector of the American economy. To do these things, we have to be smart about how we invest in our communities, and we need to allocate catalytic funding to help transform some of the country's poorest areas into economically stable, productive economies.

Innovations in sustainable design offer some new opportunities. It is possible to build new homes, schools, and businesses that consume far fewer resources, increase productivity, and improve human health. Many of these things can be done for no cost premium, and virtually all have rapid economic paybacks. In communities where people are stabler and less likely to make frequent moves, the benefits of more efficient, healthy, and durable buildings could be enormous. For residents on fixed incomes, this is no small accomplishment. Offering incentives that allow our rural communities to embrace better long-term decision making is critical to securing the future of small-town America.

These new building techniques require trained builders and creative thinking. There are hundreds of new businesses that potentially feed the vision of a sustainable rural America, and the communities that embrace new market opportunities will lead their peers. By developing new sustainable materials, rural communities could even attract scientific researchers and entrepreneurial manufacturers.

Then again, building is only one small aspect of a sustainable approach to rural development. There are many other sectors that also come with economic, social, and environmental benefits. One example particularly relevant in rural areas is renewable resources. As a country, we are moving toward a lean carbon economy, and from this it will be possible for our rural communities to tap their immense wind, solar, and biomass resources to become the nation's largest energy producers. Not only do these resources create new jobs, they also generate cleaner air and cleaner water. There is little doubt that renewable energy is a potential boon for many small towns.

The quality of life in a small town is a powerful marketing tool, and as technological innovations continue to shrink the distance between home and office the feasibility of a dispersed business model is on the rise. It is now possible for someone to live in a small town and participate in the global economy. We must continue this progress and ensure every community has access to high-speed telecommunication networks. Rural economies can be reshaped to embrace holistic solutions. With a renewed sense of economic vitality and dedication to quality of life, our rural communities can secure their future.

Tornado Hits Greensburg, Kansas

On May 4, 2007, an EF-5 (Enhanced Fujita Scale), two-mile-wide tornado hit Greensburg, a town of 1,389 in southwestern Kansas. The tornado is still the most powerful on record in the United States, and the disaster leveled more than 90 percent of the town's buildings, killed ten people, and prompted a

Published online in Wiley Online Library (wileyonlinelibrary.com)

writer in the *New York Times* to observe, "Nature had performed a coup de grace" on this "Kansas town" (June 24, 2007).

A second look reveals that this disaster was not the only threat to Greensburg's future. For decades, this rural Kansas town had struggled with an unstable economy. With few opportunities for the youths who were leaving the area, Greensburg's population had aged and decreased from nearly two thousand in the 1960s. The town was on a familiar rural decline. To many onlookers, Greensburg was known as a "dying town." Conventional wisdom held that the tornado had merely finished it off.

> The citizens of Greensburg found that the buildings had been swept away, but the relationships forming the bedrock of their community remained intact.

The citizens of Greensburg had a different idea. Emerging from the rubble of their ruined town, they found that the buildings had been swept away, but the relationships forming the bedrock of their community remained intact. Drawing strength from these relationships, the citizens of Greensburg decided to rebuild. They recognized that things were not working before and pledged to do it right. This agricultural community based its recovery strategy on respect for the land and rededication to future generations. In the wake of this terrible disaster, the community rallied around a vision of a sustainable future.

Recovery

Three days after the storm, an envoy to then-Governor Kathleen Sebelius came to our offices in Kansas City with a request for us to visit Greensburg and deliver whatever assistance we could to the community's rebuilding efforts. Having worked in the 1993 floods and in post-Katrina New Orleans, we knew the challenges facing the town. Our first visit to Greensburg confirmed our worst fears. It is impossible to describe the total devastation. Buildings were turned inside out. Hundred year-old masonry schools, businesses, and homes were turned to piles of rubble, and the community's extensive tree canopy was stripped completely. A walk down Main Street revealed one lone building standing along a corridor that had been relatively unchanged for the preceding century.

Even at this early date, we were far from the only envoy already in town. FEMA and the National Guard were in charge, clearing debris and setting up temporary facilities. It wasn't long before the list of outside federal resources grew to include the Department of Agriculture, Environmental Protection Agency, Department of Energy, and National Renewable Energy Laboratory. State officials, the news media, and countless volunteers also came to town, bracing against what was a very long and very hot summer.

As days went by, the community of Greensburg began to transition from survival mode toward recovery mode. The work of FEMA's recovery team helped establish a path out from the piles of debris into temporary housing and through the early stages of community planning. Two large circus tents were erected in the city park to house community meetings, prayer sessions, and planning conversations. South of town, "FEMAville" sprouted a new street network lined with white trailer homes, and the community began dealing with the constant push and pull between wanting to build back exactly what was there before and the hope of creating something dramatically different that would position them for success.

Public Process

A pervasive public process was fundamental to establishing a unified community vision, goals, and a strategy to move from devastation to renewal. As designers, we began by learning about the place and the values of the community through an open dialogue about opportunities for the future.

The first public recovery planning workshop set the tone for the recovery process. Hundreds of people gathered under a large tent erected on the east edge of town, eager to share their ideas for rebuilding. The planning team started the conversation by asking three questions: "What are the community treasures?" "What are the barriers to rebuilding?" and "What would you like to change to create a vital future for Greensburg?" Because a neutral observer facilitated the meeting, citizens felt free to tell the

truth about their concerns and hopes for the future. The workshop was active; people moved around, looked at maps, and created their own drawings. The community created a map of the treasures and landmarks that survived the storm. Placement of the new school was a high-priority decision, and the community formed several scenarios during the meeting. City staff, high school students, and other citizens presented the findings alongside the planning team. The planning team learned about the community values during this process, and just as importantly the community members reunited with their neighbors and formed stronger relationships. The workshop created a foundation for rebuilding; it was these relationships that constituted the solid bedrock on which Greensburg was rebuilt.

The tent remained a community gathering space throughout the recovery process, hosting several design workshops, community meetings, and even Sunday morning church service. During the workshops, the design team shared information about options for sustainable design and, together with the community, adapted it to local conditions. From this process, the community formed a vision and presented it to the planning team. That effort evolved into this statement:

> Blessed with a unique opportunity
> to create a strong community
> devoted to family,
> fostering business,
> working together for
> future generations

At its heart, this vision is about constantly improving and strengthening community. A powerful statement memorializing generational thinking, it became the guiding principle for all decisions made in the comprehensive plan.

The resulting Greensburg Sustainable Comprehensive Plan is built around twelve progressive goals dealing with the built environment, hazard mitigation, economic development, resource management, housing, transportation, infrastructure, parks and green corridors, and future land use. Each goal is holistic in nature and would have a dramatic impact on the rebuilding effort.

Water: Treat Each Drop of Water as a Precious Resource. Many new facilities in Greensburg incorporate stormwater harvesting techniques, and the new Main Street streetscape represents completion of a landscape element that uses only nonpotable water for irrigation as well as incorporating native plantings and underground cisterns, a high-efficiency irrigation system, and reclaimed brick pavers.

Built Environment: New Development Should Be Durable, Healthy, and Efficient. City projects will lead the way by becoming examples of green practices that are built to last. On December 17, 2007, the city council passed a resolution requiring all publicly funded city buildings of more than four thousand square feet to be built to the U.S. Green Building Council's LEED Platinum certification level. Greensburg is the only city in the world with this commitment, and it is now positioned to be the home of the first eight LEED platinum buildings in the state of Kansas.

Energy: Promote a High Level of Efficiency in New Construction and Look to Renewable Sources for Generation. Last fall marked completion of a new 12.5 megawatt wind farm just south of town. Greensburg needs about 3 megawatts for its own needs, and the remainder is sold out onto the grid, making the town completely powered by renewable sources. Also, through assistance provided by the National Renewable Energy Laboratory, new homes that received energy ratings are performing 43 percent better than standard homes built to code.

Renewal and Economic Development: Make Proactive Decisions That Use This Opportunity to Reverse the Decline of the Community and Build a Progressive City with a Strong Future. Ultimately, the sustainability of Greensburg relies on the ability to bring new high-quality jobs to town. The vision of a green Greensburg offers a significant competitive advantage. The available resources, amenities, and clean energy resources that are planned for Greensburg create a host of potential economic development opportunities. Currently, six to eight medium-sized manufacturers are in negotiations with the city and the State of Kansas with the intention of locating anywhere from forty to two hundred new jobs in Greensburg

because of its dedication to sustainability and available renewable energy.

The John Deere dealership, owned by the Estes family, serves as perhaps the best model of economic revitalization. This farm equipment dealership was completely destroyed by the EF-5 tornado. The owners vowed commitment to the goals of their community to rebuild better than before, and they pledged to achieve LEED Platinum certification.

During the process of designing their new high-performance facility, the Estes family found opportunities to expand on new efficiencies in their operation to create benefits for their customers and the communities in their region. They created a subsidiary wind turbine business to make renewable energy available to their clients and are selling turbines out of their second new facility to customers across the country. Additionally, the family obtained permission to install cell phone transmitters on every wind turbine tower they install, supplying uninterrupted data service for their clients' computer-controlled farming equipment, and better cell phone service for the rural communities where their clients live.

The Future

Since the disaster, Greensburg's remarkable rebuilding efforts and commitment to sustainability have gained attention on the national stage. CBS News spent an entire week in Greensburg broadcasting their daily Early Morning Show live. President George W. Bush gave the commencement address for Greensburg's graduating class of 2008, the first-ever high school commencement address given by a president of the United States, and commended the town on its efforts to rebuild sustainably. President Barack Obama has twice mentioned the town in addresses to the country. In the spring of 2008, the Discovery channel launched a thirteen-part documentary following the rebuilding of Greensburg, on its newly launched Planet Green channel. This ongoing work and the commitment to a third season of programming is testament to the continued dedication of the residents of Greensburg to the principles of sustainability. The portrayal of the process is also raising awareness of the planning process and the work of professional planners and designers.

The immense challenges in Greensburg's reconstruction, and the townspeople's desire to embrace commonsense green solutions, make it an ideal model for the sustainable rural community. There is an opportunity to repair the destruction with a stronger community and a promising new way of life. This is not about disaster recovery but instead a strategy to capitalize on the opportunity to build replicable systems capable of change from the ground up. They have the opportunity to get it right, on a highly visible stage. Greensburg could become a community with strong leaders who reach out to neighbors—a community where new businesses grow, where sustainability in its truest sense is embraced, and where lessons learned grow outward to bolster rural prosperity.

Lessons for Other Communities

Among the most exciting aspects of Greensburg's amazing reconstruction efforts are the implications for other small rural towns. Greensburg is pioneering the relationships, economics, and form of the sustainable rural community. The lessons learned in Greensburg could be transferred to thousands of struggling small towns across the nation. Even large metropolises are taking note and learning relevant lessons. Greensburg is redefining what is possible in rural America; it is serving as a model for the sustainable rural community of the future.

Setting Visionary Goals

Greensburg is proof of the often-quoted maxim by Daniel Burnham: "Make no little plans; they have no magic to stir men's blood." The ability to set audacious goals in the face of overwhelming inertia is truly a lesson for communities of all sizes. Had the community not set out on such an ambitious agenda, funding, interest, support, dedication, and success would have been diminished. This has been shown to be true in many communities across the country. Without bold vision, inertia is likely to win out.

On-the-Go Implementation

The planning team worked with the city to conduct an on-the-go approach to implementation. This approach led to the launch of two important and highly visible projects simultaneously with adoption of the plan, the Greensburg Business Incubator and the Downtown Layout Scheme. The momentum

generated by these projects instilled good faith in the potential of the plan.

Blending Sustainability Plans and Comprehensive Planning

One of the biggest missed opportunities in planning today is the separation of climate and sustainability initiatives from the comprehensive planning process. Comprehensive plans benefit greatly from the holistic approach required when creating sustainability and climate plans. Indeed, the comprehensive plan of the near past is not only outdated but often counterproductive in its myopia and encouragement of unintended consequences. A well-executed comprehensive planning effort should dramatically improve the quality of life in a community and drastically reduce long-term fiscal maintenance and operational costs.

Disaster Preparedness

The importance of a disaster preparedness plan is difficult to overstate. Regardless of the type of disaster, knowing what to do immediately after the event is critical to how it can be overcome. Having a plan for where people can regroup, how to find help, what the key decisions are, and how you want the disaster recovery planning to take place allows a community to improve the recovery process. One key example is reuse of damaged materials. If done correctly, material reuse can speed recovery, reduce costs, generate immediate employment, and reduce the environmental footprint of the rebuilding process. Without a plan, materials are likely to be burned or buried.

Conclusion

The lessons from Greensburg have real implications for communities of every size. By thinking about planning and development holistically, a relatively small taxpayer initiative can dramatically improve the outlook for the entire community.

When we talk to people about the story of Greensburg, we often hear "Yes, but they were lucky enough to have a tornado that allowed them to start with a blank slate." To which the mayor of Greensburg often responds that he "would gladly trade an intact community for the blank slate." Greensburg is in the process of experimenting with sustainable community design with great motivation, but against all odds. The truth is that if Greensburg can make sustainable community building work, anyone can. To quote the mayor one last time: "The only way to start is to just get started."

Robert Berkebile is a principal at BNIM Architects, Kansas City, Missouri.

Stephen Hardy is director of planning at BNIM Architects.

DOI: 10.1002/ncr

The Envision Utah Process

BY SOREN SIMONSEN

Along with those inalienable rights of life, liberty, and the pursuit of happiness, most Americans consider mobility to be one of their most basic and precious freedoms. This is understandable, because transportation systems support almost every aspect of our lives, from work to recreation. With the proliferation of the private automobile and construction of a nearly ubiquitous network of roads and highways during the last century, residential and business developments gradually and easily spread out across the country. Yet the problems and limitations inherent to this kind of car-based development—commonly referred to as *sprawl*—are now taking their toll through increased traffic congestion, environmental degradation, escalated health risks, and mobility challenges for the young, the old, the poor, and the disabled—or about one-fourth of our population.

These problems are a growing concern for the long-term economic viability of our communities as well. Trade associations and private companies in major metropolitan areas are increasingly recognizing that a region's economic health depends on a balanced transportation infrastructure. In 1995, for example, Bank of America prepared a landmark study that identified the effects of suburbanization, congestion, and transportation problems on business activity and economic development. Although focused primarily on California communities, the study's general conclusions are applicable to any metropolitan region:

- Road-weary commuters spend more time traveling to work and other destinations because of increased vehicle-miles traveled, leading to fatigue and loss of productivity.
- Many workers cannot compete in the job market because transportation alternatives do not afford access to remote job centers.
- The costs of new infrastructure along the urban edge and of mitigating environmental impacts from transportation projects are passed on to businesses and citizens who receive little or no benefit from the new construction.
- The flight of formerly urban businesses to the suburbs, often subsidized by taxpayers, weakens urban central business districts and the entire region.

In addition to this study's highlighting of economic concerns, dozens of community health studies undertaken since 1987 have linked air pollution—predominantly unhealthy particulate matter from vehicle emissions—to an increase in urgent medical care and premature death. Pollution and environmental degradation are creating staggering health risks and economic costs.

The Federal Role for Sustainable Communities

In response to these circumstances, the federal government has taken renewed interest in supporting effective regional responses to the myriad challenges facing our communities. In 2009, the Department of Transportation, Department of Housing and Urban Development (HUD), and Environmental Protection Agency announced an unprecedented Interagency Partnership for Sustainable Communities to better coordinate federal transportation, environmental protection, and housing investments and to identify strategies that support sustainable regions and communities. Through their partnership, the three agencies collaborated on establishing a set of guiding livability principles that will set the direction for future federal investments:

- *Provide more transportation choices.* Develop safe, reliable, and economical transportation choices to decrease household transportation costs, reduce our nation's dependence on foreign oil, improve air quality, reduce greenhouse gas emissions, and promote public health.
- *Promote equitable, affordable housing.* Expand location- and energy-efficient housing choices for people of all ages, incomes, races, and ethnicities to increase mobility and lower the combined cost of housing and transportation.
- *Enhance economic competitiveness.* Improve economic competitiveness through reliable and

This article is adapted from "Effective Planning for Regional Transportation" by Soren Simonson, originally published in *Livability 101,* 2005.

Published online in Wiley Online Library (wileyonlinelibrary.com)
National Civic Review • DOI: 10.1002/ncr.20029 • Fall 2010

timely access for workers to employment centers, educational opportunities, services, and other basic needs, as well as expanded business access to markets.

- *Support existing communities.* Target federal funding toward existing communities—through such strategies as transit-oriented, mixed-use development and land recycling—to increase community revitalization and the efficiency of public works investments, and safeguard rural landscapes.
- *Coordinate and leverage federal policies and investment.* Align federal policies and funding to remove barriers to collaboration, leverage funding, and increase the accountability and effectiveness of all levels of government to plan for future growth, including making smart energy choices such as locally generated renewable energy.
- *Value communities and neighborhoods.* Enhance the unique characteristics of all communities by investing in healthy, safe, and walkable neighborhoods—rural, urban, or suburban.

Earlier this year, HUD announced the launch of a $100 million Sustainable Communities Regional Planning Grant program to present a framework for implementation. The program is designed "to create stronger, more sustainable communities by connecting housing to jobs, fostering local innovation and building a clean energy economy." As a result, it will lend support for building regional linkages between land use policies and transportation systems. The initiative will fund grants to multijurisdictional and multisector partnerships, as well as metropolitan planning organizations, representing a major federal investment in sustainable regions and an important new opportunity to facilitate more effective regionalism across the country.

Working Together to Find Solutions

Federal support for sustainable solutions is increasing dramatically, but the challenges facing local jurisdictions will require place-based approaches and strategies. It is difficult to define a balanced regional transportation system. Every community and region must recognize its own opportunities and constraints. Most important, community leaders—political, business, and institutional—must work together to achieve the desired health and economic benefits. What is clear, however, is that most communities must vastly increase their efforts to include public transit, bicycle, and pedestrian facilities in order to reach a proper balance. Fortunately, the public and private sectors in many forward-thinking communities are finding ways to take the incremental steps necessary to develop viable, multimodal regional transportation systems.

For example, when the Denver region faced a large shortfall in transportation funds in 2001, the Denver Metro Chamber of Commerce courageously advocated numerous increases in taxes and fees onvarious products, assets, and services—including gasoline, personal property, drivers' licenses, motor vehicle registration, and toll roads—to build needed public transportation projects (rail transit and highways) over a shorter period, greatly increase other public transit systems and services, improve efficiency of highway construction and maintenance, and improve transportation-demand management through increased public awareness. They even went so far as to propose creation of a tax on vehicle-miles traveled. They took such action because they recognized that the consequences of this shortfall in transportation funds—decreases in both quality of life and global-market competitiveness—were far more severe than the effect of the increased taxes.

In the late 1990s, faced with regional road congestion and air-quality problems, the Metro Atlanta Chamber of Commerce formed the Metropolitan Atlanta Transportation Initiative (MATI). In 1998 MATI successfully lobbied the Georgia legislature and the governor to create a regional agency responsible for planning and allocating resources for highway and transit projects within the purview of the Georgia Regional Transportation Authority. The Metro Atlanta Chamber of Commerce also issued a resolution that (1) identified transportation corridors with an unacceptable level of congestion and (2) advocated the *flex trolley,* a bus rapid-transit system operating in dedicated corridors within existing roadways that can serve as a cost-effective interim step toward supplying expanded rail networks. These recommendations by the business community have increased the political capital that local and state policy makers need to make the tough appropriation decisions that, in turn, will result in implementation of more suitable regional transportation initiatives.

Envision Utah: Implementing a Regionwide Approach

In addition to establishing alliances between the public and private sectors, civic leaders must coordinate with neighboring political jurisdictions in developing regional transportation plans. This is particularly true for large metropolitan areas, where adjacent jurisdictions inextricably share both the opportunities and the problems associated with transportation systems. Envision Utah, a grassroots regional planning initiative in the Salt Lake City metropolitan region, illustrates some of the positive outcomes of such a broadly coordinated effort. In 1997, a coalition of business, civic, and political leaders launched this large-scale visioning process. Their purpose was to study the long-term effects of growth based on uncoordinated local planning efforts over a ten-county metropolitan region, and recommend policy changes that would preserve and enhance the region's quality of life. Issues of particular concern included prosperity of business and industry; conservation of natural, recreational, and agricultural open space; improvement of air quality; better delivery and more efficient use of water, energy, and other vital resources; and appropriate housing and transportation choices for a rapidly growing and changing population.

> More than seventeen thousand business leaders, elected officials, executives and staff from state and local agencies, and numerous community stakeholders took part in a two-year visioning and strategic planning process.

More than seventeen thousand business leaders, elected officials, executives and staff from state and local agencies, and numerous community stakeholders took part in a two-year visioning and strategic planning process. Through initial surveys and town meetings, they explored the effects of various transportation and land use decisions according to models of current planning trends and alternative growth-management approaches. Later, participants helped evaluate specific strategies for implementation of a preferred growth scenario, including identification of the types of public and private cooperation that would be most effective in executing the recommendations. The coalition's report, "Envision Utah Quality Growth Strategy," unveiled in January 2000, identified specific planning measures:

- Promote development of a regionwide transit system (including public and private buses, light rail, and commuter rail, among other options) that is effective and convenient.
- Foster transit-oriented housing and commercial development that incorporate and encourage various forms of public transportation.
- Encourage both new and existing developments to include a mix of uses in a pedestrian-friendly design so that walking is an attractive option.
- Support development of a network of bikeways and trails for recreation and commuting.

As Envision Utah described it, the Quality Growth Strategy represented "a strategy developed by the people of Utah to make our lives better—that provides more choices for how we, and the next generation, would like to live." According to the report's transportation modeling, such recommendations could result in a projected reduction of 2.4 million vehicle-miles traveled per day by 2020, as compared to the status-quo baseline scenario. At the same time, average speeds would increase by 12.5 percent, commute times would decline by 5.2 percent, and transit trips would increase by 37.5 percent. These systemic improvements came with a proposed reduction in road spending of approximately $3.5 billion and an increase in transit spending of $1.5 billion, for a net savings of $2.0 billion. Additionally, over the next twenty years, 171 square miles of land would be saved from development.

Since the Quality Growth Strategy was released, a new light-rail system opened in 2000 and was expanded in 2002 and 2003. As a result, the region has already seen a major increase in transit spending. With the support of "Envision Utah" stakeholders, and the overwhelming success of the early phases of the light-rail system, more than a hundred miles of major rail and bus rapid-transit projects are now in the works. In addition, more than two hundred miles of regional, nonmotorized trails for commuting and recreational use by bicyclists and pedestrians have been planned, substantial portions of which are

now in development or have been completed. Even more important, many communities have adopted updated general plans and zoning ordinances that offer more compact development alternatives to support and enhance these transportation systems and address other health, safety, and quality-of-life issues for area residents.

A Model for Others

The broad coalition of support for and participation in Envision Utah, by businesses, residents, and state and local officials, has significantly and positively affected the approach to transportation planning in the region. This process of integrating transportation and land use planning through meaningful involvement of stakeholders continues to guide major transportation planning efforts in the Salt Lake region. Since development of the Quality Growth Strategy, Envision Utah has expanded statewide to facilitate similar processes in regions across the state. The grassroots coalition and public process developed by Envision Utah has also been used as a guide for similar regional planning measures in Chicago, Los Angeles, Austin, and other major metropolitan areas. As regions recognize the tremendous need and compelling reasons for a multimodal transportation network of streets, transit, trails, and highways, and use a broad coalition of business and political leadership to implement systems that permit balanced transportation options, the mobility needs of all can be met while ensuring the health and well-being of communities and regions for generations to come.

As cities and metropolitan areas become increasingly large and complex, the need for effective regional planning will be even more apparent and important. Lessons learned from these early success stories will serve as a blueprint for future efforts.

Soren Simonsen, a licensed architect and certified planner with Community Studio, serves as a member of the Salt Lake City Council.

DOI: 10.1002/ncr

Local Governments and the Economics of Community Sustainability

BY DEREK OKUBO

The late John W. Gardner, who chaired the National Civic League (NCL) board of directors during the early 1990s, often said that the key in community change was finding ways to awaken and unleash the human potential within its residents. Indeed, our own experience with the All-America City Award and our Community Services department at NCL has demonstrated that citizens across sectors—government, business, nonprofits, and community-at-large—are capable of achieving what might previously have been perceived as impossible. Communities achieving remarkable results were effective because of the skilled ways in which people worked together to address highly complex issues.

Without doubt, sustainability is a complex topic with multiple definitions, a variety of assumptions on the part of key players, and many approaches to finding solutions. However, a number of communities have found ways to define and address sustainability so as to make sense for them. They have demonstrated that the perceived barriers to environmental health and economic development are not as formidable as once imagined. Business and environmental sustainability can work together; such a link is necessary in today's world of economic constraints and limited resources.

In the fall of 2009 the National Civic League conducted a number of interviews with city and county managers across the nation to explore how they were coping with the economic downturn. In one interview, Joyce Wilson, the city manager of El Paso, Texas, observed, "One thing is for sure. With the economic crisis, the sustainability movement now has a platform." Indeed, subsequent conversations with other managers reaffirmed Wilson's words. Their municipalities, they felt, would be in even worse financial shape had it not been for their sustainability efforts over the previous years. The economic downturn has produced challenges not seen for generations, but it has also posed an opportunity for local governments to implement changes too politically difficult to address before now.

Uncontrolled development and sprawl meant more infrastructure and municipal services in outlying areas, and therefore more costs for local government and residents. Consequently, development had to be smarter, focusing on redevelopment and in-fill to avoid the extra expenses and take advantage of existing infrastructure and services. Changes in the economy meant that a community's retail sector had to be diverse, to offer local consumers broad choices, or else the city would lose sales tax revenue. Communities began recognizing that to become more effective in these areas, they had to find the means for working together effectively across viewpoints and interests. Doing so meant taking the time and energy to come to common understandings of the issues at hand, the desires of everyone, and the strategies to achieve them.

In this article, key staff and managers from four local governments—El Paso, Texas; Chapel Hill, North Carolina; Mankato, Minnesota; and Eau Claire, Wisconsin—were interviewed to share their insights into their own sustainability efforts. Their learning included experiences in producing internal change within their governments and in bringing about broader community change. As you read the examples, consider the actions these remarkable people took to make their hopes and dreams reality. All of these efforts are an ongoing work in progress, but there are many practices critical to the successes experienced to date. No one entity alone has (or has to have) all the answers; many players are necessary to effect change, and relationships do matter.

A Community on the Move: El Paso, Texas

The city of El Paso, Texas, has a population of about 613,000, and the county has more than 740,000. Its entire metropolitan area covers El Paso County.

Published online in Wiley Online Library (wileyonlinelibrary.com)
National Civic Review • DOI: 10.1002/ncr.20030 • Fall 2010

El Paso is the sixth largest city in Texas and the twenty-second largest in the United States. Ciudad Juarez sits directly across the Rio Grande River, creating an international metropolitan area of more than two million people. The climate in the region is warm and arid, with piercing hot summers and mild, dry winters.

Since 2000, El Paso has been a community on the move. In 2004, voters approved a measure to change their government from a strong mayor to a council-manager form to become more responsive and add continuity in its service to residents. In 2005, a new mayor and five new council members were elected. Mayor John Cook convened a council strategic planning session to create a focus shared by the elected body. Some key ideas energized the council. Among those that emerged was for El Paso "to become the premier community in the southwest." To do so, council members recognized that El Paso had to become more sustainable. "It was mentioned that we have to pursue sustainability or we will die," said Marty Howell, sustainability program manager for the city. "We could not continue to do things with high costs, particularly in a tough economic time."

In 2007, communitywide curbside recycling began to help address challenging solid waste issues. The first month revealed an astonishing 85 percent participation rate throughout the entire community. Practically "overnight," El Paso had one of the top twenty recycling programs in the nation. The response indicated the appetite of residents for becoming more sustainable. Also in that year, City Manager Wilson was appointed to the Sustainability Steering Committee of the International City/County Management Association. In 2008, local Sierra Clubs lobbied Mayor Cook to sign the U.S. Mayors Climate Protection Agreement, a U.S. Conference of Mayors initiative to support mayors in combating global warming in their cities. The city council unanimously endorsed Mayor Cook's signing the agreement. That same year, the city council decided that all new city buildings would meet LEED silver certification standards. (LEED is an internationally recognized standard for green building.) In 2008, the Office of Sustainability was created and Marty Howell was hired to manage it. The message was clear: El Paso was determined to be a role model, and sustainability was a priority that was not going away.

The message was clear: El Paso was determined to be a role model, and sustainability was a priority that was not going away.

Soon after, Howell convened an inclusive sustainability planning process to identify clear goals and a plan of action. The process took six months, with participants meeting all day every three weeks. Transit was an obvious challenge in the sprawling city. Five years ago, Sun Metro, El Paso's public transportation service, was in shambles; the challenges were confirmed when audits revealed serious problems. The city had begun to retrofit its buses to use natural gas in the 1990s; the city is now buying natural gas vehicles to replace those that were retrofitted five years ago, and the technology has improved since then.

El Paso also focused on energy retrofits. Lone Star Energy set aside money for local governments to dip into for energy improvements. El Paso used that money to replace signal lights with LED (light-emitting diode) bulbs in all five thousand intersections. Within eight months, the investment was paid back in energy cost savings. El Paso is now realizing savings of $50,000 a month. The city has also retrofitted fifty-four buildings and put in energy management systems where building managers can manage the facilities remotely. The projected savings are $20.4 million dollars over the next ten years.

City pools are heated by solar energy, producing as much as $47,000 in savings for a single pool. The contractor for the solar panels guaranteed the savings to the city and said he would write a check if the savings weren't met. The savings were indeed realized. The city borrowed money from the state for the solar and used the savings to pay off the loan; it is now harvesting the savings for other areas of concern. The city was also recently awarded stimulus money to change three thousand street lights, which will soon generate additional savings in the coming years.

Development and Growth

"Many residents have to travel thirty to forty minutes from outlying areas to make it to work," noted Howell. "The housing affordability index was also out of whack." To address the housing issue, the city rewrote "every piece of paper on development and growth in the past three years," Howell said. The process of rewriting codes was challenging and involved a lengthy, inclusive process with builders and developers to create the new codes. "We have to nudge, nurture, and nag developers to avoid sprawl," commented Howell. The codes have helped set standards to assist with all future development.

Currently, the city has convened a community focus on planning for four key transit corridors for bus and light rail. The goal is to create viable corridors where LEED silver-certified transit terminals act as hubs. The current challenge is getting developers to buy in during a period of economic downturn, but the mind-set is always on problem solving through the barriers that emerge. "We are looking at alternatives at every turn," Howell said. "We are looking at abandoned buildings, malls, and such. We want to let developers know that we will go through the door for you and with you." The sustainability mind-set is also being realized with the help of key partners such as Fort Bliss, the University of Texas-El Paso (UTEP), and community organizations such as UR-GREEN (Upper Rio Grande Renewable Energy and Efficiency Network).

Green building practices for residences are becoming the norm in El Paso. In 2004, 0.4 percent of new residences were Energy Star rated. Howell described one instance where a contractor contributed free installation of solar on a regional home builders' association building as a demonstration. Builders saw the ease of installation (completed within two days), permitting (within a few hours), and the subsequent savings and tax credits as icing on the cake. The result was ten presales on new homes in one week. Being green is also a great marketing tool for builders and helps with long-term home affordability by keeping energy costs down.

Fort Bliss, located east and northeast of El Paso, is experiencing explosive growth, with twenty-one thousand new troops and thirty thousand family members expected by 2013. The military base is spending $2 million a day on new buildings—with all new buildings meeting LEED standards. Fort Bliss has been named as the Army's Renewable Energy Center, where all new technology is going to be tested. The City of El Paso will be able to learn firsthand from the Fort Bliss experience because of their relationship.

Exploring Collaboration

The mayor saw that the many sustainability efforts in the community were fragmented, so he convened a workshop to explore collaboration. UR-GREEN was formed as a result. UR-GREEN membership includes builders, UTEP, refinery companies, the City of El Paso, entrepreneurs, home raters, and solar companies whose goal is to advance the green economy in El Paso. "They care more about the region than [about] their own organizations," said Howell. A team from UR-GREEN was recently selected for special training with the Green Jobs Academy through the Institute for Sustainable Communities in Washington, D.C. The partners look forward to applying their learning to new programming in El Paso.

Howell is constantly out in the community, meeting with residents and organizations and exploring multiple ways of getting the word out. Websites, newsletters, breakfast meetings, meetings with local nonprofits, green organizations, and federal agencies all build the relationships required for effective collaboration. The activities and meetings have revealed a desire on the part of key players to turn many isolated events into integrated events to coordinate activities and produce greater impact. "We feel very strongly that we can't be successful unless we have deep support from the community," Howell said. "We have to have that support in order to move to the next level."

One challenge he noted was overcoming the notion that sustainability is basically "tree hugging" and that business and environmental concerns don't mix. Sustainability relates to community health, however, and green efforts have proven to help with the bottom line. Another challenge is to find the money up front to start new efforts. "We are constantly trying to find ways to do things without adding a dollar of cost," Howell added.

Another challenge is when stakeholders have a single-issue focus and act as though their one area of interest is the most important and must be addressed above everything else. Overcoming narrow focus meant a lot of conversation, sometimes in planning sessions and other times one-on-one, but the sustainability planning process assisted greatly in helping people see how everything was connected and not singularly focused. Creating a shared vision helped set a target and was later helpful in refocusing people when necessary.

Howell said one of his most significant roles is as matchmaker, connecting diverse groups to vendors and businesses. "Since I'm here, everyone who is curious and interested comes to me," he explained. "Every time I give a talk, I get waves of emails afterward. Without this position, where would they go? I am a hub. I may not know much about biodiesel, but I know who does. I connect those people together.

"El Paso investing in a sustainability office and hiring a program manager is a strong statement," he said. "That the manager and council hired someone shows the level of commitment of the city. It creates the very real perception that this is important." With the commitment of the elected body, the city manager, and a passionate and approachable program manager, El Paso is well on its way to turning sustainability into reality.

The Value of Partnerships: Chapel Hill, North Carolina

Chapel Hill is home to the nation's oldest public university, the University of North Carolina (UNC). The school was chartered in 1789, the same year the town of Chapel Hill was chartered, and in many ways the community resembles a company town. Today, the town covers nearly twenty square miles and has a population in excess of fifty-four thousand residents; the university has twenty-eight thousand students of which ten thousand live on campus and the rest reside in the community. The university and town share the community's main corridor, Franklin Street, on which UNC owns several buildings. As a result students, faculty, and residents regularly come into contact with one another.

Because of the progressive attitude and focus on innovation, UNC has played a significant role in advancing new ideas for the town. One example was a fare-free transit system for all residents in Chapel Hill. UNC students actually voted to place a fee on themselves to pay for the transit so it would benefit the entire community. Students noticed that lower-income residents had to pay for the service while they could show their student identification and ride free. "It became an equity issue for the students," said Chapel Hill City Manager Roger Stancil. Staff and the UNC administration also saw it was easier to pay for transit than to fight for more parking and parking decks.

Chapel Hill is a community where a resident can drive five minutes and be in the country, where residents can buy eggs from local farmers. Urban boundary planning and preserving the small-town character are priorities that were set a number of years ago by the council in accordance with the desires of residents. An "active living by design" approach focuses on land use patterns that promote walkability. "We are built out, so all development is multiuse and transit oriented," said Stancil. "Every new development has to have components of housing, commercial, and retail." Open space is a community priority, and the town has set aside a thousand acres that will never be developed. Citizen advisory boards and commissions related to sustainability are another aspect of partnering with residents.

When UNC pitches the university to potential faculty and students, Chapel Hill's quality of life is one of the selling points used to attract students and faculty. This feeling of being a part of a livable community is an important basis for the collaborative partnership between the town and the university. The partnership began in 2004 when the university approached the town to talk about potential changes to carbon emissions in Chapel Hill. UNC had participated in a global conference in the United Kingdom and made a pledge to initiate activities in its hometown. The town was receptive to the idea and since that time has received a lot of assistance from the university. The first step was placing a graduate intern to help monitor emissions. This led to additional capstone courses that were project- and client-based, in which questions brought up by

departments were explored and answered during the semester. UNC's approach to the town was timely. It wasn't long afterward that a town committee began to focus on sustainability. An ordinance was enacted for town buildings to meet LEED standards, and the city fleet began to look at alternative fuels and greater efficiency. This approach and assistance from UNC have helped produce a 9 percent drop in fleet emissions since 2005.

Grow Local, Buy Local

The town, with the help of the university, chamber of commerce, and local businesses, created a Grow Local, Buy Local campaign. "We don't have huge chain stores such as Kohl's and Wal-Mart. We have small, local entrepreneurs," said Stancil, "but we are still outpacing the state in local sales. Residents shop and eat locally. All the local restaurants list the local farmers they buy their products from. It's a movement that has been around for a long time and has helped save us during this economic downturn."

The university continues to play an important role in local sustainability efforts. For instance, a UNC student group called HOPE (Homeless Outreach Poverty Eradication) at UNC came to the town council and asked them to consider supplying land for a community garden to go along with a project for the homeless. The community garden would be a jumping-off point for people experiencing homelessness to assist them with life transitions. The town gave access and surface rights to a vacant fourteen-acre plot for creating the garden. Last fall the student group and the town's Parks and Recreation Department put in the infrastructure for the garden. Community sponsors were recruited for each plot, to either work it themselves or sponsor others to use the plot for $100 a year. Men from the shelter are transported to the site to work the garden for their own benefit and the community's. The ribbon-cutting ceremony for the garden was held in April 2010.

Less Water, More Savings

Another sustainability partnership is among the town, area school districts, Niagara Conservation (which donated the equipment), Orange Water and Sewer Authority (OWASA), and the UNC Institute for the Environment. Students installed new toilet fixtures in five units of a public housing development. They wrote a report to the council that focused on the goal of the project, what the audit told them, the approach taken, and the interim results: a 30 percent reduction in water consumption. The council was thoroughly impressed and asked themselves what more they could do. What started with fixtures in five units ended up placing fixtures in all public housing units (all with 3.5-gallon-per-flush toilets or better) with the use of Community Development Block Grant (CDBG) funds. "The decrease translates into cost savings and ultimately impacts home affordability," explained John Richardson, who heads the town's office of sustainability. "In the same vein the program is now looking at home energy audits and conservation measures. OWASA, UNC Institute for the Environment, and 36 South [a local energy auditing company] are collaborating with the town on the project."

The Importance of Place: Mankato, Minnesota

Located in south central Minnesota, Mankato is the Blue Earth County seat (the name refers to the fertile ground, which has a bluish tint). Mankato's population is in excess of thirty-six thousand. With North Mankato at its side, the total population of the Mankato/North Mankato region approaches fifty thousand residents. Mankato is home to Minnesota State University (MSU), whose student population is estimated to be around seventeen thousand. Three smaller private colleges are in the region as well. Location is an important part of the city's identity; there is an appreciation of the abundant natural resources, wilderness areas, and forests. Simply because of the natural beauty of the region, awareness of preservation is widespread.

In the early 2000s, Mankato became a state leader in water reclamation. It started when the city took advantage of an opportunity. A gas-fired turbine power plant was built and had a need for water for cooling. The city began collecting and treating wastewater, producing a high-quality effluent that is now being used for cooling and irrigation. Additionally, the city invested about $40 million in a treatment facility for domestic water, making a conscious effort to move away from tapping deep aquifers. In the long run, these two elements will sustain water resources and allow growth without dependency on additional sources of water. In the same decade, the

city converted a coal plant to a waste plant that focuses on recycling. They also created strong urban boundary and sprawl programs in place and collaborated with other towns along municipal boundaries and outlying areas to put in growth agreements. Planning practices since the 1990s and through the 2000s always included environmental and impact studies.

A New Vision

In 2006, the greater Mankato region completed a community visioning and strategic planning project that was convened by the cities of Mankato and North Mankato, the chambers of commerce, Greater Mankato Economic Development, and Mankato State University. The eight-month process, facilitated by the National Civic League, had a core stakeholder group that was consistently two hundred–plus at the ten meetings. The work teams met regularly between sessions as well. "The Envision 2020 process provided an opportunity to get [sustainability] into the community," said Paul Vogle, director of community development. "It put everyone on the same page and allowed the political momentum necessary to move sustainability forward."

Local initiatives focused on green protection areas along the river, open space, environmentally friendly development approaches, and green buildings. During the process, Blue Earth County was in the design phase of a new county building. On the basis of input from the stakeholder group, the plans were redesigned. The new county building is designed to LEED silver standards and is currently undergoing certification. This demonstrated a commitment by the county and a contribution to other efforts that have snowballed. In fact, a variety of buildings in Mankato have been retrofitted, and all new buildings (public and residential) are being designed to receive LEED silver certification. Local architectural firms are now focusing their building designs to meet those green standards.

The visioning process reinforced the desire of residents to preserve the local ecosystem, a viewpoint that has emerged across perspectives and sectors. For example, in the Hilltop section of Mankato (a forested hill targeted for additional residential development) it spurred interest not just in preserving trees but in drainage and development and open space. Residents, the city, financial institutions, developers, and builders alike realized that taking all of the variables into consideration saves money because not every part of a development has to be graded. Development can take advantage of the natural land. "Developers liked it," Mankato City Manager Pat Hentges said, "and residents liked it because it makes housing more affordable too."

Because of the Envision plan, the Mankato region now enjoys a riverfront park, a natural habitat park, and stronger conservation efforts in rural areas. Transportation studies were once concerned only with roads. Now they also focus on bikes and walking. From Envision, an advocacy group emerged that is handling the bicycle aspect of the transportation plan, further illustrating the positive role of residents in helping implement the plan. Another goal from the plan was to get the region designated a Metropolitan Statistical Area (MSA), which would place them in a better position to venture into regional initiatives.

> The strongest qualitative indicator of success is the number of diverse partners involved in moving the initiatives forward.

Citizen Advocacy Plays Key Role

Both Hentges and Vogle feel the strongest qualitative indicator of success is the number of diverse partners involved in moving the initiatives forward. There is strong support from businesses, the university, cities, towns, the two counties in the region, and residents. The Envision process has moved many of the activities to advocacy groups and less-traditional institutional groups. Citizen advocacy groups are playing a key role in planning for transportation and energy conservation. The advocacy groups do not work in a vacuum and regularly partner with local institutions. For instance, electrical meters to help residents monitor the energy efficiency of their homes are now available for checkout from local libraries. Neighborhood associations that used to focus on parochial issues are now key participants in helping make homes in the neighborhoods more efficient.

DOI: 10.1002/ncr

Support from local officials has also increased as they learn more about the potential cost savings associated with green initiatives. "With the tough economic times, policy makers are saying we have to do it," noted Hentges. "The savings with infrastructure and the ease with which we can deliver services has helped a great deal." The water initiatives have already shown dividends. Accessing aquifers costs money; the water reclamation plant is now treating waste at a higher level and effluent trading credits are realized so that savings can be focused on other areas of need.

A Clear Vision: Eau Claire, Wisconsin

A number of factors converged around 2007 to make Eau Claire, Wisconsin, a leader in the sustainable community movement. As with Mankato, the Eau Claire region was in the process of completing a community-based visioning and strategic planning process called Clear Vision, where a number of sustainability goals emerged. The city council adopted a resolution to make Eau Claire an "eco-municipality," incorporating ecological and social justice values into its charter. The economic crisis was emerging for local municipalities, forcing the city to look even more closely at cost efficiencies. Finally, the International City/County Management Association was also focusing on sustainability as a key goal area with its internal strategic plan.

Also that year, City Manager Mike Huggins sent a staff person to a green building conference. "He came back all jazzed," recalled Huggins. "And so we created an interdepartmental Green Team that focused on the things we should be doing internally to have a coherent program as an organization. The Green Team had to spend time defining sustainability and why we should care. We had to get an operational policy definition. We realized we couldn't be saving the entire globe."

Building capacity within staff was an important step. Getting the various departments to participate in creating the work plan was hard work, but the process of working together produced an understanding that being more sustainable as a governmental organization was a priority. It meant carving out time for people to work on the issues while dealing with the fiscal crunch that every municipality faced. Every department had its own perspectives on how sustainability had an impact. Huggins said having the broad departmental focus made the process longer, but the buy-in ended up in a stronger plan. Through the discussions, they were able to bring it all together such that every city office was contributing to create benefits, both within their own departments and governmentwide.

Impressive Results

The city is tackling a number of areas, with impressive results. For the past thirty years, they have incorporated systems to capture methane at the sewer treatment plant and convert it to meet the electrical needs of the plant. This practice produces a savings of a little over $200,000 annually. Since 2000, the water treatment has used geothermal energy to help run the plant. Hobbs Ice Arena has three sheets of artificial ice and uses heat recovery from the ice chillers to run other equipment in the facility.

The city used a $500,000 energy performance contract to make HVAC improvements to city hall, which guarantees an annual $73,000 energy savings. They implemented expanded use of electronic transmittals and revised procedures to reduce total organizationwide photocopies by 23 percent annually, which resulted in a 32 percent reduction in the total cases of paper purchased.

In 2008, the city changed all paper dispensers in public restrooms to an electronic type that reduced paper towel use by 50 percent. In 2007, the city also replaced 122 toilets at a city housing project for an annual reduction of 2.3 million gallons of water used and $9,200 in annual savings. In the same year, they replaced water closet flush systems at city hall to yield an annual savings of 750,000 gallons in potable water.

Organizing the Effort

While the governmental practices were progressing in Eau Claire, sustainability efforts within the community (driven by organizations, schools, and coalitions) were both abundant and fragmented. Huggins realized that organizing the various sustainability efforts was going to be necessary in order to bring the desired benefits. The city adopted an amendment to the comprehensive plan to include a sustainability chapter. The city, in partnership with community

groups, schools, Clear Vision (a large community-based strategic planning effort), the Green Team, and the university worked together to put all their mutual sustainability ideas into an organized chapter. A series of community workshops were also implemented to help generate specific policies that created the chapter.

During the Clear Vision community process, sustainability was identified as a priority area. One of the goals is to get other local governments to become eco-municipalities throughout Eau Claire County. The task force, made up of community residents, is in the process of meeting with all Eau Claire County governmental bodies (thirteen towns, two villages, three cities, and the county board) to promote interest in becoming official sustainable communities and adopting the Natural Step Framework for sustainability. The Natural Step is a nonprofit organization with origins in Sweden; it offers a framework toward creating a sustainable society by focusing on economic, environmental, and social aspects of community.

In late summer of 2009, the Clear Vision Eau Claire Sustainability Task Force began working with Eau Claire County Extension and Joining Our Neighbors Advancing Hope (JONAH), a faith-based coalition that focuses on environmental justice, to bring an EcoTeam community sustainability initiative to Eau Claire County households, businesses, churches, and neighborhoods. EcoTeams are groups that are formed in neighborhoods, workplaces, churches, and other gathering places to furnish tools and practices that are implemented to make the community more sustainable, and to have fun while doing it. EcoTeams became a second initiative presented to county governmental boards when Clear Vision visited with them about becoming eco-communities.

By mid-January of 2010 fifty-seven people and forty-one households were working on or had completed the six-step process for EcoTeam development as presented in *The Green Living Handbook,* by David Gershon. Church groups, neighborhood associations, civic groups, and workplaces in Eau Claire County communities have adopted the EcoTeam approach. "The civic infrastructure is so strong here in Eau Claire," Huggins said. "We are very citizen-run. The city has always been open to partnering, and it is having an effect with sustainability. We are now even seeing sustainability rippling through our professional associations."

Conclusion

One of the key elements for success in these four community sustainability programs was recognizing that local government is a role model for the broader community. If local government was unwilling to change, how could they expect the community to do so? "Local government has to be a role model," noted Eau Claire's Huggins. "We have to exercise stewardship with how we as an organization practice sustainability first before branching out to the community."

Creating an internal governmental structure such as a sustainability office can help overcome internal turf and power struggles. It also signals that local government is serious about sustainability. John Richardson, who heads the Chapel Hill Office of Sustainability, noted the importance of approaching sustainability with departments in an encouraging way—no slap-on-the-wrist approaches—and creating a culture through interaction by identifying things together and "embarrass them with their successes." The sustainability office is currently developing and designing a sustainability award for individuals and divisions.

"The key is to get employee involvement and to get their say in how sustainability can be applied," noted Richardson. "The 2010 work plan takes one of three approaches: explore and gather information and propose recommendations for action to the manager; pilot project-testing the projects; and implementation of projects where we go full bore. It's a phased approach, like climbing a ladder."

Another critical element is having a prioritized plan of action for both local government and the community as a whole. "Some view sustainability as the panacea," Richardson said. "The reality is that sustainability is a goal and is something you work toward. It is such a huge topic that it's easy to become overwhelmed. My advice is to prioritize and create a manageable plan and achieve some early success."

DOI: 10.1002/ncr

"Have a plan to point to," urged Howell of El Paso's Office of Sustainability. "Our plan has different focus areas and provides a real benefit to remind people that we have a direction and specific priorities. One of my primary roles is using the plan and building the type of support necessary to move things forward."

Communication was absolutely essential to strengthen the key human factors of building relationships and trust—the basis for developing strong partnerships to move sustainability forward on a communitywide basis. "Clarity as to what you mean when you say 'sustainability' is crucial," said Howell. "People will be thinking a variety of things when you say it. Define what you mean by sustainability."

Sharing information on the "payback time" on investments and the subsequent savings also supplies the necessary proof to change mind-sets. "Find success stories where the triple-bottom-line items are being achieved, and share them—constantly," Howell said. "Demonstrate that it is already working! It makes economic sense and community sense. We are saving money. The investment is worth it."

Huggins agreed that showing tangible cost savings helped. The savings that occurred allowed city departments to use those resources to further capital improvements. For example, solar panels were installed to heat public swimming pools throughout the city; the payback was realized within three to five years. Seeing the results has helped build the case for investing more in the future.

Having an open and honest dialogue is critical, said Hentges of Mankato. "Dialogue is the key to all of this," he said. "As a result, there is a strong will and ease with which initiatives and policies can be implemented and produce the progress that we're seeking. We now have a variety of forums where this type of dialogue can take place. We've gotten better at it, and the dialogue has become easier."

Finally, willingness to build partnerships, both likely and unlikely, is crucial. Sustainability is too complex a challenge for local government to tackle alone. "Tapping into universities is a two-way street of benefits," said Richardson. "Students benefit by working and learning in real-world situations, and we benefit by being able to tackle a variety of areas."

Get environmental agencies, such as the regional office of the Environmental Protection Agency, involved in working with planners and have open and honest dialogue about the issues. Regulating agencies aren't necessarily good planners, and planners aren't necessarily aware of environmental impacts. Getting them together early in the planning process helped the implementation in the long run. Another suggestion is to call on people with technical expertise to help with options. In the case of the Mankato region, this meant partnering with MSU and businesses to help others think things through.

All of the officials interviewed for this article shared the insight that they still view their efforts as a work in progress. They recognize that mistakes, conflicts, and unforeseen challenges are a natural part of the process. Sustainability is a change in culture; it is a process and not an event. Nevertheless, these municipalities show that the change can happen with some quick wins and then snowball into broader community change.

Reference

Gershon, D. *Green Living Handbook: A 6 Step Program to Create an Environmentally Sustainable Lifestyle*. Woodstock, N.Y.: Empowerment Institute, 2008.

Derek Okubo is senior vice president of the National Civic League.