

Sustainable Shelby *Implementation Plan*

A Future of Choice, Not Chance



Sustainable Shelby
Implementation Plan



“Our times offer an historic opportunity to rethink where and how we live, work, play, and shop. The path to a sustainable lifestyle builds on the principles of smart growth, new urbanism, and green buildings. If successful, it will not only vastly reduce environmental harm but also offer stunning enhancements to the current quality of life.”

—Doug Farr, *Sustainable Urbanism*

“I have never been more certain of anything than I am on the importance of this agenda. Our citizens want a sustainable community. They may not call it that, but they want walkable, healthy neighborhoods, vibrant public spaces, energy efficient buildings, and streets that serve alternative transportation like bikers, pedestrians, and first-class public transit.”

—Shelby County Mayor AC Wharton, *Sustainable Shelby Kick-off*



ACKNOWLEDGEMENTS

This plan could not have been possible without the commitment of a number of special people. The roots of this plan are found in the hard work of the seven Sustainable Shelby committees. The recommendations they created guided the implementation strategies in this plan. The committees have also served as an invaluable resource during the writing of this plan by providing feedback on the strategies. A complete list of the committee members can be found in the appendix.

The Sustainable Shelby Implementation Plan is designed to provide both the general public and those implementing the strategies with the information they need to implement the strategies and track progress over time. Division Directors for the City of Memphis and Shelby County have been helpful throughout the process and generously agreed to meet with the Sustainable Shelby Team to ensure that the strategies are both realistic and possible.

This is the first government report designed by Memphis College of Art, and for this, Sustainable Shelby is especially grateful to College of Art president Jeffrey Nesin; David Chioffi, head of the department of design; and design students Katie Benjamin, Anthony Carter, James Hart, Eric Huber and Bryan Rollins.

Finally, this plan would not have been possible without the support and interest of the citizens of Shelby County. Their desire to make the region more sustainable now and into the future has been the driving force behind this plan.

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Foreward by Mayor AC Wharton

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There is no going back.

Our national economy is undergoing fundamental change. Our regional growth trends intensify our energy dependency and export more money out of the local economy. Our local development patterns contribute to stressed public services and to expanded public debt. Our neighborhoods are strained by the effects of car-dependent development and often lack the elements that make them walkable, commercially healthy, and convenient to public transit.

Babies born today will spend 87 percent of their lives indoors. Abraham Lincoln may have walked six miles to school a day, but on average, Americans walk an average of about four minutes a day. The rise in obesity in Shelby County is well-documented, and if trends continue, babies born today will be the first generation of Americans whose life expectancy will go down. The size of the average American family has shrunk 15 percent, but the size of a new house has swollen 50 percent. The average plate of food that we eat has traveled 1,500 miles, but the average American family eating it drives the equivalent of about 90 percent around the globe in a personal automobile each year.

In other words, there is no question that we live in a time of great change; however, as we implement *Sustainable Shelby*, we do so with the unchangeable fact that the future will be anchored firmly in sustainable urbanism; that every citizen, regardless of where they live, will be affected; and that our quality of life will be enriched and improved by sustainable practices and behavior.

We are fortunate that our community—through the dedicated work of 130 members on seven committees and a special planning group—has now imagined a different future with these detailed strategies for a greener, smarter, and more sustainable future. Best of all, *Sustainable Shelby* sets out the roadmap for this journey and provides our community with the markers for progress.

I am proud of the results of *Sustainable Shelby*. It has been a new way of engaging the public and developing an action plan for change. In this way, the recommendations and strategies have exceeded all of my expectations and positions our community on the leading edge of change that can improve our quality of life, strengthen our economy, and enhance the building blocks of a healthy region—our neighborhoods.

When I started this process, I set out several priorities:

• **Create civic engagement across all sectors—top down, bottom up, and inside out.** Exciting momentum for sustainability is seen in all parts of our community, and our success will be based on a historic level of engagement and collaboration.

• **Emphasize action over analysis.** Because of our strong sense of urgency, the goal of our process was to create immediacy and action-oriented strategies, recognizing that most of us are familiar with the data, and that there is time for ongoing research and continued benchmarking.

• **Act short-term while thinking long-term.** Just as our problems developed over a long period of time, we will not create a sustainable community overnight. In fact, we can feel overwhelmed if we consider the full scope of our work, but it is my hope that every person and organization can find strategies to embrace and own.

• **Institutionalize changes.** This cannot be a report destined for the shelf. It must be alive and it must continue to evolve within a formal structure of accountability and execution.

• **Create momentum for change by supporting both grassroots innovations and formal public sector action plans.** These strategies offer opportunities for quick wins as well as the chance to set in motion fundamental public sector structural and policy changes.

Sustainable Shelby has achieved these goals and much more. It gives us the roadmap to build a community that meets its present needs but makes sure that future generations can also meet their needs. And, along the way, it calls on us to aim higher, work harder, and accomplish more.

Sustainable Shelby is different. It is not a smart growth plan. It is not an environmental plan. It is not an urbanist plan. In truth, it is all three, and because of it, our community has an unprecedented opportunity to combat the trends that have led toward more obesity, hollowed out neighborhoods, car-dependent transportation, sprawl, environmental harm, choking public debt, and a disconnection between our neighborhoods and our people.

We now have the opportunity to change all this, and along the way, *Sustainable Shelby* will become a national model for bold sustainability plans of action. With our campaign for sustainability, we now tap into the reservoir of innovation and creativity that are our legacies as citizens of this mythic community. In the past, we have created the world's most popular music, invented modern global commerce, and transformed the way that every American lives. Each of these began with the inspiration of special people who galvanized our community to do great things.

That is the unfolding story of *Sustainable Shelby*, and armed with this new vision of the future and united in support of this report's goals, we cannot fail. In this way, this report is an urgent call to action for all of us who love this community, care about its future, and are prepared to join hands to do the hard work of place-making that is the essence of sustainability.

About this Document ‹‹

The Sustainable Shelby Implementation Plan is the most ambitious plan of action ever issued by this local government. First, in order to reduce its environmental impacts, it is primarily being distributed in a digital format. The implementation plan is produced on an environmentally friendly DVD. It is also available in local public libraries and online at www.sustainableshelby.com.

Second, the pictures in this Implementation Plan are of the greater Memphis area and were obtained through a Call for Photos that was sent out to the local community. The plan uses local photos to help the public relate to the strategies and showcase examples of successes in the region. Many people responded to the call and submitted hundreds of photos for use by the Sustainable Shelby Implementation Plan. Although not all of the photos were used in this document, many will be used on the website and or in future materials produced by Sustainable Shelby.

Third, sustainability begins locally and as such the plan contains several stories of local leaders working to make our region's future sustainable. By highlighting these local efforts the plan looks to local talent for solutions to the challenges facing our region.

Finally, this DVD includes more than the final Sustainable Shelby report. It also includes other files—interviews with our national advisers, copies of their presentations given throughout the Sustainable Shelby process, the summary of the public polling results, and all of the committees' recommendations.

This report is a living document. Updates to the plan will be posted on the Sustainable Shelby website where your suggestions and opinions are welcomed.

How to Use This Plan

The Sustainable Shelby Implementation Plan you are now reading is designed to increase transparency and accountability for the Sustainable Shelby Initiative. To accomplish this goal, these implementation strategies include as much detail as possible, such as what is being done, who is doing it, and when it is going to be started or completed.

With this information, citizens can track the progress of specific strategies and hold public officials accountable. Similarly, the Sustainable Shelby website was developed so that interested citizens can track strategies with the latest, most up-to-date information.

This plan is also created for those who will implement the strategies, with the emphasis on being specific enough to guide their efforts while also being broad enough to allow for creativity on how to implement the strategy.

The plan is laid out so a reader can review the whole plan, a specific chapter or just a specific implementation strategy. There are several bookmarks and links that will help you easily navigate throughout the plan. The plan uses colors to serve as navigational clues for each of the chapters. Every page in each chapter will have a specific color, so readers can readily know what chapter they are reading.

We hope you enjoy reading the Sustainable Shelby Implementation Plan and will find it to be a useful tool.

—Sustainable Shelby Team

Introduction

» Every cause begins with a conversation, and every movement begins with a meeting.

And so it was with Sustainable Shelby, the first agenda for sustainability in the greater Memphis region. Seeds for this process were planted by Mayor A C Wharton during discussions about his desire to change the unsustainable course of our community, and the movement was launched in a meeting on March 6th, 2008, to an overflow crowd at the Memphis Botanic Garden that considered how Memphis and Shelby County could become more environmentally, socially, and economically sustainable.

Sustainable Shelby began with a challenge delivered by Mayor Wharton to develop priorities for our community. He said these recommendations are not the “end all, be all” report for green issues in Shelby County. Rather, according to Mayor Wharton, it was to be a “strategic framework for action” developed by 130 people on seven committees and a special Sustainable Shelby Team of professional planners from the public sector. The seven committees included: building codes, environment and natural resources, land use and development, neighborhood rebirth, public buildings and purchasing policy, public incentives, and transportation and traffic.

For four months, committees sifted through hundreds of recommendations and ideas and selected 52 of them as priorities for action. For the first time, wireless digital technology at the FedEx Institute of Technology at the University of Memphis was used to set public policy priority in Shelby County. In a unique “Digital Congress,” all committee ideas were ranked and the

public’s opinions were factored into the final recommendations through the first scientific poll of the public on sustainability issues. Then, these recommendations were developed into strategies by a Sustainable Shelby Team of multi-disciplinary planners.

Because Mayor Wharton expressed his strong belief that the public sector should lead by example, many of the strategies of Sustainable Shelby take a decidedly ambitious approach to changing government policies and procedures that brought Shelby County Government to the brink of bankruptcy.

That’s why Mayor Wharton unequivocally said, in kicking off the Sustainable Shelby process:

“Shelby County is now on an unsustainable journey to the future. It is not sustainable on the basis of public finances. It is not sustainable on the basis of environment and land use. It is not sustainable in the disposable neighborhoods and the deteriorating health and quality of life of their residents.

It became clear to me that all of these were not isolated crises or independent problems. In fact, they were all inter-related and only by addressing sustainability in the totality of the issue could we truly change the dynamics of our county in a way that makes it more fiscally strong, gives it a higher quality of life, protects our environment, contributes to a vibrant economy, improves planning and design, strengthens our neighborhoods, and builds our sense of community.

Here's what I'm looking for at the end of this process—an agenda that ensures that sustainability permeates every decision made in our community, that it becomes a way of life for us, and that we stop looking at our decisions as 15-20 year choices but as the 100-year choices that they are.”

In considering 100-year choices, Sustainable Shelby relied on four sources for its context: the State of Oregon's definition of sustainability, Portland economist Joe Cortright's "City Dividends" research, New Urbanist leader Jeff Speck's "The City Livable" presentation, and architect Doug Farr's book, *Sustainable Urbanism*.

As this process began, it was crucial that everyone agreed on a definition of sustainability that set out the ambitions for Sustainable Shelby. As a result, the definition used by the State of Oregon was adopted: "Sustainability means using, developing, and protecting resources at a rate and in a manner that enables people to meet their current needs and also provides that future generations can meet their own needs. Sustainability requires simultaneously meeting environmental, economic, and community needs.”

Portland economist Joe Cortright, former executive officer of the Oregon Legislature's Trade and Economic Development Committee and a member of the Oregon Governor's Council of Economic Advisors, kicked off Sustainable Shelby with the presentation of the "Memphis Green Dividend," which showed that small improvements can yield big returns. For example, if the Memphis region could reduce average daily commutes by less than two miles, it would pump \$280 million into the local economy.

Cortright:

"It's time to replace the cliché of green policy as sacrifice and instead recognize that for progressive regions and their residents, being green pays handsome economic dividends.”

To further inform its work, Sustainable Shelby sponsored the May 1, 2008, presentation of "The City Livable: 12 Modest Suggestions for Making Memphis Great" by Jeff Speck, former director of design for the National Endowment for the Arts and co-author of *Suburban Nation*. In his comments, he emphasizes several themes that were embraced in this report: the importance of historic preservation, tree planting, connectivity, anti-sprawl policies, and places of civic ritual.

Speck:

"Build Memphis for humans, not just cars. Don't leave the design of your city to the highway engineers.”

Finally, on July 8, 2008, Doug Farr, head of a Chicago architectural firm and author of *Sustainable Urbanism*, spoke at the release of the Sustainable Shelby Final Recommendations, saluting the work of the committees and emphasizing the importance of a process aimed at creating a community that lasts. He said that the consequences of past unsustainable choices are just now being understood through lower life expectancy rates, higher obesity rates, environmental harm, and infrastructure costs bequeathed to our children and grandchildren.

Farr:

“Sustainable urbanism is walkable and transit-served urbanism integrated with high-performance buildings and high-performance infrastructure. Sustainable urbanism draws attention to the enormous opportunity to redesign the built environment in a manner that supports a higher quality of life and promotes a healthy and sustainable American lifestyle.”

The presentations by Mr. Cortright and Mr. Speck are in separate files on this DVD.

When the final Sustainable Shelby recommendations were issued, several compelling themes were apparent:

1. There is strong sentiment for an emphasis on revitalization of neighborhoods.
2. People care deeply about the public realm, and they want to have parks, streets, and plazas that are special in their individuality.
3. There is unequivocal concern about protecting our natural environment—our parks and our green spaces.
4. There is strong support for greater emphasis on walkable neighborhoods and a bikeable community.
5. There is an unmistakable call for better planning and more public input into the planning and development process.
6. The public wants government to quit talking about sustainability and lead by example with government fleets using alternative fuels, buildings built to green standards, and adaptive reuse of former public buildings.

Already, the energy and ambition of Sustainable Shelby—as well as some exciting initiatives in our community—are converging to create a powerful current for change. From BioDimensions to Clean Memphis, from Project Green Fork to LocalEx, from Edible Memphis to Grow Memphis, there is no lack of inspiration for the sustainability movement.

To skeptics who question the boldness of the plan of action represented by Sustainable Shelby, Mayor Wharton said: “There are some who suggest that Shelby County can never join the ranks of the nation’s most sustainable communities. Today, I repeat the words of Chicago Mayor Richard Daley when asked what to do to become a sustainable community, “Start.”

And that most of all is what Sustainable Shelby is. Our start.

2

Great Neighborhoods for a Great Community





We don't use the word, neighborhood, to refer to the disconnected, single-use developments that characterize sprawl, such as stand-alone apartment complexes, subdivision tracts, office parks or shopping centers. Real traditional neighborhoods meet all those same needs—for housing, workplaces, shopping, civic functions and more—but in formats that are compact, complete, and connected, and ultimately more sustainable and satisfying.

—Doug Farr, “Sustainable Urbanism”

Healthy, attractive, safe, diverse neighborhoods are the building blocks of a sustainable community.

A testament to this truth is reflected in the fact that no other chapter of this report has more strategies or is more challenging in the scope of its ambitions. In pursuit of the kinds of neighborhoods that are the threads that hold together the fabric of our community, Sustainable Shelby has compiled a web of strategies that converge to support, nurture, and create sustainable neighborhoods.

Sustainable neighborhoods are walkable, bikeable, clean, and are served by high-quality 21st century public transit. They also feature neighborhood retail, are strengthened by public incentives, and planned smarter to form a community that works now and in the future. The sections in this chapter stress the importance of a welcoming public realm that acts as the heart of community. To create great neighborhoods we need to rethink transportation so that it is less carcentric and oil dependent, encourage green buildings, revive urban neighborhoods with community development programs, assist in making public investments that contribute to healthy neighborhoods, and deliver a brand of planning that directly participates in neighborhoods' success.





2.1

Great Neighborhoods

The backbone of Memphis and Shelby County is its many great neighborhoods, but much work remains to be done. We need to strengthen existing neighborhoods and to ensure that new development is designed to create a place of lasting value. An innovative approach is needed to measure the impact and potential for zoning and planning decisions to ensure that we create the kind of neighborhoods that Memphis and Shelby County need and its people want.

Local governments are in a unique position to help shape and sustain great neighborhoods, because they have the opportunity to assess carefully the long-term impact of new development, including whether it is economically prudent, environmentally responsible, and socially equitable (known as the triple bottom line). In support of this, we need to reinvent public planning within local government to encourage better decision-making and to increase the impact of good planning while creating neighborhood planners to serve as liaisons to neighborhoods and community groups. Meanwhile, we need demonstration projects that show us what local examples of sustainable neighborhoods could look like.

Finally, we must re-establish Memphis's reputation as one of America's cleanest cities. A clean and attractive city is a valuable source of pride for citizens, and a competitive advantage in retaining and attracting talent. Recycling opportunities for every citizen and business must lie at the heart of this renewed attention to a cleaner city.

Strategies

2.1.1



Nothing is more fundamental to sustainability than great neighborhoods. To underscore this fact, Memphis and Shelby County Mayors should issue a joint executive order declaring Memphis and Shelby County as a "Community of Great Neighborhoods."

2.1.2



A new approach is needed to determine the impact of proposed development on existing neighborhoods. The Memphis and Shelby County Division of Planning and Development (DPD) will create the "Great Neighborhood Score," which will be a compelling way to elevate all proposals and applications by grading them against the standards of high-performing, successful neighborhoods. Community values and best practices will form the basis for a "Great Neighborhood Score," and it will be a blend of key factors such as walkability, neighborhood completeness, quality and availability of open space, the ability to age in place, transit accessibility, a mix of uses so people can live, work and shop in their neighborhoods, and fiscal impact to produce strong neighborhoods of lasting value. This score will provide both citizens and local decision makers with an easy-to-understand way to measure the impact of development proposals on existing or new neighborhoods.

2.1.3



Memphis and Shelby County Governments can no longer afford to approve new development that does not make sense in the context of the overall public good from an economic, environmental, and social point of view. The long-term fiscal impact of a new project or development will be a major factor in determining its "Great Neighborhood Score." By July 1, 2010, DPD will revise the current fiscal impact model to ensure that it more closely reflects the actual costs of new development. The fiscal impact model will no longer simply look at anticipated tax revenue versus the cost of providing additional public services, but will also quantify other associated long-term costs of new development including school overcrowding, environmental degradation, impact on existing housing values, and auto dependency.

2.1.4



Planners who are experts and knowledgeable about specific neighborhoods are a special resource for citizens. By December 1, 2009, DPD will reorganize around "neighborhood planners" who will be trained as experts to handle issues for specific geographic areas. In this role, a neighborhood planner will be a liaison, adviser, and technical resource for neighborhoods as well as the internal expert about the neighborhood within Memphis and Shelby County Government.

« Shared Values Are Always Sustainable

Sarah Newstok
Coalition for Livable Communities

Representing a diverse group of local stakeholders, the Coalition for Livable Communities (CLC) supports the development and redevelopment of healthy, vibrant, and economically sustainable communities throughout the greater Memphis region. We do this by educating residents, building a shared vision of livable communities, and promoting public policy to further that vision.

The CLC has five core values: Balanced Development, Shared Benefits & Costs, Access & Choice, Community Input & Collaboration, and Environmental Protection. If embraced when making development decisions, these values would go a long way toward creating a livable Memphis. What exactly do we mean by “livable?” A Livable Memphis would be home to great neighborhoods that offer residents efficient, effective, and (hopefully) pleasant ways to accomplish their daily needs—getting to and from work, school, play, access to and options for housing, work, food, education, services, and recreation. A Livable Memphis looks at the entire region as a community. The needs of one neighborhood cannot be sacrificed for another.

Livability won't just happen. It needs to be planned. (The alternative is haphazard development that drains resources from existing neighborhoods: e.g. sprawl.) The City of Memphis and Shelby County have the ability to design our region for livability. The Sustainable Shelby initiative, under the leadership of Mayor AC Wharton, does exactly that. Great neighborhoods, environmental protection and localized economic development are on the horizon through this new plan, which is aligned with the values of the CLC.

Mayor Wharton convened more than 100 local leaders to catalog issues facing Shelby County. In doing so, he boldly stated that our “present course is unsustainable on the basis of public finances, environment and land use, disposable neighborhoods, deteriorating health, and declining quality of life.” Committees of citizens and experts tackled major issues and outlined recom-

mendations for the Sustainable Shelby staff. These recommendations are currently being translated into real implementation strategies for moving toward the vision that this collaborative group created. (Clearly the CLC value of community input and collaboration was embraced.) As the process nears public release, the CLC is excited for another tool for promoting healthy growth in the Memphis region.

The theme of Great Neighborhoods is an overriding priority of the agenda. A commitment to reviewing the social impacts of development decisions recognizes the importance of access and choice. Sustainable Shelby promotes smart planning and balanced development. Revitalization of commercial corridors and public realm investments encourages the redevelopment of adjacent existing communities.

Sustainable Shelby addresses the need for all County residents to equitably share both economic benefits and costs of development. Sustainability benchmarks will become a measure to assess projects that will receive incentives from public sources. Locally owned businesses may find assistance easier to come by, especially when they can stimulate neighborhood-centric opportunities. From parks to water quality, environmental protection is on the Sustainable Shelby agenda. Highlighting the relationship between reduced resource consumption and economic savings, Portland economist and Sustainable Shelby presenter Joe Cortright calculated that by decreasing their average daily drive by 1.6 miles, Memphians could “generate \$260 million in annual savings that could stimulate the local economy.” Simple recycling measures and sophisticated energy consumption audits could create a green ethos throughout the community—and save money!

The CLC supports Sustainable Shelby's commitment to building public awareness and offering opportunity for continued collaboration. A Green Center and Office of Sustainability would further embed sustainable practices

among local governments, private industry, and the community at large. Sustainable Shelby's ability to succeed is strengthened by its promise of balanced development, equitable distribution of costs and benefits, and providing access and choice to community members—all under the umbrella of environmental protection. And, CLC members may have been given a resource to promote with pride and enthusiasm.

CLC Values:

Balanced Development: Growth should be planned and managed in a way that balances both private and public interests. Future growth must address the entire community's need for economic development and healthy, diverse neighborhoods.

Shared Benefits & Costs: All Shelby County residents must share in the economic benefits of growth, as well as its costs. Public expenditures (tax dollars) should be spread equitably among both new and existing neighborhoods.

Access & Choice: All residents deserve equal access to jobs, schools, shopping, transportation and neighborhood facilities. Citizens also must have choices in housing type and location, as well as multiple transportation options.

Community Input & Collaboration: All residents should have a voice in how the community is developed. Venues for effective citizen input should be well-publicized, timely, and accessible.

Environmental Protection: Open space, natural habitats, and landscapes must be protected and preserved for the benefits of citizens and the greater community.



Strategies

2.1.5

Neighborhood identity is an important source of citizens' pride, community vitality, and civic ambition. By January 1, 2010, DPD Neighborhood Planners will begin to assess neighborhood boundaries. During this process, planners will work with local Community Development Corporations, community associations, and members of the general public to achieve consensus on the definition of their neighborhood boundaries. Neighborhood planners, working with the neighborhoods, will create a neighborhood character guidebook based on the identity and agreed upon neighborhood boundaries that resulted from the process.

2.1.6

U.S. cities that are attracting and retaining talent are also bike-friendly communities. By February 1, 2010, jurisdictions within Shelby County will have applied to the League of American Bicyclists, with help from the Metropolitan Planning Organization's (MPO) Bicycle and Pedestrian Coordinator, to become a "Bicycle Friendly Community."

2.1.7

Successful urban farming programs are encouraging place-based "eat what you grow" community gardens and capitalizing on economic opportunities through a growing market for organic food. The Office of Sustainability will support new and existing community gardening programs by providing information and working to coordinate public and private sector efforts and programs. The Office of Sustainability and Agricenter International will take the lead in creating an Urban Garden and Organic Farming Initiative, which will offer training in urban farming and help transform vacant urban parcels—particularly those owned by local government—into community gardens.

2.1.8

Our community deserves places where sustainable strategies can be concentrated, tested, and evaluated. By July 1, 2010, DPD, working with City of Memphis Division of Housing and Community Development (HCD), will establish three demonstration neighborhoods where targeted policies, incentives, and public and private partnerships will be applied to develop a model sustainable neighborhood. These demonstration neighborhoods should reflect the diversity of Memphis and Shelby County and will be selected through an evaluation process in which private and community resources are maximized and public incentives are targeted.



A Sustainable Foodway

Melissa Petersen,
Editor & Publisher, *Edible Memphis*

Whether you are new to Memphis or you have called it home for a lifetime, I invite you to take a look at the city and surrounding environs with a new set of eyes.

No place is perfect—really—and while visiting Memphis on vacation from our home in Portland, Oregon, my husband and I arrived expecting the stereotype—barbecue, everywhere, all day long. What a surprise to find a burgeoning farmers’ market, innovative chef, and exceptionally friendly, welcoming people.

We see the potential and the opportunities that Memphis has. Sure, we focus mainly on the positive, but by doing so we’ve met hundreds of people—here in Memphis—doing good, changing habits, and rediscovering the rich food traditions that abound here.

It’s not perfect—but having lived in “perfect” San Diego and “perfect” Portland, does it say anything that we choose to live in Memphis over either of those places. Sure, the music and barbecue are great, but Memphis has so much more going for it, especially in the area of food. In two short years, we’ve seen the food scene here grow by leaps and bounds. A handful of chefs sourcing local ingredients has become dozens. Community gardens

have exploded, feeding those in need and the well-being of their communities. Once there were two farmers’ markets. Now there are four. That’s one hundred percent growth, people. Cooking classes at all levels and price points are full. We’re seeing new, young people learning the art, science, and business of farming. There is a measurable awareness and action toward preserving our resources through recycling and green practices.

All this in a place where it’s not all that easy. But Memphians are persevering.

Many of the steps are small, but isn’t that how everything gets started? The farmers’ market at the Memphis Botanic Garden started with just two weeks of preparation and several very determined individuals. A few farmers persevered from August to October through rainstorms, heat waves, drought-affected crops, and light attendance. And now, every Wednesday during the season, the crowd starts arriving a half hour before the official start time to snap up local honey, beef, veggies, bread and flowers.

Two years ago, you might have found a chef or two growing their own herbs. But this year, we’ve got several chefs creating 100% locally sourced menus for special events—during the winter. This is great progress.

Look around you. Ask what’s local on the menu—and order it. Visit one of the farmers markets—before long it could be an easy habit that supports our local economy AND provides you with the freshest, tastiest food around. Get to know where your food comes from. Cook.

There’s a lot to be done. Schools should have gardens. Locally grown food should be finding its way into hospitals, large company cafeterias, and schools. Farming is an admirable occupation that should be encouraged—we do need more farmers.

We all have to eat. Being sustainable means being able to feed ourselves.

The easiest, first step to a sustainable Shelby is to incorporate locally produced food into our daily meals. The bottom line is that Memphis is moving in the right direction. But it will take all of us working together to keep it moving toward a sustainable foodway.



Strategies

2.1.9



The redevelopment of the Fairgrounds offers special opportunities for our community and a distinctive chance to stitch together neighborhoods in the area. Our community should do everything possible to help developers achieve their pledge for it to be a “green” project and for the redevelopment to demonstrate sustainable urbanism principles in action. The redevelopment of the Fairgrounds should have the key assets of a nationally significant sustainable project, including high performance buildings and infrastructure (including streets and stormwater), adaptive reuse of Fairview Elementary School, green roofs, urban art, transit-ready development, and mixed-use (residential units above commercial) to activate the streets during non-event days. In this way, the Fairgrounds project can help knit together Cooper-Young, Christian Brothers University, and the Beltline neighborhood. DPD and City of Memphis Engineering should partner with the local chapter of the U.S Green Building Council (USGBC) to evaluate the Fairgrounds and develop a target score to achieve according to the LEED ND rating system.

2.1.10



Memphis should take a lesson from its history and organize neighborhood-based clean-up campaigns to renew our city’s reputation as one of “America’s cleanest cities.” By October 1, 2009, the Shelby County Division of Community Services and the City of Memphis Division of Community Enhancement will work with Memphis City Beautiful and Clean Memphis to create a “Neighborhood Clean-up Drive” program. The program will be an intensive period in which a neighborhood has access to resources and equipment to remove debris, trash, and abandoned cars. Neighborhood associations and community groups would submit applications to receive help and create a plan of action for the clean-up day and describe future efforts to maintain the area.

2.1.11



Design matters. It contributes to our community’s authenticity, vibrancy, and sense of place. By January 1, 2010, the Shelby County Land Bank, Homestead Program, and HCD will partner to create shared design guidelines and establish a design review processes for the redevelopment of tax sale properties in order to preserve neighborhood integrity and strengthen community character.



Smart Planning

Memphis and Shelby County need a shared, comprehensive vision for the kind of community we want to create, a specific plan for achieving it, and ways that each of us can contribute to its success. This is why a Comprehensive Plan for Memphis and Shelby County is absolutely vital. Without it, key decisions by the public and private sectors are made in a vacuum with little sense of the “big picture.”

In addition, more community voices and professional experts are needed to strengthen the work of the Land Use Control Board (LUCB) and to make certain that new development is consistent with the Comprehensive Plan. Having a shared vision creates a new framework and understanding for decision-making, the evaluation of long-term impact of actions, and the best use of limited resources.

2.2

Strategies

2.2.1



Effective planning for Memphis and Shelby County demands a Comprehensive Plan that sets out a cohesive, coordinated vision for our community and specific strategies to achieve it. Upon completion of the Unified Development Code (UDC), DPD will begin development of a Comprehensive Plan for the City of Memphis and unincorporated Shelby County. Other municipalities within Shelby County will be engaged as partners in the planning process for their respective annexation reserve areas. The Memphis and Shelby County Comprehensive Plan will be based upon the principles of Sustainable Urbanism, including the relationship between climate change and unsustainable development patterns. The first step, to be completed by January 1, 2010, is to prepare a preliminary scope of work and set the schedule and the costs for the comprehensive planning process. The Comprehensive Plan should be adopted by 2011, keeping in mind that it is a living document and future updates should be scheduled every 5 years.

2.2.2



A critical part of the Memphis and Shelby County Comprehensive Plan will be the Environmental Resource Protection component. This component will inventory and provide guidelines for the protection of priority wetlands, aquifer recharge areas, wildlife corridors, and critical habitats for threatened and endangered species.

2.2.3



If Memphis wants a first-class public transit system, there must be appropriate density levels to support it. The Memphis and Shelby County Comprehensive Plan will map the location of existing and future neighborhoods, employment centers and business districts with transit-ready density levels in conjunction with the adopted Long-Range Transportation Plan and Regional Transit Master Plan. Upon adoption of the Comprehensive Plan, the Unified Development Code (UDC) will be amended to include tools to ensure that newly proposed development or redevelopment plans are reviewed for conformance with the requirements for transit-ready neighborhood developments.



What is a Comprehensive Plan?

A Comprehensive Plan is an official government document that sets the goals, objectives, and operating policies for land use, development, and investment within a community. The Plan is created with the help of professional city planners through a public participation process that allows every member of the community the chance to contribute their ideas and have a voice in the process.

The Comprehensive Plan is an important tool for local governments because it establishes a vision of the kind of place our community wants to be in the future, and provides a clear course of action to guide us towards that shared vision. Comprehensive Plans typically cover a period of 20 years and can be updated every five years as needed.

Strategies

2.2.4



A key part of the Memphis and Shelby County Comprehensive Plan will be a bold Parks and Open Space component that includes equitable access to parks and open space while also providing for the active and passive recreational needs of all citizens. The Parks and Open Space and the Transportation sections of the Comprehensive Plan should be coordinated to connect parks and open spaces throughout the city and county with a cohesive bicycle and pedestrian network. In addition to recreation and open space needs, the Parks and Open Space section will address the need to maintain and preserve wildlife corridors as well as protect existing and restore disrupted ecosystems throughout Memphis and Shelby County.

2.2.5



The Comprehensive Plan will be responsive to the distinctive character of each neighborhood. As a result, neighborhood plans will be created with specific attention given to protecting and enhancing the character of established neighborhoods. Neighborhood plans will include specific tools that can be used to determine the desired density for neighborhoods based on location and services offered or proposed for the area. Special planning teams will be led by the DPD Neighborhood Planner for the targeted neighborhood.

Strategies

2.2.6



A greater emphasis on connectivity should be a hallmark of the Comprehensive Plan. It should create and reflect a direct link between major roads and the need for local connections and extensions. Towards this end, the City of Memphis and Shelby County should prepare a major road plan at the same time as the development of the Comprehensive Plan. The Major Road Plan should include existing and future collector streets, in addition to major road alignments and right-of-way requirements. Any modifications to the Major Road Plan must be approved by the appropriate legislative bodies.

2.2.7



As Mayor Wharton said, the present course of Shelby County is unsustainable. For that reason, Memphis City Council and the Shelby County Board of Commissioners should suspend the acceptance of applications for new residential developments smaller than four-acre lots within unincorporated Shelby County while the Memphis and Shelby County Comprehensive Plan is being prepared. Future policies should aim to discourage leap frog development and encourage infill.



Why 4 Acres?

Any development with lots smaller than four acres will at some point require the need for urban services. Currently, it is common in our community to allow two acre subdivisions with septic systems. This practice simply masks the need for urban services, leaving Shelby County tax payers to pick up the tab of extending services later.

If we are going to change our current pattern of development from an unsustainable path of sprawl to a path that will ensure that future generations can meet their needs, then we must stop our extension of sewers, roads, and other urban services into rural greenfields. We should allow the Comprehensive Plan to guide where we might extend urban services and

not continue to allow unplanned greenfield developments that only contribute to the problem. Limiting greenfield development to rural four acre lots will help ensure that the undeveloped portions of Shelby County be self-sustaining without the need to extend urban services prematurely.

Strategies

2.2.8



The LUCB is crucial to the execution of more sustainable policies, and because of it, the expertise and involvement must be broad-based and diverse. Greater technical expertise on the LUCB will enhance deliberations about zoning and land use within the city and county. Beginning July 1, 2010, the current make-up of the LUCB should be changed to include the chairmen of city and county legislative bodies' planning and zoning committees as ex-officio members; two architects, two developers, two civil engineers, two representatives from either a neighborhood or community advocacy group (or a combination thereof), and two professional planners. At least two of the board members will be LEED Accredited Professionals. DPD will work with the city and county mayors to implement this change. The Division of Planning and Development should work with the both mayor's offices to develop a plan and schedule for the city and county mayors to implement this change that takes into account the remaining terms of current appointments.

2.2.9



By December 31, 2009, the Joint Resolution and Ordinance (No. 2524) that created the LUCB should be amended to charge the Board with the responsibility of preparing, adopting, and implementing a comprehensive plan for the City of Memphis and unincorporated Shelby County. The Board should become an integral part of the long-range planning process through the preparation, adoption, and implementation of comprehensive, neighborhood, and district plans. The Board should be required to use the adopted plans as the basis for its decisions.

2.2.10



Because of the importance of the work of the LUCB, particularly as it relates to government budgets, Memphis and Shelby County should learn from other communities whose planning board members are given special training. Beginning October, 2009, LUCB members will be required to obtain a minimum of 12 hours of annual training provided by Memphis and Shelby County, to remain members of the body.

Strategies

2.2.11



Planning means little if it is not accompanied by advocacy. Beginning immediately, DPD will advocate strongly for its recommendations and adopted plans, because both have been based on professional training and sound planning principles. This style of advocacy will contribute to fuller exploration of issues by public boards and city and county legislative bodies.

2.2.12



Better trained planners produce better plans. Beginning January 1, 2010, the leadership of DPD will be required to prepare and direct a yearly “Training and Professional Development Plan.” This plan will identify gaps in skills and knowledge for each department, taking into account emerging trends and best practices. Each department’s Training and Professional Development Plan must be reviewed and approved by the Deputy Division Director. The plan will require at a minimum, quarterly in-house training sessions and attendance at a yearly division-wide staff retreat.

2.2.13



By October 1, 2009, the leadership of DPD and HCD should establish a process aimed at improving coordination and cooperation between the divisions with an eye toward alignment of resources, plans, and programs. In particular, the planning functions of the divisions should be collaborative as they address neighborhood redevelopment and planning projects, and the divisions should consider new structural approaches that address duplicate functions.

2.2.14



All planning decisions are made wiser by meaningful public involvement. Greater requirements for public input should be required by DPD. This could include such requirements as; providing electronic notices where users can sign up and receive notice of all land use applications within their community and more effective sign posting for all land use applications (zoning and subdivision). Additionally, public board meetings will be recorded, placed online and streamed live for public access and review.

Strategies

2.2.15



By January 1, 2010, DPD will begin the creation of a public participation plan to include public involvement in the planning process. The plan will spell out the public participation requirements for documents such as the comprehensive plan, neighborhood plans, annexation studies and other special interest plans and projects.

2.2.16



More up-to-date information on development trends can produce better informed decisions. Beginning July 1, 2010, DPD will create a quarterly reporting system, similar to the previously produced Urban Development Report, to track development patterns.

2.2.17



Sustainable development deserves special support from our community. If a private development is proposed as a LEED ND Certified Project, or the equivalent, the application will be fast tracked through the entitlement and permit process. By October 1, 2009, The Office of Sustainability will begin to work with relevant partners to develop a plan for fast tracking development applications.

2.2.18



Smart growth and sustainability deserve incentives. By January 1, 2011, Memphis and Shelby County should pass ordinances (and request state legislation) for “Sustainability Development Zones” where special bonuses are given for compact, mixed-use, transit-oriented, and energy-efficient development. These zones could capture a portion of sales tax revenue to help finance needed green infrastructure and public improvements.



What is LEED for Neighborhood Development?

Leadership in Energy and Environmental Design for Neighborhood Development (LEED ND) is a rating system developed by the US Green Building Council (USGBC) that integrates the principles of smart growth, new urbanism, and green building into the first national standard for neighborhood design.

Why should we encourage LEED ND Projects?

LEED ND ensures development projects that successfully protect and enhance the overall health, natural environment, and quality of life of our communities. This rating system encourages smart growth and New Urbanist best practices, promoting the location and

design of neighborhoods that reduce vehicle miles traveled and communities where jobs and services are accessible by foot or public transit. It promotes more efficient energy and water use—especially important in urban areas where infrastructure is often overtaxed. *(Source: USGBC website)*

Strategies

2.2.19



The overuse of planned developments eliminates the predictability that lies at the core of responsible, credible zoning and plans supported by the public. After the completion of the Memphis and Shelby County Comprehensive Plan and associated comprehensive rezoning, the UDC should be amended to require that planned developments be approved by ordinance.

2.2.20



Neighborhoods should be assured that city and county governments have a sincere commitment to environmental justice. To this end, the UDC should include additional use standards for certain hazardous waste industrial uses, including radioactive materials.

2.2.21



Streets that are too wide result in cars that travel too fast. The UDC should require new local street lanes to be no wider than the measurement that corresponds to the desired automobile speed needed for the neighborhood and surrounding area.

2.2.22



Decisions about roadway designs should involve planners and neighborhood representatives and not just engineers. DPD and Memphis and Shelby County Engineering should study existing streets to determine those that have characteristics that encourage excessive traffic speeds. Based on that analysis, DPD should initiate plans for reducing lane number or widths or to provide other traffic calming devices on those streets.



What is the Unified Development Code (UDC)?

The Unified Development Code will incorporate the zoning and subdivision ordinances for the City of Memphis and unincorporated Shelby County into one consolidated document. The Memphis and Shelby County planning region spans the full range of development intensity—from dense urban core to rural farmland. Subsequently, the new code will accom-

modate a broad development typology while remaining easy-to-use by administrators, developers, and the general public.

The new code is not just a rehash of the existing regulations. It represents a substantial shift in the approach to regulation—supported by a committee of developers, engineers, architects

and planners—and draws on such recent efforts as Sustainable Shelby to provide a long-term foundation for new development patterns. The code not only enables smart infill, it improves the quality of development across the board and integrates street and streetscape design with adjacent development

Strategies

2.2.23



Abundant inexpensive parking encourages single occupancy driving and discourages alternative forms of transportation such as public transportation, carpooling, and biking. The UDC should implement reduced parking requirements and provide maximum allowances based on the current best planning practices.

2.2.24



The UDC should limit surface parking lots in urban areas. To do this, it should encourage the redevelopment of buildings on existing surface parking lots in pedestrian-oriented neighborhoods and require street edges to be designed to bring liner buildings up to the streets with associated parking placed in the rear, or when appropriate, in mid-block structures. The UDC should permit angular on-street parking in pedestrian-oriented neighborhoods where appropriate.

2.2.25



By September 1, 2009, our community should create a diverse task force, including agencies such as Memphis and Shelby County Construction Code Enforcement, Memphis Fire Department, Memphis Light, Gas and Water, and private sector groups charged with identifying barriers in the existing technical codes and other regulatory codes that prevent or discourage sustainable development and green building practices. The task force should then recommend amendments to local and state legislative bodies that eliminate any barriers to sustainable development or green building practices and promote these practices in lieu of traditional development and building practices.

2.2.26



People with knowledge of sustainability issues are needed on boards that set technical building standards for our community. Memphis and Shelby County Governments should establish a policy that all technical building code committees and appeals boards have at least two LEED-Accredited Professionals.



Examples of Green Building Practices that are currently not permitted

Dual Flush Toilet and Waterless Urinals
Greywater Reuse
Rainwater Capture Reuse
Geothermal Heating and Cooling



2.3

Capital Improvement Program

Spending and investment by local government should be a clear reflection of the values and priorities of a community. Public investments should encourage and reinforce the principles of sustainability and solve the growing problems of urban disinvestment and suburban sprawl. Once an official Comprehensive Plan is in place, the funding and projects of the Memphis and Shelby County Capital Improvement Programs (CIPs) must be consistent with the plan and reflect our community commitment to sustainability. Now more than ever, we need to be making wise choices about the future we wish to create.

Strategies

2.3.1



Public investments must act as levers for progress by being connected to a plan for a stronger sustainable community. Memphis and Shelby County CIPs' should be reviewed for consistency with the adopted Comprehensive Plan during the CIP budgeting process. As part of this process, DPD should prepare a written Conformance Evaluation for each proposed CIP investment.

2.3.2



Sustainability must be a factor in evaluating public investments. The Office of Sustainability will provide a Sustainability Impact Statement for each proposed project within the Memphis and Shelby County CIP and for key pieces of legislation and policy decisions considered by Shelby County Government. The impact statement must be a key factor in the selection of projects within the CIP and for evaluating proposed policy and legislation based upon the principles of sustainability.

2.3.3



Community livability is no luxury. Instead, it is a competitive advantage for cities in the knowledge economy. Urban art projects whose funding is guaranteed by CIP funding should be expanded to include Shelby County Government, Memphis City Schools, and Shelby County Schools in earmarking one percent of all CIP projects for urban art by July 1, 2010. At the same time, local Urban Art CIP programs should be amended to allow funding to be spent in alignment with an Urban Arts Plan so that funds are not limited to a site-specific project.



Community Redevelopment

A vibrant and successful urban core is crucial to the ultimate success of a sustainable community. Disinvestment and neglect have weakened our urban core, but it has strong assets that can become the foundation for new progress. Reinvestment in urban areas and urban infill makes wise use of our scarce financial resources because the infrastructure is already in place.

Programs and incentives to strengthen small businesses and neighborhood commercial businesses are needed. Neighborhood nuisances and blighted properties must be treated with the seriousness they deserve and tax delinquent property needs to be put back into productive use. A revived Home Buyers Revolving Loan Fund can help steer investment in areas prime for redevelopment while providing expanded opportunities for home ownership, and an official Reinvestment Boundary for the City of Memphis and unincorporated Shelby County will identify the areas where new development should be located and incentives should be targeted.

Strategies

2.4.1



Sustainable neighborhoods are characterized by vibrant commercial districts. By July 31, 2010, DPD will work with HCD and their existing neighborhood-level commercial revitalization initiatives to support locally-owned small businesses. This partnership should coordinate new and existing programs to better address the unique challenges facing urban areas. The programs include financing needed building upgrades and façade improvements, improving access to low interest loans and grant opportunities and providing business management counseling.

2.4.2



Neighborhood nuisances should be treated with the seriousness they deserve to protect neighborhood health. Memphis and Shelby County Governments should by July 1, 2010, provide a proactive Environmental Team (E-team) with dedicated staff that meets regularly, who would partner with neighborhoods to aggressively use the Tennessee Nuisance Law and the Neighborhood Preservation Act to address problem properties.

2.4.3



Proper maintenance is fundamental to healthy, sustainable neighborhoods by enhancing their appeal and protecting their value. By January 1, 2010, ordinances should be amended to add a modern property maintenance code that sets higher standards for the proper maintenance of privately and publicly-owned property. These standards could include maintaining the original transparency of commercial building fronts and retaining appropriate front and rear external lighting regardless of occupancy.

2.4.4



Land banks are proven platforms for neighborhood redevelopment. Beginning January 1, 2009, the Shelby County Land Bank Office should actively pursue State of Tennessee funding sources, such as Tennessee Housing Development Authority grants, to purchase private property adjacent to properties taken for non-payment of taxes. These combined properties will provide better opportunities for redevelopment projects or sustainable projects—such as urban gardening—that can rebuild declining neighborhoods.

Strategies

2.4.5



The current process for disposing of tax-delinquent properties is costly and time-consuming. By September 1, 2010, the Shelby County Land Bank Office should prepare a study that shows the revenue gained from the sale of tax delinquent properties versus revenues gained if the property could be freely “gifted” to county government to sell for use in a redevelopment project and returned to the tax rolls with a higher assessed value due to its revitalization. This information should be used to identify and seek support for further changes in legislation to provide the Land Bank with additional options in acquiring tax-delinquent properties.

2.4.6



Barriers to putting tax-delinquent property back into productive use need to be identified and removed. By January 1, 2010, Shelby County Administration should actively pursue the following legislation with the Shelby County Delegation: authority should be granted to Shelby County Government to receive unwanted property from owners that have unpaid taxes due; authority should be granted to allow county government the ability to gift property to 501.(C)(3) non-profit groups for purposes other than single-family residential development; and create a process to streamline the transfer and sale of tax reverted and surplus property.

2.4.7



By July 1, 2011, Shelby County Government should re-establish the highly successful Homebuyers Revolving Loan Program. This program should actively seek collaborative relationships with other relevant government, non-profit, housing, and real estate development agencies.

2.4.8



Small urban lots are ripe for redevelopment but it is difficult due to the current zoning standards. Within six months of the adoption of the UDC, DPD will identify and study existing smaller urban lots to determine whether they may be re-zoned to the R3 (minimum lot size 2,500 square feet) district.

2.4.9



Public investments make the most sense in areas with existing infrastructure and excess capacity. After the adoption of the Comprehensive Plan, DPD and HCD should work to establish an official Reinvestment Boundary within the City of Memphis and unincorporated Shelby County. The Reinvestment Boundary will result from detailed analysis identifying the location and condition of existing infrastructure and areas where excess capacity exists that are suitable for additional development. All public incentive programs should be limited to projects and areas within the official Reinvestment Boundary.



Sustainable & Great Places Go Hand-in-Hand

Sutton Mora Hayes, Executive Director
Cooper-Young Development Corporation

I am often asked if our developments are sustainable. We build homes for low- and moderate-income families in Midtown and they should be sustainable, they tell me.

People know the words “sustainable” and “green” now, and they ask the question to prove that they have heard of the concept, but also to hold me accountable for a concept that I am not sure many entirely understand at first glance. I know I did not understand it before I was able to research it through projects like Sustainable Shelby. Not that I am any kind of expert now. But I do have an understanding for what it is and what it can be, and I happily tell people that my work is sustainable. It may not involve solar panels or wind turbines, but it is sustainable.

In my line of work, sustainability is the key to building great places. It means growing and protecting what you have. It means investing in the existing people, infrastructure, and neighborhoods of Memphis.

It means infill development. To me, infill is the ultimate sustainable development. We reuse land and buildings that already have sewer and water lines that are easily tapped. Electricity and gas are easy to connect. The streets to the sites are already built, and the neighborhoods and neighbors are already there.

Everything is already connected, and connection is what makes great places great.

Reinvesting in neighborhoods that are already built saves time, money, and resources; none of which we have in abundance now. Sustainable Shelby recognizes the need for infill development and targeted investment, and that is so important to the continued revitalization of Memphis and Shelby County.





2.5

Public Realm

The public realm matters. It is our shared living room, our common ground, our community gathering place. Sustainable communities have welcoming, well-designed public places that encourage civic participation, promote face-to-face interaction, and provide places for rituals of celebration where our spirit of community is forged. Local government, nonprofit organizations, and the private sector have the shared responsibility to improve the quality of our public realm, and it begins with a commitment to quality urban design and increased efforts to animate public space with programs and activities that draw people in, creating a public realm that we can all be proud of.

Strategies

2.5.1



Our community is in dire need of high-quality public realm in every neighborhood. To accomplish this, the Memphis and Shelby County Comprehensive Plan and all neighborhood plans adopted after July 1, 2009, will contain standards and principals for creating a better public realm.

2.5.2



A commitment to design must be an integral part of public planning. By January 1, 2011, DPD will establish an in-house design studio for the creation of best practice planning documents. The studio will be staffed by and have access to urban designers, architects, landscape architects, graphic artists, and planners. The design studio will provide design support for plans created by Memphis and Shelby County Governments. The studio staff should partner with local educational institutions to expand the capabilities of the studio and provide design experience to students. Also, the studio should establish relationships with key partners like the Memphis Regional Design Center and Memphis College of Art.

2.5.3



By January 1, 2013, DPD, in conjunction with the City and County Engineering Divisions, should create a countywide Streetscape Master Plan. The master plan should identify the street types and their corresponding streetscape elements which could include raised crosswalks, curb extensions, street trees, on-street parking, bicycle lanes, medians, and street furniture. The master plan should also include design standards for the construction of new streets and improvements to existing streets. Additionally, special consideration should be given to identifying funding sources and implementation strategies.

2.5.4



Downtown is common ground for the entire community, and its public realm must speak to our commitment to public places that strengthen our sense of community, impress visitors, stimulate vibrancy, and improve quality of life. Unfortunately, funding for signage, sidewalks, and public works projects downtown is extremely limited. As a result, a Downtown Tax Increment Financing (TIF) District should be created immediately to provide the Center City Commission with a dedicated funding source needed to fully implement the Downtown Streetscape Master Plan. It is essential that our welcome mat to the region have well-maintained landscaping, more trees, safe and attractive sidewalks, paved alleys, and other pedestrian amenities.

Strategies

2.5.5



Private investment is critical to improving the overall quality of the public realm. The UDC should require all commercial property (including non-conformities) to install required landscaping improvements and achieve compliance with the existing sidewalk ordinance prior to the issuance of a Certificate of Occupancy Permit.

2.5.6



The use of native trees, plants, and shrubs is important to successful sustainable landscaping and streetscapes. Memphis and Shelby County should encourage neighborhoods to use vacant government-owned lots to plant native trees, plants, and shrubs to be planted as part of a community beautification project. Neighborhood volunteers assisted by local government would transplant these trees, plants, and shrubs once they are hardy enough to be relocated to the corridors in their neighborhood. In addition, a broader educational program should be created in partnership with the initiative to educate the community about the importance of urban forestry and native vegetation.

2.5.7



Trees are much more than welcome additions to the urban landscape. More to the point, they are vital to better air quality, the cooling of the city, prevention of soil erosion, reduction of CO₂ in the atmosphere, and making great neighborhoods. By January 1, 2010, our community must develop an urban forestry program and hire a full-time urban forester to audit the current system and to develop a Tree Master Plan. A goal of the urban forestry program should be to develop a community-wide initiative led by the City of Memphis and Shelby County Governments to plant 5,000 street trees per year.

2.5.8



Great neighborhoods have parks within walking distance. The Memphis and Shelby County Comprehensive Plan and City of Memphis Division of Park Services Facilities Master Plan should have a goal of providing a public park within a 10-minute walking distance of every neighborhood.



Why Plant Street Trees?

Jeff Speck
 "THE CITY LIVABLE: 12 Modest Suggestions
 for Making Memphis Great"

In addition to protecting the pedestrian from traffic and better shaping the street space, studies show that continuous street trees provide the following benefits:

- Absorption of the first 30% of most precipitation, reducing storm-water runoff.
- 5 to 15 degrees local sidewalk heat reduction.
- 4 to 7 degree reduction in overall urban temperature.
- UV protection.
- Significant absorption of tailpipe emissions.
- Significant reduction in ozone.
- \$15,000-25,000 increase in home or business value.
- 12% higher income streams to businesses.
- 40% to 60% lengthening of pavement life.

Strategies

2.5.9



By July 1, 2010, Memphis Area Transit Authority should provide efficient public transportation from all areas of the community to our regional parks such as Shelby Farms, Overton, Audubon, Kennedy, Martin Luther King Jr, Tom Lee, Jefferson Davis, and Confederate Park.

2.5.10



Shelby Farms Park should set the standard for a 21st century urban park, and because of it, sustainability must be a guiding principle for every improvement. All infrastructure improvements in the park should be high-performance infrastructure.

2.5.11



Design is not enough to create a great public realm. Public space must also be used and programmed. The public realm should include regularly scheduled activities and events to encourage usage by the general public. By August 1, 2009, an information packet should be created by the Center for Neighborhoods, in collaboration with other public entities, to provide interested organizations and individuals with all the information needed to reserve public space for events. The process for reserving space in the public realm such as parks, squares, and streets, should be streamlined to make the process as transparent and easy as possible.



Rethinking Transportation

With the escalating cost of fuel and a clearer understanding of the negative environmental and financial impacts associated with car dependency, transportation demands serious rethinking. Wise public investment and thoughtful planning can give people options—walking, biking, or using public transit—and can save money, reduce congestion, help the environment, and provide opportunities for healthier physical activity.

Higher aspirations for public transit and improved bus service can decrease the number of cars on the road and improve air quality. According to U.S. Census 2007 estimates, only 2% of working individuals in Shelby County used public transportation to get to work, far less than the national average of 5%. A dedicated funding source is needed for higher quality public transportation and expansion of service. A truly sustainable community demands a 21st century approach to addressing our transportation needs and challenges.

Strategies

2.6.1



Quality, dependable public transit is a competitive necessity for metropolitan areas, particularly in attracting and retaining talented workers for the knowledge economy. If our community is to have a 21st century public transit system, it needs a dedicated funding source for expanded, modernized service. Local governments and business development organizations should collaborate in lobbying the Tennessee Legislature to establish a dedicated funding source (such as a statewide gas tax) earmarked for better urban public transit. Until a dedicated funding source can be identified, MATA should be funded by county government and all municipal governments on a sliding scale so that effective and efficient service is provided throughout Shelby County by July 1, 2011.

2.6.2



By January 1, 2011, Memphis Area Transit Authority (MATA) and the Memphis Urban Area Metropolitan Planning Organization (MPO), with input from neighborhoods and other relevant stakeholders, will develop a Regional Transit Plan that would recommend strategies for creating a world-class public transit system throughout the greater Memphis region.

2.6.3



By July 1, 2010, MATA should acquire and implement technology to measure service performance such as Automatic Vehicle Location (AVL) and Automatic People Counters (APC) Devices.

2.6.4



Public transit is a lifeline between where workers live and where they work, and it is also key to reducing our community's carbon footprint. MATA should provide rapid bus service between residential areas and urban and suburban employment centers. This service should serve as an intermediate step in the planning of a bus rapid transit system and future light rail that could be a major economic generator for Shelby County.

Strategies

2.6.5



Downtown and Madison Avenue trolleys can be more than tourist attractions and can be dependable, effective people movers that help serve our greater transit needs. By July 1, 2010, MATA should evaluate the existing trolley service and address barriers that prevent them from providing regular, reliable, and on-time trolley service. Additionally, MATA should work toward the goal that other cities have realized of offering free service. Center City Commission should actively support this program by coordinating the involvement of the downtown merchants and assisting MATA in seeking sponsorships and donations in an effort to offer free trolley service in the future.

2.6.6



Public transit ridership should be made as convenient as possible. By July 1, 2010, MATA should sell discounted monthly transit passes to customers so that riders can realize greater financial benefits the more they use their pass.

The Ride Share program should offer free bus passes to private sector and government employees to encourage riding public transit.

2.6.7



2.6.8



Public transit should be bike-friendly. MATA, working with UrbanArt Commission, should design, install, and maintain bike racks near all transit centers. Also, bike racks should be included on all buses. The bike racks should be designed as public art for maximum positive community impact.

2.6.9



Well-functioning communities require that its plans relate to each other and interconnect for maximum effectiveness. The Unified Development Code should require all new development plans to comply with the Major Road Plan for road extensions and improvements, limiting the basis for waivers.

Strategies

2.6.10



Improved connectivity is a priority identified by national experts advising Sustainable Shelby. To address this problem, the MPO will incorporate a “connectivity analysis” into its Long-Range Transportation Plan. This analysis will identify locations where connectivity could be improved. As a result, local government can prioritize CIP funding and the connectivity analysis could become a component of the “Great Neighborhood Score.”

2.6.11



Effective transportation systems are essential to our economic growth and appropriate routes are essential to the health of neighborhoods. The MPO and its Freight Committee will partner with inter-modal rail yards, port operators, trucking companies, and neighborhood residents in high-freight volume areas to identify routes most in need of improvement and routes that need to be relocated.

2.6.12



When appropriate, the MPO will incorporate improvements identified in the Memphis Regional Chamber’s Infrastructure Study into the next Long-Range Transportation Plan scheduled to be adopted on August 28, 2012.

2.6.13



The staff of the Green Center and the Green Business Incubator, by July 1, 2010, will organize business plan competitions to create local car-sharing and bicycle-sharing programs to test these ideas within Shelby County. Winners of the competitions would receive assistance from the Office of Sustainability in securing seed money and sponsorships and support for the winning project.



What is Car Sharing?

*Source: ZipCar website

Car sharing programs can give people easy access to a personal automobile when they need one, but without the expense and long term commitment that goes along with car ownership. Car sharing programs can be operated as for-profit companies, non-profit companies, or in a variety of other models including co-op ownership. Most users of car sharing programs pay an annual mem-

bership fee, and then pay a set per hour fee for the amount of time they use the cars. Vehicles can usually be checked out by the hour, for the day, or for the weekend. The cost of gas, maintenance and insurance are all included in the program cost. A website that allows for online scheduling and personal electronic keys can help make car sharing programs almost as convenient as owning your own car.

In addition to saving money, participants of car sharing programs can significantly reduce their personal impact on the environment. For each car sharing vehicle in service, it is possible to take 15-20* personally-owned vehicles off the road. Fewer cars on the road means less congestion, less pollution, less dependence on oil, and improved local air quality.

Strategies

2.6.14



Livable cities are also bikeable cities. Our community needs to ensure that more attention is given to the role of bicycles—and a major indicator would be an ongoing bike lane program—as an alternative form of transportation and a component of sustainable neighborhoods. By January 1, 2009, the MPO will hire or designate a Bicycle and Pedestrian Coordinator for the greater Memphis region. The coordinator will advance the potential of new bicycle initiatives, ensure that bicycle needs are integrated into plans and support the efforts of grassroots bicycle organizations.

2.6.15



Cyclists and pedestrians are better served by complete streets, and every area of our community deserves them. By July 1, 2010, the MPO's Bicycle and Pedestrian Coordinator will update the Bicycle and Pedestrian Plan to incorporate changes suggested in the 2030 Long Range Transportation Plan. The Bicycle and Pedestrian Plan should identify bicycle lanes that can be easily striped, contain the latest design standards for bicycle and pedestrian facilities, and be consistent with local municipal plans.

2.6.16



Shelby County should promote an inter-jurisdictional dedicated funding source for bicycle and pedestrian improvements prioritized in the MPO's Bicycle and Pedestrian Plan in local CIPs and yearly operating budgets by January, 2010.

2.6.17



Memphis and Shelby County Health Department's Rideshare Program Funding should be used in imaginative ways. The Ride Sharing Program should consider ways to encourage carpooling, car-sharing, and bicycle sharing through prepaid gas cards and an interactive website or service for linking potential carpoolers with a goal of retooling the current rideshare program by July 1, 2010.



What is a Complete Street?

Complete Streets are designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists and transit riders of all ages and abilities are able to safely move along and across a complete street.



2.7

A Leader for Green Buildings

Memphis and Shelby County lag behind many comparable metros in their commitment to green buildings. At the beginning of this process, there were no LEED (Leadership in Energy and Environmental Design) Certified new buildings in Shelby County. We can do better. According to the U.S Green Building Council, buildings in the United States account for 72% of total electricity consumption, almost 14% of potable water consumption, and almost 40% of total CO₂ emissions.

But the commitment to green buildings is about more than environmental stewardship. It also is about financial stewardship. Green buildings can reduce water use by 40%, reduce energy use by 24-50%, reduce operating costs by 9%, and can improve indoor air quality and workforce and student productivity. Return on investment and occupancy ratio of green buildings has also been shown to be 6.6% and 3.5% higher respectively.

Strategies

2.7.1



Our community can be a leader in green buildings. By December 1, 2009, DPD will review existing green building codes throughout the United States and recommend how Memphis and Shelby County can implement model green building codes. These codes should advance new approaches that increase water and energy efficiency, decrease construction-related pollution, and improve the indoor air quality. As an intermediate step, a “Green Points” program will be developed and administered through the Office of Construction Code Enforcement requiring all new construction to submit a LEED for New Construction checklist and earn a specified minimum number of points in order to receive a building permit.

2.7.2



The Memphis and Shelby County Building Codes, by July 1, 2011, should be amended to require that all commercial buildings and multi-family residential buildings of 10,000 square feet or more achieve a minimum of LEED Certified or equivalent. By July 1, 2013, Building Codes should be amended to require that all new construction achieve a minimum of LEED Certified or equivalent.



Cities that Have Adopted Green Building Codes

Source: USGBC Website

Currently 112 local jurisdictions across the United States have adopted policies encouraging green building practices in their community.

Atlanta, GA	Boston, MA	Portland, OR
Anchorage, AK	Dallas, TX	San Antonio, TX
Austin, TX	Los Angeles, CA	San Francisco, CA
Baltimore, MD	Nashville, TN	



Building Code vs. Development Code: What is the Difference?

Building codes regulate how buildings are constructed to ensure structural soundness, safety, and some degree of efficiency. Development codes, like the UDC, control zoning, land use, subdivision of land, and more generally, the development patterns of our community. Because building codes are building specific, it is essential that there be no hurdles in our building codes that prevent high-performance green buildings.

Strategies

2.7.3

Government should lead by example by ensuring that its codes embrace and advocate for sustainable principles. Memphis and Shelby County should adopt an energy code to encourage better performing buildings. Examples of model energy codes to adopt could include the ASHRAE Standard 90.1 or the 2009 edition of the International Code Council Energy Conservation Code with local amendments for both residential and commercial construction by October, 2011. To complement the change, an educational program for the public should be conducted before the roll out of the new codes and all code inspectors should be trained about the changes. A quality control program should be initiated by the Office of Construction Code Enforcement to evaluate the level of accuracy of inspections.

2.7.4

By September 1, 2009, the Office of Sustainability will develop a public education and awareness campaign aimed at dispelling myths about the cost of green buildings and infrastructure. This information will be prominent on the Sustainable Shelby website and in all materials distributed by the office. The Office of Sustainability should create an interactive website by January 1, 2010, where builders can create a virtual green building to better understand the potential costs and savings of going green.

2.7.5

DPD, by January 1, 2010, should require all land use applications with a site plan component to have a completed LEED for Neighborhood Development (LEED ND) scorecard as part of the application review process. The LEED ND scorecard should include an explanation of each LEED ND credit and prerequisite describing how each will be achieved or why the applicant is unable to incorporate the credit into the project. The results of the scorecard will be considered when determining the staff recommendation for the project. The LEED ND Scorecard program should also be modified in the future to require that each application achieves a specified minimum number of points as a condition of project approval.

2.7.6

By December 1, 2010, the Office of Sustainability will poll developers about the types of incentives that would be most effective in creating the motivation to build more sustainable projects. At the same time, the office will review and evaluate incentives used in other major metro areas and comprise a list of all existing and potential public and private incentives for exceeding local standards for sustainable design. With this information, incentives should be created and marketed to developers.

Strategies

2.7.7

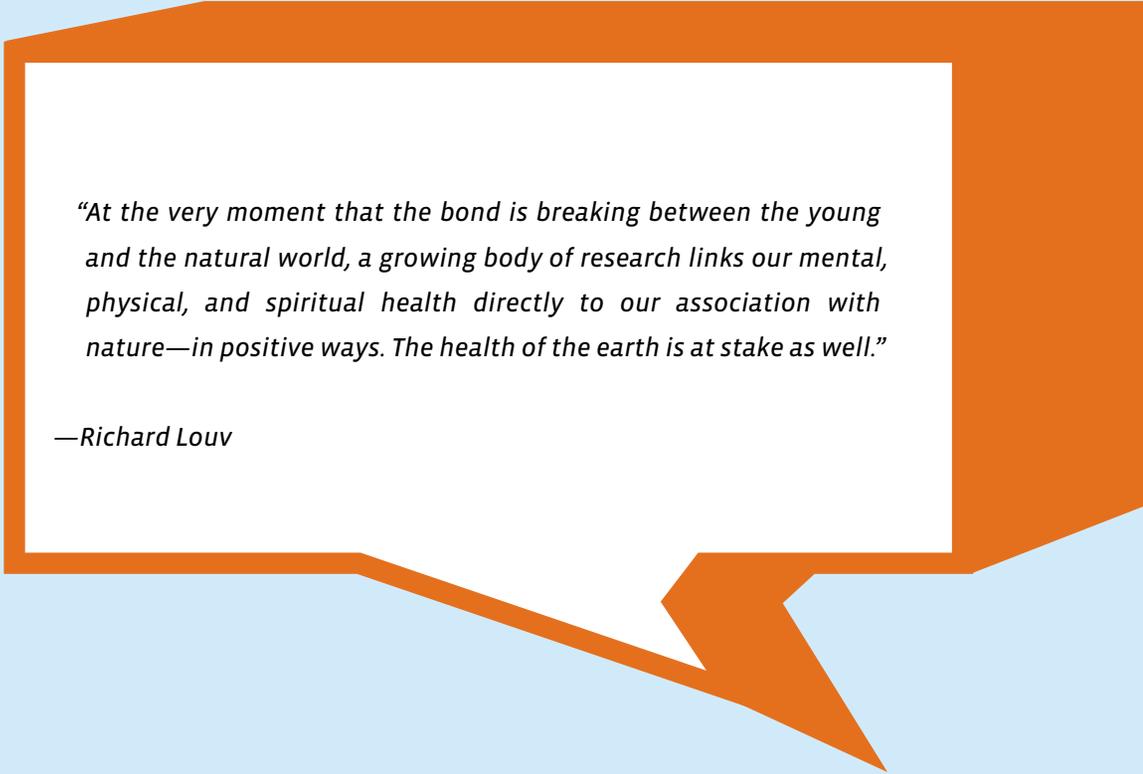


Prior to its adoption, the UDC should include incentives, such as density bonuses, when green roofs are included in a development plan. The green roof standards within the building code should be based on the American Society for the Testing of Materials green roof standards.

3

Protecting and Improving Our Environment





“At the very moment that the bond is breaking between the young and the natural world, a growing body of research links our mental, physical, and spiritual health directly to our association with nature—in positive ways. The health of the earth is at stake as well.”

—Richard Louv

Only a few years ago, becoming a sustainable community seemed a daunting, if not unachievable, ambition for our community.

And yet, today, green projects and programs are flourishing in all corners of Memphis and Shelby County. Already, we are home to a number of projects that inspire us to aim higher, act more boldly, and seek to set national standards. For example, the transformation of Shelby Farms Park, connected with Wolf River greenways and the CSX rails-to-trail project, possesses the potential to attract national attention to our community, but more importantly, the linkages of these unique natural resources will connect neighborhoods, people, and our community to a shared commitment for a greener city.

While there is reason to be encouraged, becoming a more sustainable community requires that we do a much better job of protecting and preserving our natural resources and improving overall environmental quality. More to the point, reducing our carbon footprint and protecting our natural environment are not things we do for purely philosophical reasons. In truth, it is our own enlightened self-interest. That's because more and more, environmental stewardship is a necessity tied to our ability to compete in the global economy and to attract new investments and jobs. Increasingly, companies are considering a city's environmental quality as a crucial element in their business development equations.

As we begin, we recognize that there is no single path to growing a green region. Instead, there must be multiple paths toward multiple destinations with a single overriding result—to create a prevailing green ethos in our region grounded in the principles of sustainability in all that we do, particularly in our consumption and the protection of our natural resources.





The Necessity of Green Space

Laura Adams
Deputy Director, Shelby Farms Park Conservancy

It has long been recognized that parks, greenways, and open spaces provide a diverse and quantifiable range of benefits to cities and counties. In 1868, after designing Central Park in New York City, Fredrick Law Olmstead lectured about the “vast increase in value of eligible sites for dwellings near public parks.” From strengthening our economy to improving our environment, to supporting our physical and psychological health, and making our cities and neighborhoods more attractive places to live and work and play, the benefits of parks are measurable and extend far beyond regular users to enrich the lives of every person who lives and works in our community.

That’s why Memphis and Shelby County are working to leverage the substantial and essential benefits provided by parks and greenways and open spaces.

ECONOMIC BENEFITS

Research has established that conserving and investing in green infrastructure —such as parks and trails—are investments that produces important economic benefits.

A study conducted by John L. Crompton of Texas A&M University suggests that property owners are willing to pay up to 20 percent more for property close to a park or greenway. That translates into higher property taxes which then enrich city and county government coffers.

Parks and greenways also play a vital role in economic development through the quality of life benefits they provide. In his 2002 book, *Rise of the Creative Class*, Richard Florida reported that in the “new economy” the environmental quality of a city is a key consideration for companies looking to expand or relocate, as well as for the attraction and retention of talented workers.

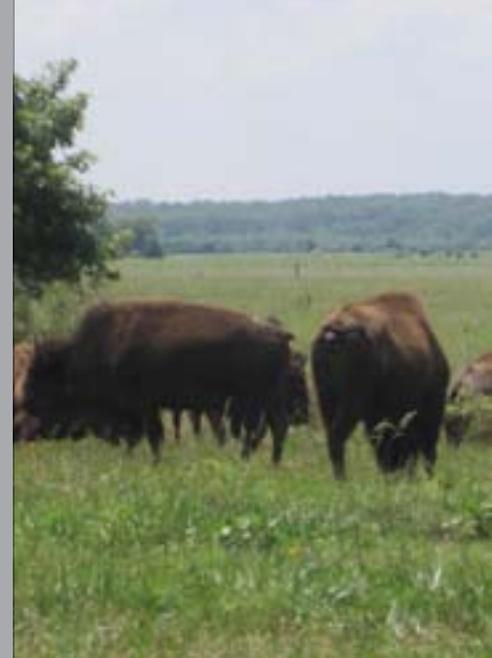
ENVIRONMENTAL BENEFITS

Parks, greenways, and other types of public open spaces serve communities by providing critical functions such as reducing energy use and storm water runoff, cleansing our water and air, providing habitat for wildlife and ecological integrity, and a host of other measurable environmental and public policy objectives that communities would otherwise need to pay for.

SOCIAL BENEFITS

Parks, greenways, and open spaces are valuable contributors to social community policy objectives, such as improved public health, youth development, providing “green job” opportunities, and building community.

A study published by the Center for Disease Control showed when people have access to parks and open spaces, they exercise more. Regular physical activity has been shown to reduce the risk of a wide range of diseases, including heart disease, hypertension, colon cancer, and diabetes. Physical activity also relieves symptoms of depression and anxiety, improves mood, and enhances psychological well-being. Beyond the benefits of exercise, a growing body of research shows that contact with the natural world improves physical and psychological health. And according to the American Planning Association green spaces, when adjacent to residential neighborhoods, have been shown to create neighborhoods with fewer violent and property crimes and where neighbors tend to support and protect one another.





3.1

Consumption

In most cases, reducing our environmental impact means reducing our consumption of energy and material goods. The good news is that there are small, easy, and smart ways to use less energy and water as well as ways to produce less trash. A campaign to conduct comprehensive energy audits for homes across Shelby County is needed to identify deficiencies in building performance and suggest ways to save money and energy. There should be an opportunity to recycle more of the debris from demolition sites and when buildings are constructed or demolished, keeping potentially reusable material out of our landfills. Local government can set an example, modeling environmentally friendly business practices and paying particular attention to improving overall efficiency. Reducing consumption not only makes good environmental sense. Most of all, it makes financial sense.

Strategies

3.1.1



Residents must know the cost of their home energy consumption and options for reducing it. New partnerships are needed - including local government, Tennessee Valley Authority, Memphis Light Gas & Water Division, the Memphis Chapter of American Institute of Architects, and the U.S. Green Building Council - to provide free on-site home energy audits for residents of Shelby County. The audits should identify deficiencies and provide homeowners with cost-effective energy improvement recommendations. Priority consideration for participation in the program should be given to low and moderate income residents. The free home energy audits should be a part of a larger public awareness campaign coordinated by the Office of Sustainability that is focused on teaching the importance of home energy conservation.

3.1.2



Renters deserve opportunities and choices for sustainable housing. The City of Memphis code of ordinance should be amended to set minimum standards for energy efficiency for all rental property by June 1, 2009.

3.1.3



By July 1, 2010, Shelby County Government should allow individual departments and divisions to use grant funds from the county government's Efficiency Grant Program to implement efficiency measures. Savings from these measures should be rolled back into the grant program to inspire future efficiency improvements.

3.1.4



Consumers need more information if they are to make sustainable choices for their lives, especially as those choices relate to home purchases. A new ordinance should be created to require an energy audit, using a rating system such as the Home Energy Rating System (HERS) Index, before new or existing homes are sold. As a result, potential home buyers will have specific information about the thermal performance and energy efficiency of the home to aid in their home purchasing decision.

Strategies

3.1.5



Recycling is the cornerstone to creating fundamental green behavior in our community. By July 1, 2011, local demolition permits should be amended to require applicants to submit a recycling plan for proposed demolition of structures larger than 2,500 square feet. Additionally, there should be requirements for recycling 25-50% of all demolition or construction waste for all construction projects requiring a permit.

3.1.6



Local governments should conduct comprehensive waste audits of public buildings to better understand the amount of resources used and thrown away. Memphis and Shelby County government should complete the waste audits by June 1, 2010. This process should be documented to serve as a model for other governments and larger employers.

3.1.7



As major employers in our community, Memphis and Shelby County Governments will become leaders for recycling and will encourage other local governments and major employers to follow their example. By January 1, 2010, all county buildings should have recycling programs and designated areas where recyclable materials (including aluminum cans, plastic bottles, office paper, cardboard, and ink cartridges) can be collected. Memphis and Shelby County Governments should be leaders in reusing materials whenever possible and reducing the use of disposable items.



Getting the Direction Right

Cheryl Goudie, Ph.D.
Ecological Research Center
University of Memphis

Ecological Research Center, University of Memphis
The Ecological Research Center was excited to hear about the Sustainable Shelby project. It confirmed that we were headed in the right direction regarding the new training that our graduate and undergraduate students would require to be successful in the new “green” economy.

We recently began the Urban Ecology Initiative here at the University because we realized that traditional ecology programs were not sufficiently preparing students for the jobs they would occupy in the urban workforce.

A traditional ecology background did not offer adequate interdisciplinary experiences to train them for jobs in private organizations, or city and county governments, where their responsibilities would require economic and equitable decisions regarding land use, environmental health and safety issues and public policy, and where skills in communication, diplomacy and even psychology (in addition to their ecological knowledge) would be imperatives.

While the urban environment is the only one that is experiencing continued growth (about one-fourth of the human population will live in urban environments by 2050), it is the one we know the least about. We must have a trained workforce that is able to take established approaches to maintenance of biodiversity and

conservation of natural resources, and apply them to the urban environment—a challenging situation because of conflicts between the ever expanding built environment that accompanies human activities (homes, stores, schools, etc. and transportation) and the plants and animals that are encroached upon and displaced by human activities—all of this, while promoting a high quality of life for all.

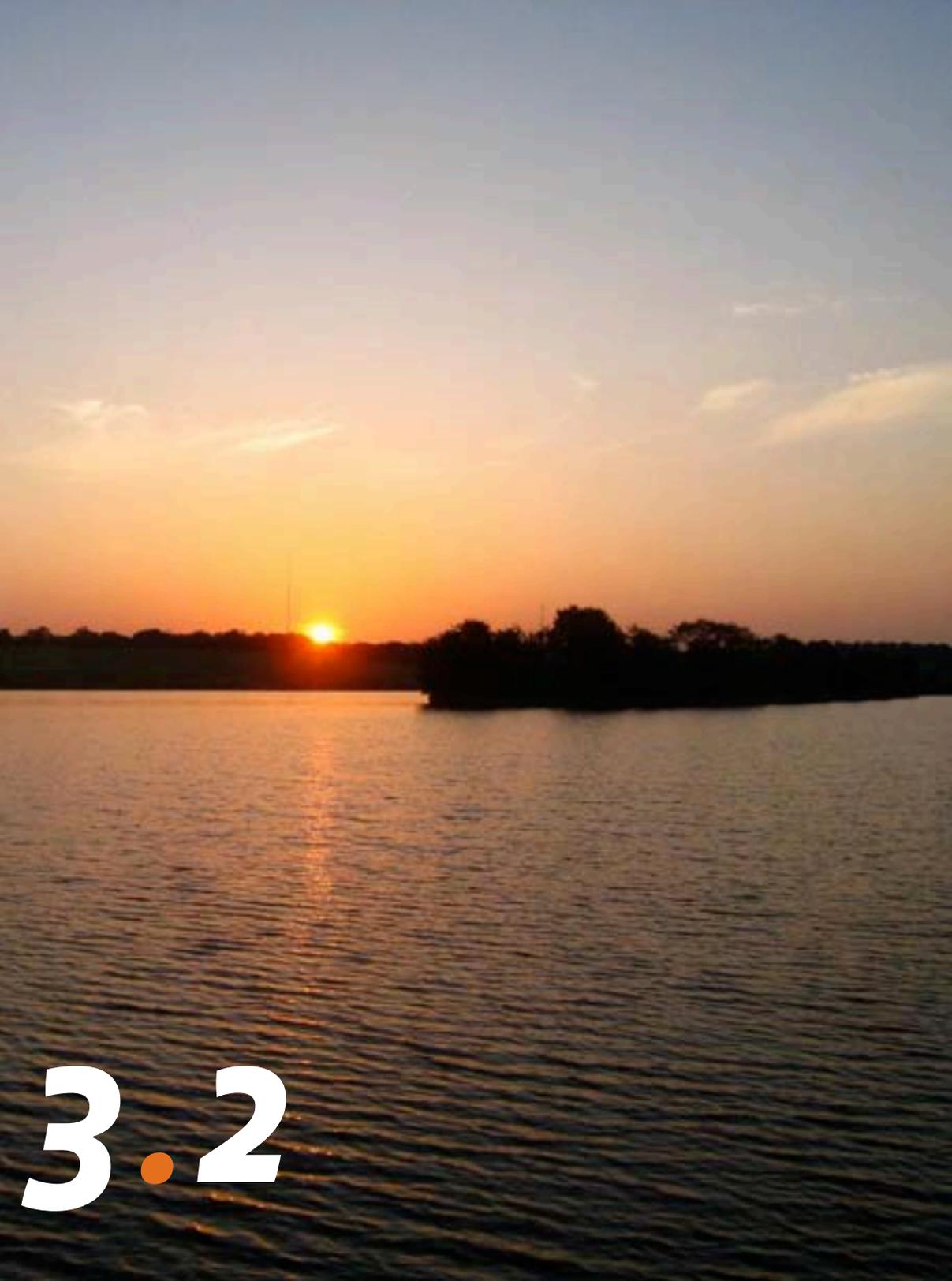
How can this be accomplished? Sustainable Shelby is an impressive start.

It takes great leadership to change the “business as usual” stranglehold in most civic organizations and governments: these are times when great leadership is needed. Mayor Wharton had heard of a change coming (the terms “sustainable” and “green” have been talked about around the world for the past quarter century and have gained momentum in this country during the last 5-10 years) and responded to it in a very thoughtful and planned manner. To take government employees off their regular jobs, to pair them with working citizens, to conduct surveys of hundreds of other citizens, to hold public commenting opportunities, and to come up with a consensus working document that will become the framework for Shelby County operations into the future demonstrates the high level of commitment that Mayor Wharton has toward sustainable and equitable development and natural resource stewardship.

Bringing sustainability issues to the forefront of government policy will do much to improve the image of Shelby County, and it comes at a time when quality of life is the single most important factor that attracts and retains a highly skilled, college-educated workforce. The University of Memphis, as a major anchor institution in Shelby County and as a significant consumer of resources, also has a responsibility to lead, and in fact, is in the process of evaluating its own sustainability footprint. As a consequence, we anticipate development of more sustainable energy use and operational practices, establishment of more sustainability-focused educational and research efforts, and graduation of more ecologically-literate and sustainability-minded students who will become future civic leaders.

The continued commitment of Mayor Wharton to implement the highest priority outcomes of Sustainable Shelby will help establish an environmental ethic in county government that hopefully will be translated to Shelby County citizens. We must all realize, however, that this is a trans-generational commitment—one that transcends all age groups, and if done correctly, will transcend all time. We anticipate that Sustainable Shelby will meet the expectations of its citizens to “create a great public realm for our community” and look forward to seeing it happen.





Protecting Natural Resources

A sustainable community requires a renewed commitment to our roles as stewards of our natural resources. Clean air, water, and protected areas of natural beauty are not only important for their environmental values, but they contribute significantly to the overall quality of life in our community. In this way, local ground water quality and quantity is a competitive advantage that must be maintained. Special attention is needed to preserve and enhance air and water quality throughout the region. A comprehensive environmental assessment and benchmarking process will help identify our environmental assets and the necessary steps to protect them.



Strategies

3.2.1



On behalf of our community, by October 1, 2009, Shelby County Government will join the ICLEI (International Council for Local Environmental Initiatives) and the ICLEI's Carbon Disclosure Project in an effort to reduce the county's carbon footprint. In addition, Memphis and Shelby County should sign the Mayors' Kyoto Accord.

3.2.2



People need to know what their carbon footprints are if they are to reduce them. By January 1, 2011 Memphis Light, Gas, and Water Division should revise its billing statements to show each customer how much carbon dioxide is released as a result of their individual energy use. The billing statements should also include monthly tips for reducing household carbon footprint.

3.2.3



Protecting natural resources can only be successful when we know what resources we have, what resources have been damaged or threatened, and the importance of these resources. By January, 2010, Shelby County Government and the Office of Sustainability will begin an Environmental Quality Assessment Program for Memphis and Shelby County using the ICLEI's (International Council for Local Environmental Initiatives) five milestone approach. The Environmental Quality Assessment Program is an ongoing process to assess the current environmental conditions within Shelby County and establish baseline measurements and specific goals for improving environmental quality and reducing pollution levels. The Environmental Quality Assessment Program will be a joint effort between the public and private sectors and will require the involvement of nonprofit groups and all concerned citizens.



What is ICLEI's Five Milestone Approach?

The five milestones provide a flexible framework that can accommodate varying levels of analysis, effort, and availability of data. ICLEI has developed several software tools that help cities comply with the methodology.

Milestone 1: Conduct an Environmental Assessment
 Milestone 2: Establish a Reduction Target
 Milestone 3: Develop a Local Action Plan
 Milestone 4: Implement the Local Action Plan
 Milestone 5: Monitor Progress and Report Results

ICLEI-Local Governments for Sustainability (ICLEI) is a membership association of local governments committed to advancing climate protection and sustainable development.

Strategies

3.2.4



Air quality is a priority for every citizen of this community—for personal health reasons and for the competitiveness of our economy. The Memphis and Shelby County Health Department should help other municipalities and organizations apply for all applicable Congestion Mitigation and Air Quality Improvement Program (CMAQ) grants provided by the Tennessee Department of Transportation.

3.2.5



Pure, abundant, water is an irreplaceable natural resource. The health and welfare of our community depend on a high quality, plentiful source of ground water and protection of our aquifers and artesian wells. By October, 2010, Memphis and Shelby County Government, in collaboration with the Ground Water Institute, should initiate a public planning process with non-profit partners, environmental interest groups, and government agencies to develop a Regional Water Resources Plan. The Plan should include strategies to protect major water basins and ground water recharge areas, ensure that all streams within the region meet the appropriate State Water Quality Standards, and that negative ground water and watershed impacts associated with development activities and land uses are minimized or mitigated to the maximum extent possible. The Plan should identify water quality problems within the region, maintain a system for tracking and reporting the condition of these water resources, and develop policies to improve their condition.

3.2.6



Since the issues of ground water quality and quantity are so intimately related to the protection of the recharge areas, the Shelby County Legislative Delegation, in cooperation with legislative representatives from adjoining states and counties, should work to form an inter-state coalition to oversee issues and factors that affect ground water quality and quantity. This organization could be similar to the Ground Water Quality Control Board, it could be a broadened Chickasaw Basin Authority, or it could be an entirely new board that crosses political boundaries.

3.2.7



The Unified Development Code (UDC) must be an effective tool for protecting the environment. The UDC should have an environmental protection zoning overlay to restrict inappropriate new development in environmentally sensitive areas.

Strategies

3.2.8



New alliances on sustainability issues should be built between all sectors of the community with an emphasis on removing adversarial relationships, particularly as it relates to environmental justice. The Shelby County Title VI coordinator should take the lead in establishing these new relationships with local environmental justice offices to identify, communicate, and collaborate on environmental concerns that threaten some neighborhoods. The process for this new relationship should begin January 1, 2010.

3.2.9



The Shelby County Title VI coordinator, in partnership with community members, by November 1, 2009, will create an environmental justice training program for public sector staff and other interested organizations.

3.2.10



Public health can be a powerful lever for neighborhood success. The Memphis and Shelby County Health Equity and Community Development program is an exemplary holistic, community-based approach to ensure that all citizens have access to quality health care, preventative programs, and information about healthy lifestyles. A priority for the Office of Sustainability should be to help recruit organizations that will be partners for this important program.

3.2.11



Greening Greater Memphis' proposal for a network of green assets should be adopted as a priority for our community. A broad-based alliance of government, business, philanthropic organizations, and environmental groups can create momentum for an interconnected system that includes Shelby Farms Parks, CSX Greenline, and Wolf River Conservancy greenways that link the eastern edge of the county to the downtown riverfront. This necklace of green should also include the Martin Luther King and Riverside Parks to maximize the opportunity of linking the diverse areas and people of the community.

Strategies

3.2.12



City of Memphis Division of Parks Services should lead efforts to enhance access to area rivers and lakes for recreational water activities in conformance with best practices for parks and open space.

4

Greening Our Economy





“It’s time to replace the cliché of green policy as sacrifice and instead recognize that for progressive regions and their residents, being green pays handsome economic dividends.”

—Joe Cortright, Impresa Consulting, Portland, OR

According to a recent Congressional committee, as much as one-fourth of America's workforce could be employed in green jobs by 2030.

Our community must act quickly, decisively, and boldly to develop and expand this segment of the economy. While Memphis was recently ranked 46th among the 50 largest cities for its green economy by the SustainLane website, our community can draw inspiration by the presence of Memphis BioWorks Foundation and BioDimensions, where our unique community niche and our distinctive competitive advantage in the emerging green economy are being identified.

Research has concluded that greening activities make financial sense for homeowners in particular. Clearing and greening a vacant lot leads to a 17% rise in value for adjacent properties and improving streetscapes increase nearby homes' values by 28%. Energy efficient windows reduce heating costs by 40%, students score higher on standardized tests in schools with natural lighting, and "healthy buildings" dramatically reduce health insurance costs and increase productivity.



Healthy Buildings are the Answers to "Sick Building Syndrome"

Sick Buildings Syndrome (SBS) is a combination of ailments associated with an individual's place of work or residence. Most of the sick building syndrome is related to poor indoor air quality. Sick building causes are frequently pinned down to flaws in the heating, ventilation, and air conditioning (HVAC) systems. Other causes have been attributed to

contaminants produced by outgassing of some types of building materials, volatile organic compounds, molds, improper exhaust ventilation of light industrial chemicals used within, or fresh-air intake location / lack of adequate air filtration. Healthy Building Systems are based on the successful fulfillment of many requirements. Buildings are boxes

of air that provide comfort and shelter from outdoor environments, but in reality, they are a complex, interconnected set of building materials and systems carefully woven together. Any product used in constructing the building must be able to work in a positive and mutually beneficial manner with all the other building components.

While the direct benefits of sustainability are impressive, the indirect benefits are just as important. For example, the key factor in determining if cities succeed in today's challenging economic environment is the presence of college-educated 25-34 year-olds, who are the most highly-educated, entrepreneurial, and mobile generation in history. According to CEOs for Cities recent research, these highly coveted workers decide where to live before they decide where to work.

When asked what cities have to do to keep them and attract others, these workers said it has to be green, clean, and safe. In other words, sustainability is a direct, persuasive force in attracting and creating the quality workforce that is needed by our community to succeed in the knowledge economy.

While the economic development strategies in this chapter are largely aimed at governments' role, Sustainable Shelby strongly urges ongoing economic growth plans like "Memphis Fast Forward" to make sustainability a core theme and objective.

In truth, all of the strategies in this Sustainable Shelby report are economic development strategies. It is in creating the kind of community that values and invests in parks, bike lanes, walkable neighborhoods, green jobs, recycling, and green buildings that we develop the competitive advantages that lead to our success in growing our economy.



This inter-dependency is the underlying principle behind the "systems approach." The systems approach is a method of design, construction, inspection and testing that accounts for the interactions of the various building components, such as the foundation, walls, roofs, doors, insulation, and mechanical systems, along with factors like site, climate, and occupant behavior.

If these interactions are not accounted for, Mother Nature will prevail and problems inevitably occur. Combining the systems approach with proven, new building materials allows designers and builders to create mold resistant, healthy buildings and homes that are good for the adults and children who occupy them.



Urban Child Institute

Kenya Bradshaw

My favorite published definition of sustainability so far is Paul Hawkin's definition from the *Ecology of Commerce*, because of his Child friendly inclusion of the economic golden rule, "Sustainability is an economic state where the demands placed upon the environment by people and commerce can be met without reducing the capacity of the environment to provide for future generations. It can also be expressed in the simple terms of an economic golden rule for the restorative economy: leave the world better than you found it, take no more than you need, try not to harm life of the environment, make amends if you do."

This Economic Golden Rule is so important to Shelby County because we have the largest population of children in the State of Tennessee. At the same time, we are the leader in the 50 largest cities in the U.S. with the highest poverty rate. Poverty is an economic

condition foisted upon children without their consent and which has lifelong ramifications for their well-being and success.

The economic future of our community is dependent on the actions that we take now. This is why I am excited about the process that Sustainable Shelby has undertaken to incorporate recycling, weatherization, tree planting and green jobs into our community's conversation about growth and its future.

The county that we leave will be inherited by a new generation that must value all of its citizenry. A society is judged by how it treats its most vulnerable. By investing now in sustainability, we are teaching our children and future generations the value of our local resources like land, light, air and water.





4.1

Green Jobs

It was only a short time ago that no one knew what green jobs were. Skeptics scoffed that it was just the newest buzzword of politicians and environmentalists. Governments placed little emphasis on shifting their communities to the green economy. Companies saw little connection between sustainable business practices and the bottom line. Today, all that has changed.

It is unquestionable that the green economy, green jobs, and sustainable businesses are essential for future economic growth, ranging from the weatherization of homes to the installation of solar panels, from the development of bio-based products to erection of wind turbines, and from the retrofitting of buildings for increased efficiency to the recycling of everything from demolition materials to cooking oil.

As the fundamental changes in our economy inspire new thinking about old problems, government has a pivotal role to play in setting the stage for green jobs, in aligning its incentives to encourage them, and to challenge and support new public private partnerships, such as a creating a Green Business Incubator and Green Technology Industrial Park. Local economic development plans must be revised and updated to respond to the unique demands and opportunities of the green economy and green jobs.

After all, green jobs are no longer seen as just a topic for researchers and activists, but as a pathway out of poverty for people trained to respond to the growing demand for sustainable lifestyles and renewable energy, particularly in their own neighborhoods. Best of all, green jobs can't be out-sourced to other countries.

Strategies

4.1.1



Green technology and green jobs are important generators for new employment opportunities in urbanized areas like ours. There should be collective attention given to infusing green economic development strategies into existing and future economic development efforts that can create jobs and attract new investment. Government economic development agencies, the Greater Memphis Chamber, and other local organizations should develop an agenda for the future that builds into their existing and future economic development plans to create green jobs and grow a green sector in the regional economy.

4.1.2



The Office of Sustainability and the local business community will partner with the University of Memphis to increase local research capacity for green technologies and renewable energy. By August, 2011, a Cleantech Demonstration Center should be formed on-campus to create, test, and showcase products, materials and processes developed through the partnership. The Green Business Incubator could be used to create start up companies resulting from the research performed at the Cleantech Demonstration Center.

4.1.3



The Office of Sustainability will be charged with actively pursuing grants and other private funding opportunities to establish a Sustainability Seed Fund. This fund would provide early stage capital for local green businesses, innovators, and participants in the Green Business Incubator. The awarding of funding will be competitive and place emphasis on anticipated economic development impact and job creation potential. A yearly status report will be published and made available to the general public describing the current amount in the fund and identifying current and future projects that have received funding.



Green Jobs

Leah Wells

BioDimensions

“Green jobs” have two components. First, they are jobs created in the production of goods and services that reduce harmful effects on the environment or in other ways encourage sustainability. Green employers of the future include those involved in energy efficiency, renewable energy, eco-building, and sustainable agriculture. Secondly, “Green jobs” deal with the quality of the job and the opportunity to employ and advance

disenfranchised populations in the emerging sustainable economy of the future. In the short term, the largest quantity of “green jobs” in Shelby County will be created through the weatherization of residential and commercial buildings, as well as other energy efficiency retrofits and green building. In the mid-to-long term, “green jobs” in Shelby County will involve the production of a diverse group of farm crops, the local delivery and use of these

crops, and the development of renewable biobased products often called “green chemistry.” Efforts are underway to develop a workforce training pipeline that engages disenfranchised populations in the short term green jobs, while offering career advancement opportunities toward the future.

Strategies

4.1.4



Memphis and Shelby County Governments and the Office of Sustainability will issue an RFP (request for proposal) for the creation of a local Green Technology Industrial Park. The Green Technology Industrial Park will be a public-private partnership that serves as a place for green businesses to work together collaboratively to build synergy for a locally emerging green technology sector. The Park should also be located strategically in order to reuse vacant or underutilized public buildings or surplus public property and provide additional employment opportunities to under-served communities. The Park will be the place where businesses that have been established through the Green Business Incubator can grow and expand.

4.1.5



The Workforce Investment Network (WIN) must be a major motivator and investor in green jobs and a key source in training a workforce for green technology. By October 1, 2009, WIN should provide funding and support for Green Job training programs through current workforce training programs. WIN and the Memphis Career Center should partner with the Green Jobs Council once it is established to identify green job opportunities. As an immediate opportunity, the program should begin by using existing city and county programs related to energy conservation improvements and weatherization for residential structures.

4.1.6



The Memphis Convention and Visitors Bureau will identify and pursue national Green Job and “Cleantech” events and conferences to bring to Memphis and Shelby County.



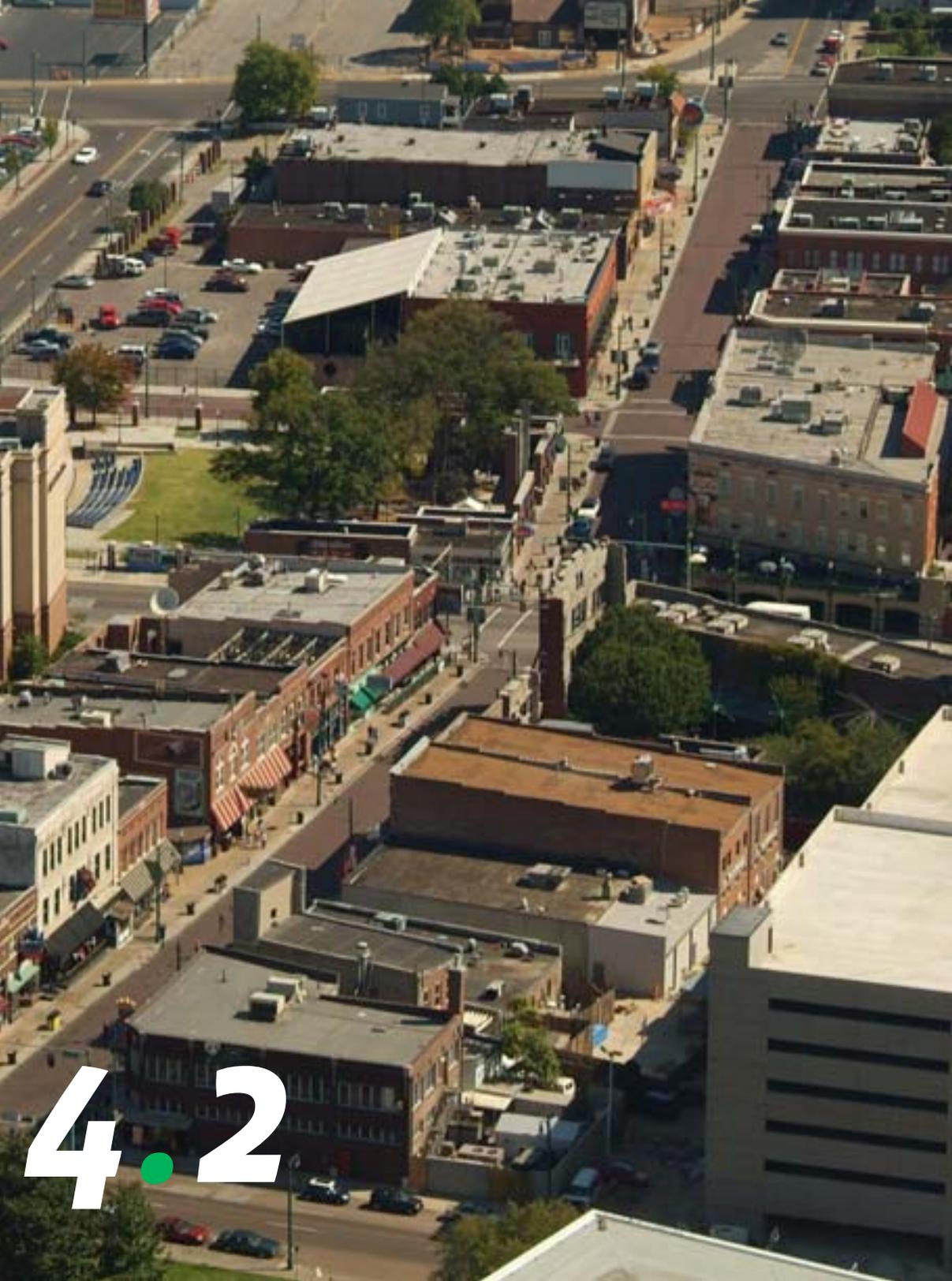
Majora Carter
*Sustainable South Bronx,
New York City*

“We want to use the green-collar movement to move people out of poverty. Little green fairies do not come out of the sky and install solar panels. Someone has to do the work.”



John E. Gnuschke
*Sparks Bureau of Business
and Economic Research,
University of Memphis*

“This may be the stage of the (green) revolution that generates a critical mass of sustainable public and private support for everything green. Finally, green industries may have arrived at the development stage that will allow them to capitalize on the technology revolution to move the nation toward more environmentally friendly consumption and production patterns.”



4.2

Economic Development

A core belief—as well as the reality—of sustainability is that its benefits are shared by all people. The new green economy offers a chance to improve the quality of life for everyone—especially those that may be unemployed, under-employed, or treated as unemployable. These new job opportunities will improve our triple bottom line—community, environment, and economy—while, enhancing the quality of life that is crucial to economic success in the new economy.

Economic development must become a broad and comprehensive effort. We must break the outdated and ineffectual silos of activity that are barriers to coordinated, collaborative action and instead embrace new green ways of creating economic growth.

Bold action is needed if Memphis and Shelby County are to participate fully in the emerging green economy. A bi-annual sustainable business conference will help bring new ideas into the region and provide networking opportunities for local entrepreneurs. Applications for government incentives and development entitlements must be revised to truly reflect our commitment to sustainability. An open, multi-service fiber network could serve as a generator for small start-up businesses and attracting more young creative people into the region. Local government must also work to remove regulatory barriers to improve farmers markets and access to local food.

There could not be a better time for this emphasis on the green economy. The increased interest by the federal government in renewable energy and energy efficiency programs to reduce our nation's reliance on foreign oil is creating a marketplace for the growing green economy. As a result, there will be major investments of federal funds into local communities. We must ensure that these investments be sustainable and encourage a new, greener economy.

« *Shifting Priorities for Sustainability*

Anthony Siracusa
Community Bicycle Shop

With the help of First Congregational United Church of Christ in the Cooper Young neighborhood, I founded Revolutions Community Bicycle Shop seven years ago. Since June of 2002, I have worked to provide affordable and reliable used bicycles to people from all over the Memphis Metropolitan Area.

From the day we opened the shop until the present moment, our mission has been about more than simply providing bicycle materials to Memphians in need. Revolutions has focused on ways in which individuals can take an active role in their community. Everyone seeking a bicycle from our shop has to volunteer. They learn basic bike maintenance skills, improve our facility, and help us recycle bicycles. Recycling bicycles lay at the heart of our programming. Memphians donate unwanted bike parts and bicycle frames, and with the help of our volunteers, we integrate the useful bikes and bike parts into our inventory of recycled goods. Bicycles that are unusable are disassembled so as to salvage the individual parts that are useful: tires, chains, seats, wheels, or gears. In this way, we take bicycles destined for the dump and turn them into transportation.

Our city is a diamond in the rough. It's a city with people whose commitment to improving our way of life outshines the despair and poverty that threaten to stain the fabric of our community. It is like a small town surrounded by a big city, a community of individuals woven into a single band of citizenry dedicated to defeating crime, creating an interconnected network of greenways, preserving our watersheds, creating bicycle lanes and pedestrian friendly sidewalks, and establishing a government that operates according to the core ideals of our democracy.

We are citizens committed to enduring one hundred percent humidity and swarming mosquitoes to make this city on the bluff the premier Southern city for sustainable initiatives. Hot weather does not keep us off our bikes. Mosquitoes do not keep us from paddling in our rivers, and “a lack of fiscal resources” does not keep us from demonstrating to our city’s officials that we can make small investments that will reap manifold economic and social returns. In fact, it is our problems which galvanize our efforts, and it is our dedication to innovative solutions that binds us a community.

The Sustainable Shelby Initiative represents a shift in our city’s priorities. Mayor A C Wharton’s focus on land use, construction codes, transportation policy and planning that is sustainable—that is the creation of policies that meet the needs of the present generation without compromising the needs of future generations—is a focus on how to make Memphis the best city it can be.

It is a focus on making Memphis into the best city to own a house in, a focus on how Memphis can become the best city to raise a child in, a focus on how Memphis can become the best city to ride a bike in, it is a focus on how Memphis might become a model for curbing urban sprawl while developing a world class inner city.

The implementation of the Sustainable Shelby Initiative represents a political call to action, a call that will soon resonate on well-insulated walls, through complete streets, and across a city that focuses on the ways in which we can make the best use—and reuse—of the limited resources we have to work with. The initiative is a nod to activists, advocates, teachers, builders, and planners that have been harbingers of this day for many years.

The Sustainable Shelby Initiative represents the first step towards making Memphis a city known world-wide for its ability to actualize itself as a 21st century city.



Strategies

4.2.1



Innovations often occur when individuals are able to share their ideas with a broad and diverse group in a safe space. In 2009, the Office of Sustainability will partner with regional business leaders to create a regular sustainable business conference for companies across the region. This conference would inform local businesses of the broader sustainability movement and connect local green business ventures.

4.2.2



The public has the right to expect public incentives to align public priorities. Applications for entitlements (PD, SUP) or for incentives (Payment-in-lieu-of taxes, Tax Increment Financing, Tourism Development Zone, and Health, Education and Housing Facility Board) should be required to quantify the economic and environmental impacts/benefits of the proposed project. By July 1, 2010, each incentive should set minimum standards against which the impacts and benefits will be evaluated.

4.2.3



Public incentives for business should encourage sustainability. By July 1, 2010, the Memphis and Shelby County Industrial Development Board and Center City Revenue Finance Corporation should amend their PILOT (payments-in-lieu-of-taxes) application processes to award additional points to projects that incorporate existing vacant or underutilized buildings in lieu of new construction and that achieve specific sustainability benchmarks such as LEED for Existing Buildings.

4.2.4



By July 1, 2011, the Memphis and Shelby County Office of Economic Development and the Center City Commission should revise their policies to require that any project receiving tax abatement through the PILOT program must achieve a minimum of LEED Bronze Certified or equivalent for all new construction over 50,000 square feet.

Strategies

4.2.5



Public incentives for business should encourage sustainability. By July 1, 2010, the Memphis and Shelby County Health Education Boards should amend their PILOT application processes to award additional points to projects that incorporate existing vacant or underutilized buildings in lieu of new construction and that achieve specific sustainability benchmarks such as LEED for Existing Buildings.

4.2.6



Urban Homestead Programs in other communities are proven ways to redevelop abandoned property. Starting in January 1, 2010, the Shelby County Trustee's Office and the Shelby County Land Bank should work with the Shelby County delegation of the Tennessee Legislature to develop an Urban Homestead Program for vacant buildings currently owned by Shelby County and City of Memphis. It should allow surplus public buildings and tax sale property to be transferred to private owner who agrees to redevelop the property using the existing building for an approved use for a minimum period of five years. Approved uses should include affordable housing, senior housing, daycare facilities, neighborhood commercial, and other publicly beneficial uses.

4.2.7



In order to meet the region's present and future economic development needs, an open, multi-service fiber network should be developed. The system would be publicly built and maintained but open to the private sector, much the same way roads are publicly built and maintained but used by both private citizens and companies. Providing such a service to every individual would allow anybody to start a new online venture at very little cost. This system would be especially helpful in enticing young creative individuals into the region.

4.2.8



The Office of Sustainability will partner with local farmers markets, Edible Memphis, and other advocates for locally grown food, to work with the Shelby County Health Department to review and update its rules and regulations. The goal of this review should be to remove barriers faced by local farmers in selling and offering tastings of their goods and produce in our local farmers markets. In addition, local government should support programs like LocalEx which use digital platforms to connect farmers and consumers.

«
**Green Jobs
 are in Our DNA**

Leah Wells,
 BioDimensions

AgBioWorks, an initiative of Memphis BioWorks Foundation and BioDimensions, is dedicated to developing new agricultural technologies for the sustainable use of agricultural and forestry products to supply abundant food, biofuels and biobased products that are increasing in global importance and which will foster a strong bioeconomy in the Mississippi Delta.

The development of strategies to increase biodiversity, opportunities for farmers and urban workers and increase green jobs has created new opportunities to impact workforce development and the economy in Memphis and the Mid-South.

Memphis BioWorks Foundation is a non-profit organization leading the collaboration between public, private, academic and government entities to accelerate the growth of the biosciences in the Memphis region. By leveraging the region's competitive strengths, the Foundation continues to expand the infrastructure, educational opportunities and entrepreneurship needed to grow and impact the bioscience industries.

BioDimensions is a consulting firm dedicated to helping create successful strategies to capitalize on the emerging bioeconomy. Together the two organizations are developing "Regional Strategy for Biobased Products in the Mississippi Delta" for a 98-county region in Arkansas, Kentucky, Mississippi, Missouri and Tennessee. This strategy will help align public and private funding, while creating opportunities for employers and employees along the supply chain—from the farm to the factory—while improving the environment and increasing green jobs. This regional strategy outlines the Mid-South's common regional strengths: diverse agricultural production, superior logistics, and transitional manufacturing to benefit the region and its hub—Memphis and Shelby County. Battelle, an international science-based consulting group which has successfully launched bioeconomy strategies in Iowa, Missouri, Ohio and other locations, is developing the regional strategy.

The plan will be completed this year, but already there is work underway toward its implementation, including demonstrations of numerous alternative

crops at Agricenter International for making novel health products, biomaterials or biofuels; the development of a network of progressive farmers throughout West Tennessee that are partnering to grow alternative crops; the development of several projects in which green products will be manufactured in the Memphis/Shelby County region; and the engagement of inbound investment of capital and technology.

BioDimensions has also spearheaded a local green jobs regional strategic plan to assess the existing green business sector as well as future green jobs. A wide range of stakeholders has given input into this project which examines green incentives, workforce development in green industries and future community benefits as a result of increased employment and healthier conditions.



5

Learning Green Lessons



“Kids have really turned into the little conscience sitting in the back seat. One of the fascinating things about children is that they don’t separate what you are doing from what you should be doing. Here’s this information about how we can help the environment, and kids are not able to rationalize it away the way that adults do.”

—Julia Bovey, Natural Resources Defense Council

Sustainable Shelby is based on a core principle that broad community awareness is needed so that people, regardless of where they live or how much they earn, can take advantage of the savings that result from sustainable behavior and the better community that results from sustainable values.

It's clear from the polling by Sustainable Shelby that our citizens strongly support the values and principles that underpin this agenda for change. In particular, the poll indicated willingness by our community to incorporate sustainable behavior into their lives and support public policies that protect natural resources, strengthen neighborhoods, promote green buildings and development, and ensure air and water quality for future generations.

It's important that students are taught the personal and civic decisions that can produce a sustainable Memphis and Shelby County. They are the beneficiaries of actions taken now, but they also are key participants because of their ability to inspire their parents and their community. This can be seen already in the Bridges program to provide hands-on program on green living that originates in Memphis' first green commercial building. Meanwhile, the University of Memphis is developing programs to inspire students' knowledge and commitment to sustainability and to create a campus that is a model for green practices.



« Sustainable Public Participation

Rita Harris

As Sustainable Shelby started, many of the participants were unfamiliar and a bit unsure of the process that was being used. But, as it continued to move along it proved to be a great way to get input from a wide variety of people about a broad array of concerns.

In my opinion, the success of Sustainable Shelby was in the effective public participation methods that were used. A combination of methods gathered input from the public using questionnaires, phone surveys, stakeholder meetings, and hosting a Digital Congress. One of the things that this effort pointed out to me in serving as Co-Chair of the Environment & Natural Resources Committee is that the people of Shelby County really care about the community in which we live. It was very

exciting and encouraging to see all the people crowded in the room at the kick-off gathering, and seeing all those that wanted to be a part of this historic undertaking. Although the committees were overflowing with eager members bursting with ideas, we all knew that whether they landed on a committee or not, they would continue advocating for what they knew needed to be done to make their communities better.

Having everyone start the process with framing our work around our vision and creating a values statement helped us frame and focus our work going forward. Throughout the process there were so many people passionate about 'their' issue and passionate about Shelby County that it was easy to understand the success of the Sustainable

Shelby Initiative. Creating a sustainable plan for our community is not one that will ever be complete, but instead will be an organic living document that continues to be edited, evaluated, and improved. The concerns and issues that were identified call us to action.

Mayor Wharton's magnificent leadership and vision have provided us with a roadmap that we can be proud of and a strategic plan that will show future generations just how interested we are about improving the environmental quality and preserving the wonderful natural resources of Shelby County.





5.1

Public Awareness

Sustainability has to be personal and authentic. All of us want to understand how a sustainable region can improve our quality of life now and into the future. The message of sustainability needs to be crafted in ways that it resonates with all segments and in all sections of our community. In this way, sustainability needs to be everywhere—on the Internet, in libraries, in schools and community centers, in churches, synagogues, and mosques—and highlighted by an official “Sustainability Month” and “Mid-South Sustainability Summit.”



Having the Right Conversation

Rusty Bloodworth
Boyle Investment Co

Sustainable?

This is the question we must ask of ourselves, our consultants and our governmental officials. Are we creating buildings, neighborhoods, towns, and cities that can stand the test of time? Will they be economically, environmentally, and social sustainable?

The Sustainable Shelby process brought together widely divergent groups of people to collectively imagine a better place in the future and to map a series of goals that would need to be met in order to get there. These highly specialized interest groups normally have little discourse or interaction. Separate, they form isolated and independent voices clamoring for pieces of an overall solution. But joined together in the Sustainable Shelby initiative, something wonderful has taken place: real dialogue

between those that rarely talk and the emergence of a shared vision. The silos that usually separate professions and interest groups were pierced.

But it is not enough to pierce the silos; truly, as Doug Farr instructed us, they need to be destroyed. This is a task before every participant, group, and institution involved in Sustainable Shelby. Each of us must sacrifice time and resources if this is going to occur. We need to collaborate with different folks, partner with different groups, continually strive to make our efforts more and more holistic.

In the midst of the worst economic climate of a lifetime, one might argue this is not the time to worry with the future of our community, but if this is not the time, then when? I believe it actually is the most compelling time for our world is shifting rapidly in chaotic ways all around us.

The President's Stimulus Package requires each local community to make hard choices and careful picks of what to do. Thankfully, our community is better prepared to make those choices because of the Sustainable Shelby process. We understand much better how interrelated are our resources, how dependant our outcomes are on collaboration and invention.

One immediate goal is the passage of a Unified Development Code to help guide future development and redevelopment of our region. This Code has been in the incubation phase for a long time. The conclusions of Sustainable Shelby come at a perfect time to inform, improve, and hopefully speed the adoption of that Code.



Strategies

5.1.1



Sustainable Shelby needs a prominent digital presence to communicate and collaborate with the public. The centerpiece will be the Sustainable Shelby website, and it should feature social networking for green projects, links to local sustainable organizations and programs, and interactive tools. The website would provide ways for the residents of Shelby County to learn how to be responsible stewards of our environment, advance sustainability, and get involved. A major feature of the website will be the ability to track progress on the implementation of the County's sustainability initiative.

5.1.2



Public awareness should be heightened by an annual celebration of sustainability that calls attention to the progress being made in our community. The mayors of Memphis and Shelby County should designate October, 2009, as the inaugural "Sustainability Month" in order to raise awareness about and support for sustainable practices. It should emphasize educational programs about what residents can do to conserve resources, reduce waste, and engage in other sustainable behaviors. The Office of Sustainability should lead development of programs for "Sustainability Month."

5.1.3



Our community should become a recognized hub for new ideas, research, and discussions about sustainability. Shelby County Government will form a coalition of elected officials, environmental groups, and the private sector to organize the bi-annual Mid-South Sustainability Summit. The summit should be held at least once every two years with special emphasis on creating a forum where local decision-makers and community leaders exchange information and learn about best practices and where nationally recognized speakers can expand and enrich our local sustainability discussion.

5.1.4



Neighborhoods are eager to learn more about planning processes to increase involvement in decisions affecting their futures. By October 1, 2009, Division of Planning and Development will begin a neighborhood outreach program that would emphasize education and collaboration on the planning process with neighborhood associations and community based organizations. The Division's neighborhood planners would take the lead in developing and managing the outreach program, and the Division's website should allow neighborhood associations to sign up to receive information on issues and permit existing neighborhood associations to create and manage online profiles of their groups, including officers, neighborhood boundaries, priorities, and contact information.

Strategies

5.1.5

Libraries should be hubs for information and resources about sustainability. By January 1, 2010, local libraries should develop and offer sustainability educational programs and activities, particularly for children.

5.1.6

The Metropolitan Planning Organization's Bicycle and Pedestrian Coordinator will partner by January 1, 2010, with health and educational institutions to create a roadway safety education campaign. This campaign could include using resources like the Roadway Safety Foundation's education grant, radio advertisements, newspaper articles, workshops, special events and online media to educate the public about how to act safely as pedestrians, bicyclists, or motorists.

5.1.7

Mortgage incentives can pay for energy conservation improvements. By July 1, 2010, the Office of Sustainability will work with lending institutions and MLGW to encourage financing options for energy efficiency improvements on new and existing buildings. This could include options such as Energy Efficient Mortgages (EEM) and Energy Improvement Mortgages (EIM).



What is an Energy Efficient Mortgage?

Source: www.energystar.gov

An Energy Efficient Mortgage (EEM) is a mortgage that credits a home's energy efficiency in the mortgage itself. EEMs give borrowers the opportunity to finance cost effective, energy-saving measures as part of a single mortgage, allowing borrowers to qualify for a larger loan amount and a better, more energy-efficient home.

The term EEM is commonly used to refer to all types of energy mortgages including Energy Improvement Mortgages (EIMs), which are used to purchase existing homes that will have energy efficiency improvements made to them. EIMs allow borrowers to include the cost of energy-efficiency improvements to an existing home in the mortgage without increasing the down

payment. EIMs allow the borrower to use the money saved in utility bills to finance energy improvements. Both EEMs and EIMs typically require a home energy rating to provide the lender with the estimated monthly energy savings and the value of the energy efficiency measures—known as the Energy Savings Value.



Eco Kids and Eco Schools

The schools in both public districts are central to an awareness and outreach program that uses eco-kids as messengers for sustainability. In keeping with the old adage, “Teach the child, teach the parent,” sustainability needs to be incorporated into the local school curriculum in meaningful ways that demonstrate the significance and importance of changing our collective behavior in response to the global environmental challenges we all face.

5.2

Strategies

5.2.1 »

The Office of Sustainability should be a resource and partner with the Memphis and Shelby County School districts in imaginative ways to include the concepts of sustainability into the current curriculum. For example, the Memphis and Shelby County Schools could begin an “eat what you grow” school program coupled with existing outdoors classroom programs.

5.2.2 »

By October 1, 2009, local schools and libraries should create a sustainability-focused “Clean Up, Fix Up, Green Up” program that includes a check list for school children to take home and to do as part of a larger countywide clean-up program. It should also include school clean-up programs, special library programs, and neighborhood clean-up campaigns, as well as incorporating the program into existing science and social studies curriculum.

5.2.3 «

Schools should be showplaces of sustainable principles. The Memphis City Schools Board of Commissioners and the Shelby County Board of Education should design new school buildings to combine national best practices and LEED Certification. These “high performance” school buildings can provide powerful teaching opportunities to demonstrate the principles of green building and the importance of resource conservation.

5.2.4 «

Green principles should be considered when planning school facility improvements. Memphis and Shelby County School Systems should perform periodic energy audits of existing buildings and conduct energy retrofits when necessary. Beginning in 2010, several existing school facilities should be selected to receive funding from the Shelby County Government CIP and/or other identified funding sources for implementing a pilot project for implementing green building practices. These pilot projects would provide local examples of the cost and benefits of green building techniques including energy savings, better indoor air quality, and increased student achievement.

Sustainable Design

Michael Hagge
Chair, Department of Architecture
The University of Memphis

Sustainable design is an integral part of the education of architecture and interior design students in the Department of Architecture. In addition to their traditional academics, students have the opportunity to participate in a variety of hands-on activities. One of these is the TERRA (Technologically + Environmentally Responsive Residential Architecture) sustainable design demonstration house which is located at the northeast corner of North Main Street and Greenlaw Avenue in Downtown Memphis.

The project, which was initiated in 2005 by the University of Memphis through the Department of Architecture and its Center for Sustainable Design (CSD) in the FedEx Institute of Technology, broke ground in the Uptown neighborhood in Memphis in June, 2007, and was completed in February, 2009. DPC Construction LLC of Memphis is the general contractor.

TERRA was designed entirely by architecture and interior design students under faculty supervision and involved students in a series of special electives and honors courses.

“When we started all this, I knew there had to be a better way to do things, but what that was, I didn’t know.” said Mary Carroll, a fourth year student in the Bachelor of Fine Arts in Architecture degree program. “Working on TERRA has shaped my whole life and career.” Upon graduation, Ms. Carroll plans to continue her involvement in “green” design through consulting.

The idea for TERRA originated from a conversation between me, Sherry Bryan, Director of the Architecture Program, and former U of M architecture professor Jim Lutz. “We were talking about creating an urban studio in which our students would design housing within the inner city,” said Professor Bryan. “This conversation led to the idea of a sustainable, demonstration house that would serve as an educational tool for our students as well as the community.” TERRA fits into the Sustainable Shelby initiative in many ways including education and community revitalization.

Architecture Professor Michael Chisamore, Director of the Center for Sustainable Design, said: “TERRA brings a new understanding of sustainable architecture and design to Memphis. In addition to serving as a teaching laboratory, one of the main objectives of the project is to demonstrate that sustainable design can blend in with the other residences in the area.”

TERRA features energy efficient and environmentally responsible techniques, materials, appliances and fixtures. It adheres to Memphis Light Gas and Water Division EcoBUILD program and to the American Lung Association Health House standards. The Department of Architecture will apply for LEED (Leadership in Energy and Environmental Design) Platinum designation, and the two-story, 1,840 square-foot home will then be one of the first in the region to conform to U.S. Green Building Council LEED Green Building Rating System.

Several features, such as insulated concrete forms, special soy-based expanded insulation, passive ventilation, a tankless water heater, sustainable landscaping, and a grey water recovery system, among others, are uncommon, and in some cases a first for the Memphis area. The house also features a cool metal roof with a photovoltaic array and energy-efficient windows. A rainwater harvesting system was designed into the house and will be added in the future.

Eric Criswell, one of the principals in DPC Construction LLC, said “We are very committed to advancing sustainable development and would definitely welcome the opportunity to do another house like TERRA.”

More than 55 businesses and organizations donated materials, time, expertise and offered discounts towards the eventual completion. The project has benefited from partnerships between the University of Memphis and AIA Memphis (American Institute of Architects), the Memphis chapter of the U.S. Green Building Council, and the Uptown Partnership, which includes the Henry Turley Company, Belz Enterprises, and the City of Memphis.

Third year BFA in Architecture student Kate Bidwell, a LEED Accredited Professional, likes what she sees in the TERRA house and is encouraged by the Sustainable Shelby initiative. “Architects and designers have an obligation to give back to the community. Projects such as TERRA and our sustainable design education work with BRIDGES USA offer that opportunity while helping revitalize the neighborhood.”

TERRA also serves as a teaching and research tool for sustainable design in the region. Using knowledge gained from the TERRA project, the Department of Architecture plans to continue student-centered research into sustainable design through the design of prototype affordable and sustainable residences in other neighborhoods within the Memphis area and fostering partnerships with local businesses and organizations.

Alzbeta Bowden, a student in the Master of Architecture degree program, has been greatly influenced by her three years of working on the TERRA house. She recently opened a sustainable design firm in Memphis with former U of M student Philip Jaynes. “The house may be finished but the mission TERRA started is just beginning.” Ms. Bowden replied when asked about the role the project has played. “TERRA will continue to inspire and educate people in Memphis and the region for years to come.”

Like TERRA, Sustainable Shelby is not only a vision of how things should be. It is also a blueprint for how things must be. Our students and faculty have seen the benefits of developing consensus and working together towards a common goal in our projects such as TERRA. Now is the time for everyone to support and implement Sustainable Shelby and move forward together into a sustainable future.



6

Leading by Example



“We have to quit bequeathing the cost of our lifestyle to our children and grandchildren. The cost is just too steep.”

—Mayor AC Wharton

“The ultimate goal for all of this is we want to create a healthy, sustainable community for all the residents and everybody who comes into the neighborhood, whether they reside there are not.”

—Michael Hagge, University of Memphis

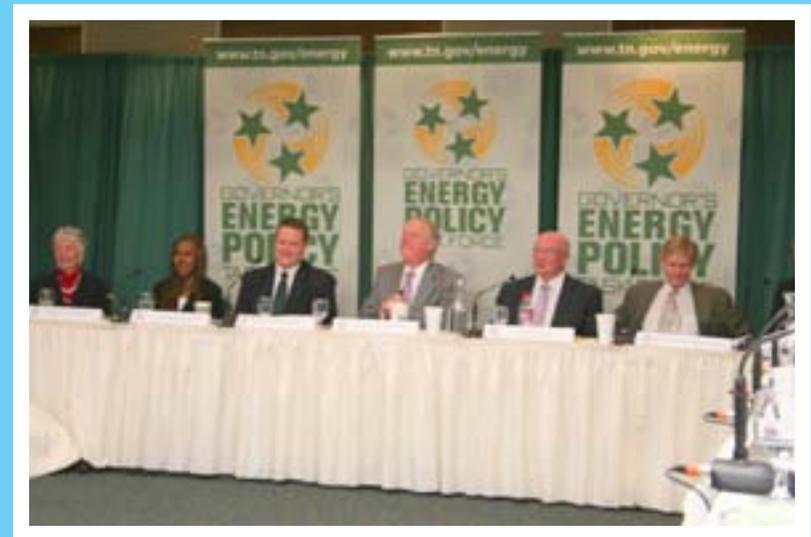
Despite their different perspectives, every committee in the Sustainable Shelby process reached one resounding conclusion: government must lead by example.

Put another way, committee members said that it is not enough for government to share a sustainable vision of our community, to convene the Sustainable Shelby process, to develop specific recommendations, or to define the strategies for achieving them. More to the point, government must integrate sustainability programs into its own buildings and with its own workers. It must inject sustainability into every policy and procedure.

To accomplish this, government must be prepared to play many roles—convener, manager, cheerleader, advocate, implementer, and keeper of the vision. Government must balance the pragmatic with the philosophical, the practical with the ideal, and the tangible with the intangible.

Most of all, however, government must show by its actions that it will lead by example, set the pace for change, create the momentum for innovation and demonstrate the wisdom of more sustainable practices.

With programs that touch the lives of people in every corner of our community, local government has the chance to be the ultimate role model for sustainability. It can show that green programs have a positive impact on the balance sheet, it can spread the word to builders and developers, it can support and encourage healthier lifestyles through its health programs, it can create neighborhoods where people walk to parks and stores, and inspire a green ethos by a consistent attention to green practices in its own policies and procedures.





Sustainability: It's About Doing Our Part

Charles Santo, Ph.D.
Live Where You Live



Let's start small. While it's nice to think about doing our part to save the planet, adopting a workable sustainability agenda for the Memphis region isn't really about that, it's about doing our part to save our city—ecologically and financially.

If we are to make Memphis a community of choice, we cannot ignore the importance of environmental amenities in location decisions. Our civic commitment to environmental stewardship is a reflection of our commitment to a high quality of life. And we cannot ignore development and infrastructure decisions that allow our urban footprint to expand at a rate that exceeds our population growth, and which allow us to treat our inner city neighborhoods as disposable.

As we face these challenges, I am hopeful that we can make inclusivity and broad grassroots participation a priority, especially among minorities and poor inner city residents who are often overlooked in the environmental movement, but who are disproportionately affected by environmental injustice and the negative consequences of sprawl. Our efforts to build a greener, more sustainable community should benefit those residents with the greatest needs.

According to recent Census Bureau estimates, the Memphis metropolitan statistical area is the first major metro area in which minorities make up the majority of the population. This unique attribute brings unique opportunities including the opportunity to set a green agenda against a multi-colored canvas. Accomplishing this would establish Memphis as a trend-setter. Statistics regarding minority involvement in setting the environmental agenda are bleak. Minorities make up only 11 percent of the staff and 9 percent of the boards for organizations that are members of the Natural Resources

Council of America. And according to a survey conducted by the Minority Environmental Leadership Initiative, 33 percent of mainstream environmental organizations and 22 percent of related government agencies have no minorities on staff.*

I hope that Memphians will take inspiration from Majora Carter (Sustainable South Bronx) and Van Jones (Green for All), who offered the following challenge while speaking at the Dream Reborn conference in Memphis in 2007:

Billions of dollars are pouring into the solar, wind, geothermal, and other clean industries. This so-called 'green economy' will generate thousands of business opportunities and millions of new jobs. We must guarantee equal opportunity in this growing green, clean and renewable economy. We must insist that the coming green wave lift all boats. Those low income communities that were locked out of the pollution-based economy must be locked into the clean and green economy. Our communities—especially our children—deserve green collar jobs... We must link the solutions of social justice, peace, and ecological sanity. Our new dream must uplift the people and the planet, too. The Memphis community has the chance to lead by developing a multiracial civic agenda with a commitment to environmental stewardship and quality of life issues that will help attract talented people of all races, while providing pathways to lift inner city residents from poverty.

**Bonta, M., & Jordan, C. (2007). Diversifying the American Environmental Movement. Land Trust Alliance: A Report on the Future of Land Conservation in America, 13-33.*
Dorceta, T. (2005). Diversity in Environmental Institutions: Summary Results of the MELDI Studies. Ann Arbor, MI: University of Michigan School of Natural Resources and Environment.





6.1

Office of Sustainability and the Green Center

A major way to lead by example is for government to create an Office of Sustainability, which would direct the strategies in this plan, collaborate with grassroots groups and nonprofit and philanthropic organizations to advance our sustainable agenda, and monitor and reports on progress.

Sustainable Shelby calls not only for the creation of a new office, but for the creation of the “Memphis Green Center,” a hub for green thinking and advocacy, a clearinghouse for information, an incubator for green businesses, a training site for green jobs, and home for the “Office of Sustainability.”

Strategies

6.1.1



Sustainability will not succeed without a dedicated staff driving change, leading programs, creating collaborations, and communicating the benefits of sustainable practices. For maximum impact and influence, The Office of Sustainability, with the full support of both Mayors, should become a part of the joint office of the Memphis and Shelby County Division of Planning and Development by July, 2009. The Office of Sustainability will be the area's leading advocate and expert for sustainability, coordinator of initiatives, the communicator about Sustainable Shelby and Sustainable Urbanism principles, and be the local expert on such topics as reducing global warming emissions, increasing energy efficiency, and the use of renewable energy, waste reduction and recycling, sustainable economic development, sustainable food systems, and green building practices. The Office of Sustainability should be appropriately staffed to address its ambitious objectives.

6.1.2



The Executive Director of the Office of Sustainability should be an experienced urbanist with a record of proven success. Toward this end, a nationwide search should be conducted to fill the Executive Director position beginning immediately.

6.1.3



The task of turning Shelby County into a sustainable community will take hard work from a lot of dedicated people. A county-wide, broad-based "Sustainability Commission" could focus, support, and assist the work of the Office of Sustainability. The members will include appointees from each municipality in Shelby County, grassroots leaders, sustainability experts, university researchers, and private citizens who reflect the diversity within our community. The primary responsibility of the Sustainability Commission will be to monitor the progress of Sustainable Shelby, provide advice and support in program implementation and policy setting for the Office of Sustainability, and to hold periodic public meetings. The commission would also recommend potential policy changes and legislation to local elected officials that would further the sustainability agenda. Most of all, the Commission would issue updates on the recommendations and keep the public informed of the progress of Sustainable Shelby.

Strategies

6.1.4



For reasons equal parts symbolic and pragmatic, a center for sustainability should be established that becomes the focus for all things sustainable in our community. “The Green Center” would be home to the Office of Sustainability, serving as a one-stop shop for sustainability practices, resources, and green technology displays. The Green Center would be home to a sustainable business incubator, a venture fund for green businesses, a sustainability policy institute and office space for nonprofit green organizations’ so they could co-locate in ways that would allow them to share administrative costs and to develop new partnerships and programs through cross-fertilization of ideas and energies. Special emphasis should be given to a location that allows for adaptive reuse of an existing building with the potential for a green roof, access to public transit and easy access for bicycle commuters. The Green Center should be established within five years of the creation of the Office of Sustainability and be the single place where the inspirations of the sustainability movement in our community converge with our aspirations for the future.

6.1.5



The Office of Sustainability will create and maintain a local “Green Businesses Directory.” The directory will serve as an invaluable information resource for community members wishing to support local green businesses, products, and services. This document will also be made available online.

6.1.6



By July 1, 2010, The Office of Sustainability will develop a “Sustainability Scorecard Program” for all departments and divisions within Shelby County Government that could become a model for other area governments. As part of the “Scorecard” program, each division and its management will be evaluated on a yearly basis to determine the progress made toward sustainability goals. Potential evaluation criteria should include energy conservation, responsible consumption, recycled materials, alternative transportation, and efficiency. The results of each scorecard should be posted prominently in county buildings and should be made available for public review and comment. Incentives for highest score and most improved division should be developed.



6.2

Public Purchasing

As one of the largest employers in the region, local government has the opportunity to create a “green army” for our community that extends far beyond the walls of government, transplanting green behaviors learned at work into the homes and neighborhoods of employees.

With large numbers of vehicles—ranging from squad cars to buses—local government can transform its fleet into a model of energy efficiency. Green purchasing policies can help build the local market for environmentally friendly goods and services. Local government must set the example and acknowledge life-cycle costs, environmental impacts, and issues of social equity associated with purchasing decisions.

Strategies

6.2.1



Memphis and Shelby County Governments, MLGW, city and county schools, and other public agencies should revise current purchasing policies and rules to emphasize the total life-cycle costs of any goods, services, and equipment when making purchasing decisions. Policy revision for Shelby County government will be completed by July 1, 2010, to serve as a starting point and model for other organizations.

6.2.2



Green purchasing is an investment in a green community. The public sector must encourage sustainable practices and support local companies through its purchasing policies. Local governments, led first by Shelby County Government, should develop and institute a “Green Purchasing Policy” that requires the purchase of environmentally preferable products within 10 percent of the lowest bid. The policy should be in place no later than July 1, 2010 and be based on a best practices review of existing municipal green purchasing programs across the country. A detailed yearly purchasing report should be submitted to the Shelby County Mayor and made available to the public. This report would be used to track progress towards meeting the County’s green purchasing goals.

6.2.3



Memphis and Shelby County Purchasing Departments should create a task force to study how county government can leverage its buying power by coordinating with other local municipalities. The task force will be organized and begin meeting by December, 2009, to prepare recommendations for coordinated purchasing.

6.2.4



Memphis and Shelby County Government will inventory all vehicles in their fleets and create a plan, by March 1, 2010, for gradual replacement of the existing fleet with vehicles that are alternatively fueled and energy efficient.

Strategies

6.2.5

Public budgeting should encourage conservation and sustainable policies and procedures. Shelby County Government should make changes that encourage and reward savings from sustainability. Shelby County Government should develop a pilot program that allows a county department to reserve a portion of the savings through energy and resource conservation for use within that department or division. Each department should be required to prepare a “Responsible Consumption Plan” that documents its specific efforts to save energy and reduce consumption. The Responsible Consumption Plan will report annual savings from those efforts and will be updated periodically. At the end of each fiscal year, half of the money saved as a result of the strategies outlined in each Responsible Consumption Plan will be made available for use by that department on a special project or to upgrade equipment.

6.2.6

The Contract Compliance Office of Memphis and Shelby County Governments should create an outreach program, by July 1, 2010, with the goal of increasing education and awareness of the government contractor/vendor program and certification process. This should also include establishment of a County’s Bonding Assistance Program and Insurance Assistance Program for small business owners doing business with Shelby County.

6.2.7

Local government should establish measurable goals for increasing opportunities for local, minority, and green businesses to provide goods and services. Memphis and Shelby County Purchasing Departments should lead this program and ensure that progress is made in increasing the use of local, minority and green suppliers when purchasing goods and services. The program should reevaluate and modify its policies to meet or exceed established participation benchmarks over time with the ultimate goal of matching the demographic composition of Memphis and Shelby County.



6.3

Public Buildings

With hundreds of buildings all over our community, local government has an important stake in demonstrating the benefits of green building practices, in considering alternative uses for the future, and for calculating life-cycle costs when considering the financial implications of new construction. Local government must take the lead in constructing public buildings that set a good example and provide opportunities for local contractors and designers to gain experience in green building techniques and practices. Public buildings should serve as models of energy efficiency that inspire and educate the people who visit or work in them. Local government must also demonstrate its belief that the greenest building is one that is already built, and emphasize the adaptive reuse of existing buildings whenever possible.



Germantown: Model for Sustainability

Josh Whitehead
AICP, Planning Director
City of Germantown

I first started hearing the term “sustainability” in reference to the built environment about 10 years ago when I was in graduate school. I suppose it wasn’t until then that Americans began witnessing the same kind of disinvestment in suburban communities that had been ravaging the nation’s urban cores for decades. The idea of creating sustainable developments arose out of the concern that we were simply building new communities that were cannibalizing old communities. To make matters worse, since the new places we were building were not designed for the long haul, most of them ended up getting cannibalized themselves, usually within a decade or two.

I think one of Germantown’s strongest attributes is the number of young families moving into the same neighborhoods they were raised in and often where their parents and grandparents still reside. The ability for a community to serve multiple generations over a course of generations is a strong indicator of sustainability. As Planning Director of the City of Germantown, part of my job is to ensure that our new residential developments are designed to continue this trend. This task is made much easier by the fact that the city has, over the years, developed some of the most envied development guidelines in the nation.

These guidelines have given Germantown a solid reputation as one of the most sustainable residential communities in Tennessee, with home appreciation rates far exceeding the metropolitan, state and national averages.

But, a city in Tennessee cannot rely solely on residential property taxes and achieve true, long-term sustainability. This determination was made with great foresight several years ago by the citizen-led Germantown Vision 2020 strategic plan. Vision 2020 charted a road to comprehensive municipal viability by envisioning a Germantown that was not just a city of excellent residential neighborhoods, but also one with a strong, mixed-use city center. This city center includes shops along sidewalks with condos above, pedestrian-oriented streetscapes and buildings exceeding the long-standing three-story height limitation.

With a clear signal for the revitalization of the core of Germantown from Vision 2020, the city then embarked upon the adoption of the Smart Growth model of growth for the area roughly within a half mile of the intersection of Poplar and Germantown Road.

A whole new set of zoning restrictions, collectively known as the SmartCode, was established in this area to usher the kind of development called on by Vision 2020. The SmartCode strongly encourages LEED buildings, a designation of green, sustainable construction. The City is currently in the planning phase of constructing the first LEED municipal building in Shelby County, its new fire station on Forest Hill-Irene Road. With these solid foundations, Germantown will become a sustainable, well-rounded community where people will not only want to live, but also work and play.



Strategies

6.3.1 » Shelby County Government, by July 1, 2010, will require that all new county-owned or county-funded buildings with more than 10,000 square feet be designed, contracted, and built to achieve a minimum of LEED Certified, and by July 1, 2012, should achieve a minimum of LEED Silver Certified. Shelby County Government should strive for the highest level of certification for new public buildings.

6.3.2 » A grade should be given to every public building so people are aware of its energy efficiency and energy consumption. By July, 2010, The Office of Sustainability, with the help of relevant government departments, will create a rating system for public buildings in Memphis and Shelby County where each building will be given a rating of “A” through “F” following an energy audit which has identified where improvements are most needed. The rating should be displayed prominently at the building’s public entrance and be part of a larger campaign to educate the public about the economic and environmental benefits of efficient buildings and the importance of reducing energy consumption throughout Shelby County. The private sector should be encouraged to adopt a similar grading system in the future.

Government can be a force for sustainability with a plan for future public buildings. Memphis and Shelby County should work together, possibly through the joint Division of Planning and Development, to develop a Strategic Plan for Public Buildings and Facilities. It should contain a comprehensive review and inventory of existing assets and anticipated future needs for new public buildings for the next 25 years and should present criteria for selecting future project sites in a strategic way that reflects a commitment to sustainability and reinforces the principles of the Memphis and Shelby County Comprehensive Plan. The plan should be anchored in the adaptive reuse of existing buildings in lieu of new construction whenever feasible.

6.3.3 «

Shelby County Government, by July 1, 2010, will create an official policy for determining if an existing building can be reused or expanded in lieu of new construction. As a first step, a database of all existing public buildings should be created. In addition to reviewing the public building database, county government should look for vacant or underutilized privately-owned buildings to purchase in the vicinity of the proposed project. Shelby County should consider the availability of existing underutilized or vacant buildings before any decision to undertake a new construction project is finalized.

6.3.4 «

Strategies

6.3.5

Public engagement is a necessary element for successful sustainability programs. Within one year of the adoption of the Unified Development Code, City of Memphis and Shelby County should create an official process for soliciting meaningful public input at the beginning of the schematic design phase for new public buildings and facilities. The Memphis Division of Planning and Development (DPD) should start the public participation process for new public buildings and facilities by providing direct mailings to all property owners in the project vicinity, illustrating the scope of the project and describing ways to give input. DPD should investigate the potential negative impacts that could be associated with the use, site layout, or design of the proposed public building, and suggest possible mitigation strategies. General notice regarding public participation for reviewing new public buildings and facilities should be placed in local newspapers. At least one public meeting should be held at the start of the schematic design phase for each new public building or capital project to allow neighborhood residents and community members the opportunity to share their concerns and vision for the project.

6.3.6

Shelby County Government, by March 1, 2011, will create a set of design guidelines for new public buildings. The Design Guidelines for Public Buildings should be created through a public participation process facilitated by Division of Planning and Development and should address neighborhood impact, including building height, massing, scale, lot coverage, use of materials, architectural character, landscaping requirements, parking requirements and configuration, exterior lighting and noise generation, signage, fencing, and other related concerns. The purpose of the Design Guidelines for Public Buildings should be to ensure that new public buildings and facilities are compatible with the surrounding context in terms of general appearance and architectural character, mass, and scale.

Strategies

6.3.7

Whenever significant upgrades or modifications to an existing Shelby County-owned building are made, a LEED for Existing Buildings checklist will be completed for each project to assess the feasibility of any sustainable design technique that can be incorporated into the project. The Office of Sustainability will assist the Shelby County Engineer, the Senior Architect, and the Public Works Division as needed to complete the checklist and suggest improvements. Special attention should be paid to any techniques that can reduce energy consumption, increase efficiency, and provide significant cost savings over the useful life of the building, material or product. An official policy should be developed and adopted by March 1, 2010.

6.3.8

When planning new building construction, Shelby County Government will identify at least three feasible future uses for the building in an “Alternate Use Plan.” The Alternate Use Plan for each new project should specify how conversion to another use is feasible, and estimate the extent of changes that would be required. Structural and mechanical systems for new public buildings should be designed to allow for easy conversion to the identified alternative future uses. The Alternate Use Plan will also contain a written estimate from the County Engineer specifying the expected useful life of the building, and including recommendations and cost estimates for extending the estimated useful life of the building. By July 1, 2010, Shelby County Government will create a policy requiring Alternate Use Plans for all new public buildings.

Strategies

6.3.9



Public buildings can become centers for neighborhoods and hubs for community. By January 1, 2010, Memphis and Shelby County governments should create an official policy encouraging the co-location of compatible uses within new and existing public buildings and schools whenever feasible.

6.3.10

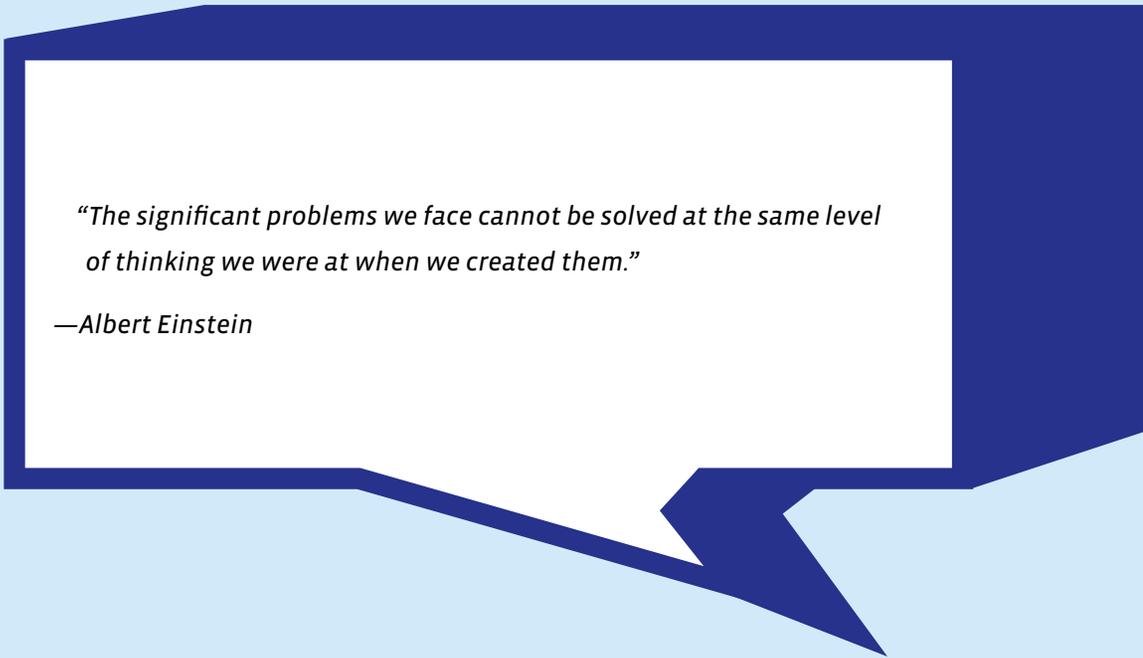


Key public departments need advice from professionals with special sustainability training. Shelby County Division of Public Works, City of Memphis Engineering, Memphis and Shelby County Schools, Shelby County Engineering, and the Division of Planning and Development should all have at least one employee certified as a LEED Accredited Professional (LEED-AP).

7

Call to Action





“The significant problems we face cannot be solved at the same level of thinking we were at when we created them.”

—Albert Einstein

Why should we care about sustainability?

What's the reason to be so concerned about the environment? Why should we be concerned about walkable neighborhoods? Why should we care if Shelby County is sustainable? Are we supposed to care about it as a concept, an aspiration, or because it's supposed to make us happier and healthier? Are we supposed to act differently and is it really that important to our community's future?

The answers seem self-evident. These days, few people need to be convinced about the dangers of global warming, continued sprawl, depletion of our natural resources, pollution of irreplaceable water sources, neighborhood decay, too little park land, and poor planning and implementation.

Research shows less stress in the lives of people who have outdoor experiences; however, only 17% of 16-17 year-olds observe plants or animals in the wild. A baby born today in our nation will spend about 87% of its life indoors and another 4% in enclosed vehicles.

A study in Pennsylvania showed an 18-hour reduction in hospital stays for patients recovering from gall bladder surgery when their windows faced trees rather than a brick wall. An Illinois study showed a 7% drop in crimes in a housing development when people lived in buildings near trees and grass.

“Green” buildings save up to a staggering 60% in energy costs when compared to conventional buildings, and operational costs are lower as well. Employee productivity can be increased 2-16% in sustainable buildings with sufficient sunlight and good indoor air quality.

Every car in the U.S. is provided with four parking spaces, and families average the equivalent each year of driving 90% around the earth. Sustainable practices can reduce the cost of public services through car-independent policies, energy conservation, and sustainable buildings. It can reduce costs for poor families who spend nearly 40 cents of every dollar on transportation. Driving less reduces carbon dioxide levels in the air that now threaten federal approval of our air quality.

Meanwhile, a single quart of motor oil, improperly disposed of, can contaminate two million gallons of fresh water and a person driving 1,000 miles a month produces about 120 tons of carbon dioxide. As President Obama has pointed out, putting proper inflation in car tires produces significant savings in gasoline—2 billion gallons a year if all Americans would do it.

» The average size of a household in the U.S. shrank from 3.14 to 2.62 in 30 years, but the size of the average house increased 54% as well along with the amount generated in it. Eighty-four percent of all household waste is recyclable, and if Americans recycled just 10% of their newspapers, it would save about 25 million trees. We throw away enough soft drink cans that if they were laid end to end, they would go to the moon and back 20 times.

The average plate of food in the U.S. is transported an average of 1,494 miles, and locally grown food and urban gardening programs not only brings our food closer to us but aren't as dependent on chemical preservatives.

A City shrinking in population while sprawling outward is a recipe for disaster. The urban city at the core of our region is shrinking, and yet, a healthy core is essential for a thriving region as it acts as its economic, entertainment, and cultural heart. The population within the 1970 city limits of Memphis is now 20.2% less than it was then, or 124,348 fewer people within the 217.4 square miles that comprised Memphis back then. In the early 1900's the density of Memphis was 7,125 persons per square mile. It was 4,000 persons per square mile in 1960, and it's about 2,000 now. A shrinking city has less money to spend on vital services and quality of life amenities, resulting in fewer and lower quality services in the future or higher tax rates.

Sustainable Shelby is based on two principles: one, that we must engage in new thinking to find solutions to old problems, and two, we can no longer feed policies and programs that have brought us to where we are today—unsustainable, sprawling, energy-dependent, and with a shrinking city at the core of the regional economy.

Sustainable Shelby—its strategies, its philosophy, and its guiding principles—is more than a plan. It is in truth a new framework for thinking about our community, seeing a different future, and acting

to shape that future. It is our commitment—especially through our government—to pursuing that future. We begin with government because it is important that the public sector that we support acts as a leader for an urgency to change unsustainable practices. However, Sustainable Shelby is a living document, and it will continue to evolve as grassroots groups and visionary civic leaders take up the call for a greener community.

Ultimately, the success of Sustainable Shelby will be defined by wiser public and private investments, smarter planning, and bottom-up leadership that can bring balance to our resources and our infrastructure.

The ecological facts, sprawl, and other unsustainable realities are stark, striking, and irrefutable. But they are also reversible.

That's because we, as Americans, share an unshakable belief in one thing—the power of one person to make a difference.

Today, we have a historic opportunity to reimagine how we live, work, and play. We can do it by agreeing that our community will take a sustainable journey toward the future, one that will reduce the harm to our environment, that will enhance our quality of life, that will offer healthier lifestyles, that will reduce the time and money spent on cars, and that will contribute to the fundamental sense of community that holds us together as a people.

The opportunities before us are breathtaking and so are the dividends from pursuing them. Each one of us has the power to make our community sustainable. Best of all, together, we have the power to create a current for change that will transform the destiny of Memphis and Shelby County.

Ultimately, that is also the mandate of Sustainable Shelby.

Appendix A

Implementation Table



Implementation Table

The following table offers a quick overview of strategies with the projected time for their completion, responsibility for the strategy, and the kind of additional governmental action needed for it to be achieved. This table will provide a quick reference and overview of the sustainable strategies by providing information on the timeline, type of strategy and organization responsible for completing the strategy.

	Short Term (0-12 months)	Mid-Term (0-24 months)	Term (24+ months)	Administrative Policy Change	Local Legislation	State Legislation	Incentive	Responsible Party
GREAT NEIGHBORHOODS FOR A GREAT COMMUNITY								
Great Neighborhoods								
2.1.1	X			X				Shelby County/Memphis Mayors
2.1.2		X		X				DPD
2.1.3		X		X				DPD
2.1.4	X			X				DPD
2.1.5	X			X			X	DPD
2.1.6	X			X				DPD(MPO)
2.1.7	X					X	X	OS
2.1.8	X			X				DPD
2.1.9	X			X				DPD
2.1.10	X			X				City Community Enhancement
2.1.11	X			X	X			County Land Bank
Smart Planning								
2.2.1		X		X	X			DPD
2.2.2		X		X				DPD
2.2.3			X		X			DPD
2.2.4		X		X				DPD
2.2.5		X		X				DPD
2.2.6		X		X				DPD(MPO)/City & County Engineering
2.2.7	X			X	X			Shelby County Mayor
2.2.8	X			X				DPD
2.2.9		X			X			DPD
2.2.10	X			X				DPD
2.2.11	X			X				DPD
2.2.12	X			X				DPD
2.2.13	X			X				DPD/HCD
2.2.14	X			X	X			DPD
2.2.15	X			X				DPD
2.2.16		X		X				DPD
2.2.17	X			X				OS
2.2.18			X		X	X	X	Shelby County/Memphis Mayors
2.2.19			X	X	X			DPD
2.2.20	X			X				DPD
2.2.21	X			X				DPD
2.2.22			X	X				DPD/City & County Engineering
2.2.23	X			X				DPD
2.2.24	X			X				DPD
2.2.25	X			X	X	X		DPD(Codes)
2.2.26	X			X				Shelby County/Memphis Mayors

	Short Term (0-12 months)	Mid-Term (0-24 months)	Term (24+ months)	Administrative Policy Change	Local Legislation	State Legislation	Incentive	Responsible Party
Capital Improvement Program								
2.3.1		X		X				DPD
2.3.2	X			X				OS
2.3.3		X			X			Shelby County/Memphis Mayors
Community Redevelopment								
2.4.1	X			X				HCD/DPD
2.4.2		X		X				Shelby County/Memphis Mayors
2.4.3		X			X			DPD
2.4.4	X						X	Land Bank
2.4.5		X			X	X		Land Bank
2.4.6			X			X	X	Land Bank
2.4.7			X				X	DPD
2.4.8	X			X	X		X	DPD
2.4.9			X	X	X			DPD
Public Realm								
2.5.1		X		X				DPD
2.5.2		X		X				DPD
2.5.3			X	X				DPD/City & County Engineering
2.5.4		X			X			CCC/DPD(CRA)
2.5.5	X			X				DPD
2.5.6	X					X	X	Land Bank
2.5.7			X	X				Shelby County/Memphis Mayors
2.5.8		X		X				DPD/City Park Services
2.5.9		X		X				MATA
2.5.10	X			X				Shelby Farm Park Conservancy
2.5.11	X			X				Memphis Center for Neighborhoods
Rethinking Transportation								
2.6.1			X		X	X		Shelby County/Memphis Mayors
2.6.2		X		X				MATA/DPD(MPO)
2.6.3	X			X				MATA
2.6.4		X		X			X	MATA
2.6.5		X					X	MATA
2.6.6	X						X	MATA
2.6.7	X						X	Shelby County Health Department
2.6.8	X						X	MATA
2.6.9		X		X				DPD
2.6.10			X	X				DPD(MPO)
2.6.11		X		X				DPD(MPO)
2.6.12			X	X				DPD(MPO)

	Short Term (0-12 months)	Mid-Term (0-24 months)	Term (24+ months)	Administrative Policy Change	Local Legislation	State Legislation	Incentive	Responsible Party
2.6.13		X		X				OS
2.6.14	X			X				DPD(MPO)
2.6.15		X		X				DPD(MPO)
2.6.16		X		X	X			Shelby County Mayor
2.6.17	X						X	Shelby County Health Department
A Leader for Green Buildings								
2.7.1		X		X	X			DPD
2.7.2			X	X	X			DPD
2.7.3		X		X	X			DPD
2.7.4		X		X				OS
2.7.5	X			X	X			DPD
2.7.6	X			X				OS
2.7.7	X				X		X	DPD
PROTECTING AND IMPROVING OUR ENVIRONMENT								
Consumption								
3.1.1	X			X				OS/MLGW
3.1.2	X			X	X			MLGW
3.1.3	X			X				OS
3.1.4		X		X	X			OS
3.1.5		X		X	X			DPD
3.1.6		X		X				OS
3.1.7	X			X				OS
Protecting Natural Resources								
3.2.1	X			X				Shelby County/Memphis Mayors
3.2.2		X		X				MLGW
3.2.3	X			X				OS/Shelby County Health Dept.
3.2.4	X			X				Shelby County Health Dept
3.2.5		X			X			Ground Water Institute
3.2.6			X	X		X		Shelby County/Memphis Mayors
3.2.7	X						X	DPD
3.2.8	X						X	Title VI Coordinator
3.2.9	X						X	Title VI Coordinator
3.2.10	X						X	OS
3.2.11	X			X				Shelby County/Memphis Mayors
3.2.12	X			X				Memphis Parks Service

	Short Term (0-12 months)	Mid-Term (0-24 months)	Term (24+ months)	Administrative Policy Change	Local Legislation	State Legislation	Incentive	Responsible Party
GREENING OUR ECONOMY								
Green Jobs								
4.1.1	X			X				DPD(ED)/Memphis Chambers/OS
4.1.2			X	X				OS/U of M
4.1.3	X			X			X	OS
4.1.4			X	X				OS
4.1.5	X			X				Memphis Career Center
4.1.6	X			X				OS
Economic Development								
4.2.1	X			X				OS
4.2.2		X		X	X			DPD/CCC/Shelby County Health Dept.
4.2.3	X						X	DPD(ED)/CCC
4.2.4		X		X	X		X	DPD/CCC
4.2.5	X			X				Shelby County Health Dept.
4.2.6	X				X	X	X	Land Bank
4.2.7			X		X			Shelby County/Memphis Mayor
4.2.8	X			X				OS
LEARNING GREEN LESSONS								
Public Awareness								
5.1.1	X			X				OS
5.1.2	X			X				Shelby County/Memphis Mayors
5.1.3	X			X				OS
5.1.4	X			X				DPD
5.1.5	X			X				Memphis Public Library
5.1.6		X		X				DPD(MPO)
5.1.7		X		X				OS
Eco-Kids and Schools								
5.2.1	X			X				OS
5.2.2	X			X				OS
5.2.3	X			X				City/County School Boards
5.2.4		X		X				City/County School Boards
LEADING BY EXAMPLE								
The Office of Sustainability								
6.1.1	X			X				Shelby County/Memphis Mayors
6.1.2	X			X				Shelby County Mayor
6.1.3		X		X				Shelby County Mayor/OS
6.1.4			X	X	X			OS
6.1.5	X			X				OS
6.1.6	X			X				OS

	Short Term (0-12 months)	Mid-Term (0-24 months)	Term (24+ months)	Administrative Policy Change	Local Legislation	State Legislation	Incentive	Responsible Party
Public Purchasing								
6.2.1	X			X				Shelby County Purchasing
6.2.2	X			X				Shelby County Purchasing
6.2.3	X			X				Shelby County Purchasing
6.2.4	X			X				Shelby County Fleet Service
6.2.5		X		X			X	Shelby County Finance
6.2.6			X	X				Shelby County EEOC
6.2.7		X		X				Shelby County EEOC
Public Buildings								
6.3.1		X		X				Shelby County Public Works/CAO
6.3.2		X		X				OS
6.3.3			X	X				Shelby County/Memphis Mayors
6.3.4		X		X				Shelby County Public Works
6.3.5	X			X				DPD
6.3.6		X		X				DPD
6.3.7	X			X				OS/Shelby County Public Works
6.3.8		X		X				Shelby County Public Works
6.3.9	X			X				Shelby County/Memphis Mayors
6.3.10		X		X				SC/Mphs Mayors & SC/Mphs Superintendent

Appendix B

Recommendations Table

Appendix C

Top-Ranked Recommendations



Top-Ranked Recommendations

Over a four-month period, the seven committees of Sustainable Shelby brainstormed, discussed, debated, and agreed on recommendations that would have the most impact in creating a sustainable community.

The committees developed about 300 possible recommendations. Each committee then selected its top 7-9 recommendations and presented them at the Digital Congress at the FedEx Institute of Technology to all committee members. Following the presentations, all 130 committee members ranked the recommendations, using wireless keypad technology, and in addition, Steven Ethridge of Ethridge & Associates cast an equal number of votes representing public opinion based on the results of the scientific poll conducted by his company.

In this way, the Digital Congress produced a list of 52 recommendations that came from this ranking process that combined public opinion and the opinion of the committee members. These 52 recommendations then became the focus for developing the detailed strategies of this report.

The report of the committees, with all of the recommendations that they considered, is contained in a separate file on this DVD.

FINAL 52 RECOMMENDATIONS & Recommending Committees

- 1** Create/reinvest in a great public realm that includes parks, schools, streets, that are appropriately scaled—one size does not fit all.
LAND USE AND DEVELOPMENT
- 2** Create/reinvest in great neighborhoods—not merely subdivisions—that are “complete,” walkable, and provide a sense of neighborhood.
LAND USE AND DEVELOPMENT
- 3** Amend existing Technical Codes (Building, Plumbing, Electric, Mechanical and Fuel Gas) by June 30, 2009 to eliminate identified obstacles to sustainable growth.
BUILDING CODES
- 4** Produce a Comprehensive Plan for Memphis and Shelby County that includes guiding principles that provide a clear, predictable, positive vision.
LAND USE AND DEVELOPMENT
- 5** Design new public buildings to be flexible and adaptable to potential changes in future use.
PUBLIC BUILDINGS AND PURCHASING POLICIES
- 6** The public sector should emphasize the adaptive reuse of existing buildings.
PUBLIC BUILDINGS AND PURCHASING POLICIES
- 7** Amend local regulations for demolition activities to identify and enact incentives that encourage building reuse when feasible and material recycling when demolition is needed.
BUILDING CODES
- 8** Provide incentives for reclaiming declining property in established neighborhoods.
NEIGHBORHOOD REBIRTH
- 9** Adopt comprehensive, community-based watershed management strategies as the driver of water quality, quantity and habitat decisions
ENVIRONMENT AND NATURAL RESOURCES
- 10** Create/enhance bike routes and pedestrian facilities to identify routes that can easily be stripped for bicycle lanes, ensure dedicated funding through capital improvement program for the above identified routes, and install “share the road” signs.
TRANSPORTATION AND TRAFFIC
- 11** Improve the coordination and efficiency of public sector purchasing by conducting periodic needs assessments, leveraging buying power with other municipalities, and by changing the annual budgeting process to incentives reductions in spending and energy consumption within County government.
PUBLIC BUILDINGS AND PURCHASING POLICIES
- 12** Convert government fleets to alternative energy efficiency and multi-fuel source.
TRANSPORTATION AND TRAFFIC
- 13** Identify Priority Development Areas and develop incentives for sustainable buildings in these Areas.
PUBLIC INCENTIVES
- 14** Significantly decrease overall community consumption, specifically the consumption of non-local, non-renewable, non-recyclable materials, water, energy, and fuels. The County should take a leadership role in encouraging sustainable procurement, extended producer responsibility, and should explore innovative strategies to become a zero waste County.
ENVIRONMENT AND NATURAL RESOURCES
- 15** Decrease emissions of toxic and greenhouse gases.
TRANSPORTATION AND TRAFFIC
- 16** Reduce, toward the ultimate goal of eliminating, the exposure of people and other organisms to harmful levels of environmental contaminants, with the focus being not just on separate hazards but on the way they and the ecosystems they affect are inter-related. All policies enacted will work with the goal that no one geographic or socioeconomic group in the County is being unfairly impacted by environmental pollution.
ENVIRONMENT AND NATURAL RESOURCES
- 17** Emphasize connectivity on most development.
TRANSPORTATION AND TRAFFIC
- 18** Direct more CIP funding for maintenance and updating of infrastructure and community facilities.
NEIGHBORHOOD REBIRTH

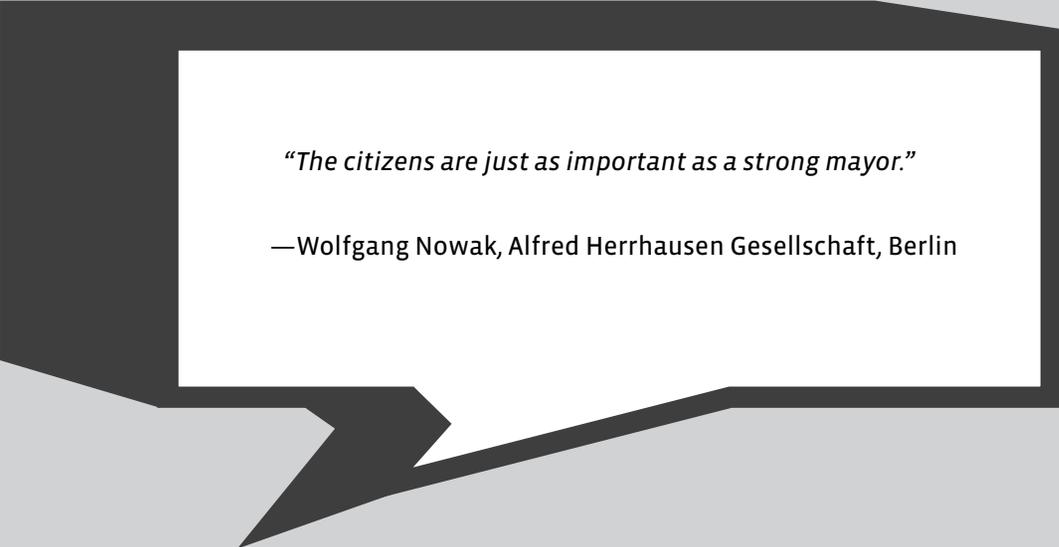
- 19** Develop an efficient multimodal system that moves goods and services effectively, maximizes the use of intermodal transportation facilities, and minimizes impacts on residential areas.
TRANSPORTATION AND TRAFFIC
- 20** Use Comprehensive Planning as the guide for public investment by city and county governments.
LAND USE AND DEVELOPMENT
- 21** Adoption of 2003 Edition of the International Code Council Energy Council Energy Conservation Code with appropriate and applicable amendments to be effective by December 31, 2008.
BUILDING CODES
- 22** Develop incentives to accomplish the goals of other Sustainable Shelby committees.
PUBLIC INCENTIVES
- 23** Develop incentives for all sustainable projects, and expedite permitting for these sustainable projects.
PUBLIC INCENTIVES
- 24** Develop and implement cost-effective, convenient, collaborative plans for community cleanliness.
NEIGHBORHOOD REBIRTH
- 25** Conduct a public planning process for the County that outlines specific measures to implement protection, conservation & resource targets.
ENVIRONMENT AND NATURAL RESOURCES
- 26** Create an entity and funding source focused on revitalizing commercial neighborhood centers, including incentives.
NEIGHBORHOOD REBIRTH
- 27** Establish a single source contact within local government to evaluate proposed economic development projects with enhanced sustainable components, and empower that entity to grant appropriate public economic incentives.
BUILDING CODES
- 28** Require applicants to quantify specific economic and environmental benefits during the application process, such as carbon footprint calculators, and ensure that the work required to obtain the incentive is delivered.
PUBLIC INCENTIVES
- 29** Streamline and improve property acquisition and assembly for redevelopment in established neighborhoods.
NEIGHBORHOOD REBIRTH
- 30** Recreate and empower the Planning Commission.
LAND USE AND DEVELOPMENT
- 31** Locate new public buildings strategically in order to take advantage of existing and planned mass transit, reduce travel distance for a building's users, and encourage private development in suitable areas with excess capacity and existing infrastructure.
PUBLIC BUILDINGS AND PURCHASING POLICIES
- 32** Identify existing sustainability opportunities (recycling, green building, etc) and use those benefits as a baseline for developing incentives for other categories.
PUBLIC INCENTIVES
- 33** Work with banks and mortgage companies to market Energy Efficient Mortgage (EEMs) for qualified new and existing homes and commercial businesses.
PUBLIC INCENTIVES
- 34** Create complete walkable and bikeable neighborhoods.
TRANSPORTATION AND TRAFFIC
- 35** Design safer streets to use street design and traffic calming techniques to slow down traffic, to create better sidewalk and intersection design of pedestrian facilities, and to educate bicyclist, pedestrians, and drivers on how to safely share the road.
TRANSPORTATION AND TRAFFIC
- 36** Plan and develop a sufficient open space system that will be diverse in uses and opportunities and includes natural function/wildlife habitats as well as passive and active recreation with an equitable distribution of parks, trees, pathways, and bikeways throughout the community.
ENVIRONMENT AND NATURAL RESOURCES
- 37** Continue to increase diversity and equal opportunity among providers of goods and services to Shelby County government by setting measurable goals and tracking progress over time.
PUBLIC BUILDINGS AND PURCHASING POLICIES

- 38** Provide an analysis of the public transportation system, identify the deficiencies of the existing system, and expand or improve its network to ensure adequate accessibility to all neighborhoods.
NEIGHBORHOOD REBIRTH
- 39** Increase the efficiency of the current transit network to develop performance measuring criteria for transit facilities and increase the frequency and reliability of transit vehicles.
TRANSPORTATION AND TRAFFIC
- 40** Consider ways to incentivize alternative modes of transportation.
PUBLIC INCENTIVES
- 41** Encourage responsible consumption within Shelby County government through energy audits, educational programs, and the creation of a new “Sustainability Officer” position.
PUBLIC BUILDINGS AND PURCHASING POLICIES
- 42** Encourage community members of all ages to understand the basic principles of sustainability and use those principles to guide their decisions and actions.
ENVIRONMENT AND NATURAL RESOURCES
- 43** Recognize the importance of context appropriate design for new public buildings and incorporate “Community Impact Statements” and Design Guidelines addressing issues of neighborhood impact into the planning process.
PUBLIC BUILDINGS AND PURCHASING POLICIES
- 44** Encourage appropriate density in established neighborhoods.
NEIGHBORHOOD REBIRTH
- 45** Demonstrate to the public the benefits of sustainable growth and development.
TRANSPORTATION AND TRAFFIC
- 46** Establish a funding mechanism and revenue source for sustainability issues, and ensure that all involved agencies are trained on implementation requirements.
PUBLIC INCENTIVES
- 47** Re-build the City from inside-out placing emphasis on areas where public investment will yield its greatest immediate return.
LAND USE AND DEVELOPMENT
- 48** Promote civic knowledge, pride, and rights through partnerships between education, government, and neighborhoods.
NEIGHBORHOOD REBIRTH
- 49** Work with the City and County Boards of Education and the Tennessee Board of Regents to identify opportunities to educate students and faculty on Building Code issues that promote sustainable growth.
BUILDING CODES
- 50** Establish a local speaker’s bureau that would seek and/or establish opportunities to educate those involved in the construction industry and the general public of the advantages of using sustainable building design methods and materials.
BUILDING CODES
- 51** Create better support systems and communication infrastructure for neighborhood associations.
NEIGHBORHOOD REBIRTH
- 52** Set goal for equitable urban land use and transportation planning and policies to create compact, ACCESSIBLE mixed-use projects, forming urban villages designed to maximize mixed income housing, Organic recycling, urban and rooftop gardening, reduced energy use, and also to encourage walking, bicycling and use of existing and future public transit systems.
ENVIRONMENT AND NATURAL RESOURCES

Appendix D

Sustainable Shelby Contributors





“The citizens are just as important as a strong mayor.”

—Wolfgang Nowak, Alfred Herrhausen Gesellschaft, Berlin

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Appendix E

History of Sustainability in Shelby County



The seeds for Sustainable Shelby were planted in 2002 when newly-elected Shelby County Mayor AC Wharton signed his first executive order. It created the “Summit for Equitable Growth” to explore the potential for smart growth in Memphis and Shelby County.

At the time, Mayor Wharton said his interest stemmed from deep concerns about county government’s climbing debt as a result of sprawl and concerns about residential developments that required owner reinvestment before first mortgages were paid off. He said past county policies “not only raise questions about the best use of irreplaceable land, but it also drives up debt through the demand for county schools, it deprives the inner city of needed investment to capitalize on existing infrastructure, and it siphons funding needed for essential county services. While there may be debate on the impact of sprawl, there is no debate on this central fact: current patterns of development are simply not sustainable.”

As a result of Mayor Wharton’s executive order, a public summit was held in March, 2003, where several hundred people heard national experts discuss trends in smart growth and then considered ways to apply them in Shelby County.

The summit developed guiding principles that have shaped the policies of the Wharton Administration and they served as foundation for the Sustainable Shelby process. The guiding principles were:

1. *We want to build a community that attracts and sustains people, a competitive city built to accommodate the new economy.*
2. *The development industry is an important part of our economy; we want to grow, not diminish, that industry and by building a community that attracts and retains talent, we will increase development opportunities.*
3. *In evaluating development, we should calculate the total cost of development and sustenance, including capital and operating costs borne by government, development, and the ultimate user.*
4. *Public discussion of public and private development and spending patterns should be promoted to tie spending to public policy.*
5. *We now have a bias that favors scattered development at the perimeter; we should make redevelopment or infill equally feasible.*
6. *We should better maintain the vitality of existing neighborhoods. Maintaining appropriate infrastructure and intervening early when signs of decay become evident are two techniques that would help affect this.*
7. *Increased home ownership leads to greater neighborhood stability.*
8. *Social capital—ties among neighbors, active citizen involvement in neighborhood planning and improvement—strengthens neighborhoods.*
9. *Identifying, marketing, and leveraging civic assets strengthen neighborhoods.*
10. *We believe that putting the “Smart Growth Principles” into practice will produce a healthier, more vibrant community. The “Smart Growth Principles” of development are:*
 - a. *Mix land uses*
 - b. *Take advantage of compact building design*
 - c. *Create a range of housing opportunities and choices*
 - d. *Create walkable communities*
 - e. *Foster distinctive, attractive communities with a strong sense of place*
 - f. *Preserve open space, farmland, natural beauty, and critical environmental areas.*
 - g. *Strengthen and direct development toward existing communities.*
 - h. *Provide a variety of transportation choices.*
 - i. *Make development decisions predictable, fair and cost effective.*
 - j. *Encourage community and stakeholder collaboration in development decisions.*

In addition, the Summit agreed on three main points. Development that is contiguous, denser, and within existing infrastructure is more cost efficient and more sustainable than current development patterns. The desirability of neighborhoods is determined by the quality of its schools and its safety. Finally, the barriers to redevelopment are difficulty and cost of land assembly, double taxation, neighborhood resistance, bureaucratic overhead, inappropriate zoning, codes and infrastructure, neighborhood deterioration, property valuation and perceived value and capital cost and availability.

In its conclusion, the Summit said that to overcome the barriers requires a “reinvigorated planning and development function empowered to create the conditions that will cause the desired development.” It added: “A restructured Office of Planning and Development together with a fully-staffed Community Redevelopment Agency are probably the organizations best suited to carry out this task.”

Their charges should include making property neglect harder, making land assembly easier, making infill development more desirable for neighborhood residents, developers, investors, site design, and operation of public facilities to have a maximum positive effect on surrounding communities.

To build on the results of the Summit, Mayor Wharton convened follow-up meetings in subsequent years and these inspired the drafting of the new Unified Development Code (UDC), which embraces many of the concepts advanced in these sessions, particularly core neighborhood revitalization, walkable neighborhoods, a transparent planning process, and mixed-use development.

As the logical outgrowth of these initiatives, Mayor Wharton conceived of the Sustainable Shelby Initiative.

Appendix F

Public Opinion about Sustainability

In support of the goals of Sustainable Shelby, the Memphis and Shelby County Division of Planning and Development commissioned a scientific poll of 610 citizens to determine their opinions on key issues of smart growth and sustainability. The objective of the study—reliable within +/- 3.9% with a 95% confidence factor—was the foundation on which policies and programs were built; more specifically, to:

- Determine public opinion on guiding principles adopted in 2003 for smart growth;
- Determine public values affecting development—neighborhoods, “green” buildings, cost of sprawl, density, walkability, etc.—that should be incorporated into the proposed new development code;
- Identify key elements of sustainable development—land use, neighborhood reinvestment, green assets, and environmentally sensitive building; and
- To gather information that becomes the framework for the development of the agenda for the future.

The results of this study were not only shared with each committee as it deliberated on its recommendations, but the polling was used to cast the public’s votes in setting the final ranking of recommendations.

The poll showed conclusive that the public is strongly interested in sustainability. In particular, it showed that the people of Shelby County are prepared to support programs that create walkable neighborhoods, better coordination by government, incentives for stronger neighborhoods, and more emphasis on bike lanes.

Key findings included the following:

- Residents are more likely to do things to conserve the environment and natural resources for economic benefits (39%) rather than environmental benefits (27%) although a third of residents (33%) would do both.
- After hearing a concept statement that defines the vision of the *Sustainable Shelby: A Future of Choice, Not of Chance*, nearly nine out of ten residents (88%) support it.

The concept statement was as follows:

I am going to describe a vision of a process for managing the interlocking problems of suburban sprawl and urban deterioration and then get your opinion of it.

The vision is called *Sustainable Shelby: A Future of Choice, Not of Chance*. Sustainability, as defined in this process, means using, developing, and protecting resources at a rate and in a manner that enables people to meet their current needs and also provides that future generations can meet their own needs. Sustainability requires simultaneously meeting environmental, economic, and community needs.

- The rank order of total agreement (strongly agree, agree, somewhat agree) with the Guiding Principles among the public is as follows:
 - We should maintain the vitality of existing neighborhoods. Maintaining appropriate infrastructure and intervening early when signs of decay become evident are two techniques that would help affect this (94%).
 - Social capital ties among neighbors, active citizen involvement in neighborhood planning and improvement strengthens neighborhoods (93%).
 - We want to build a community that attracts and sustains people, and a competitive city built to accommodate the new economy, meaning a knowledge-technology based, global economy (92%).
 - We now have a bias that favors scattered development at the perimeter. We should make redevelopment or urban infill development, that is, redevelopment of existing neighborhoods and adaptively reusing existing buildings equally feasible (91%).
 - In evaluating development we should calculate the total cost of development and maintenance; including the capital and operating cost borne by government, development and the ultimate user (91%).
 - Identifying, marketing and leveraging civic assets strengthens neighborhoods (90%).
 - Public discussion of public and private development and spending patterns should be promoted to tie spending to public policy (90%).

In addition, the polling asked the public to rank the importance of several values. The top-ranking ones were:

- Make development decisions predictable, fair, and cost effective (95%).
- Preserve open space, farmland, natural beauty, and critical environmental areas (95%).
- Create walkable communities (94%).
- Strengthen and direct development toward existing communities (93%).
- Encourage community and stakeholder collaboration in development decisions (92%).
- Provide a variety of transportation options (91%).
- Foster distinctive, attractive communities with a strong sense of place (88%).
- Take advantage of compact building design (87%).
- Create a range of housing opportunities and choices (84%).

Specific questions were asked to provide each committee with information about the public's opinions on issues being considered by it. For example, the transportation committee was told that 92% of the public said they drive alone to work or school, 3% carpool, and 3% take public transit. 71% of the public is happy with their current transportation options, but 79% said they would likely ride light rail if it was available. Public dissatisfaction with the existing public transit system was reflected in the finding that the price of gas would have to rise to \$6.12 a gallon before they would consider taking MATA. Meanwhile, carpooling becomes more attractive if gas reaches \$4.75 a gallon.

Finally, survey participants expressed strong opinions about addressing scattered development at the community's perimeter. Specifically, the public supported the following statements:

- We should make redevelopment or urban infill development, that is, redevelopment of existing neighborhoods and adaptively reusing existing buildings equally feasible (91%).
- In evaluating development we should calculate the total cost of development and maintenance; including the capital and operating cost borne by government, development and the ultimate user (91%).
- Identifying, marketing and leveraging civic assets strengthens neighborhoods (90%).
- Public discussion of public and private development and spending patterns should be promoted to tie spending to public policy (90%).

The complete polling report can be found in a separate file on this DVD.

Appendix G

Resources

Sustainable Shelby, in developing its strategies, has reviewed, relied, and read numerous reports. This is a partial list of those publications and resources.

CITY AND STATE SUSTAINABILITY PROGRAMS

Chicago Environmental Agenda
http://egov.cityofchicago.org/webportal/COCWebPortal/COC_ATTACH/ActionAgenda.pdf

Sustainable City
www.sustainable-city.org

EcoCity Cleveland
www.ecocitycleveland.org

Melbourne Principles for Sustainable Cities
www.unep.org/jp/ietc/Focus/MelbournePrinciples/English.pdf

Plan NYC: Greener, Greater
www.nyc.gov/html/planyc2030/html/home/home.shtml

Sustainable Albuquerque
www.cabq.gov/sustainability/

Sustainable Calgary
www.sustainablecalgary.ca

Sustainable Cities Program
www.unhabitat.org/categories.asp?catid=369

Sustainable Pittsburgh
www.sustainablepittsburgh.org

Sustainable Seattle
www.sustainableseattle.org

Sustainable Seattle
www.sustainableseattle.org/Resources

Tennessee Environmental Council
Sustainability Agenda
[www.tectn.org/11-13-07%20Sustainable %20TN%20Issues%20Agenda.pdf](http://www.tectn.org/11-13-07%20Sustainable%20TN%20Issues%20Agenda.pdf)

SUSTAINABILITY RESOURCES

10 Principles for Sustainable City Governance
<http://mm.dk/filer/10principles.pdf>

Center for Neighborhood Technology
www.cnt.org

U.S. Department of Energy
www.doe.gov

U.S. Environmental Protection Agency
www.epa.gov

Design Trust for Public Space
www.designtrust.org/publications/publication_03hpg.html

Earth 911
www.earth911.org

EcoEarth
www.ecoearth.info/

Eco-Studio Model Sustainability Practices
<http://ecocity.ncr.vt.edu/model.html>

Energy Star
www.energystar.gov

Enterprise Green Community Guidelines
www.greencommunitiesonline.org/tools/

Green Values Stormwater Toolbox
[//greenvalues.cnt.org/calculator](http://greenvalues.cnt.org/calculator)

Housing + Transportation Affordability Index
[//htaindex.cnt.org/](http://htaindex.cnt.org/)

ICLEI-Local Governments for Sustainability
www.iclei.org/

Oregon Natural Step
<http://www.ortns.org/>

Public Transit Calculator
www.publictransportation.org/contact/stories/calculator_08.asp

Sustainable Toolkit
www.oregonsolutions.net/toolkit/

Smart Growth America
www.smartgrowthamerica.org

Smart Growth Toolkit
www.smartgrowthtoolkit.net/

Smart Growth Online
www.smartgrowth.org

SustainLane
www.sustainlane.com/

Transportation For America
[//t4america.org/](http://t4america.org/)

Urban Land Institute
www.uli.org

SUSTAINABILITY AND GREEN GROUPS

Bluff City Canoe Club
www.bluffcitycanooclub.org

City Farms
[//journeytoforever.org/cityfarm.html](http://journeytoforever.org/cityfarm.html)

Clean Memphis
www.cleanmemphis.org

Coalition for Livable Communities
www.livablememphis.org

Eco Memphis
www.ecomemphis.com

Edible Memphis
www.ediblememphis.com/

Greater Memphis Greenline
www.greatermemphisgreenline.org/

Greening Greater Memphis
www.greeninggreatermemphis.org/

Grow Memphis
www.midsouthpeace.org/growmemphis.html

Healthy Memphis Common Table
www.healthymemphis.org/

LA Ecovillage
www.laecovillage.org/brochure.html

Live Where You Live
[//memphisdcouncil.blogs.com/lwyl/](http://memphisdcouncil.blogs.com/lwyl/)

Memphis Hightailers Bicycle Club
www.clubexpress.com/content.aspx?page_id=0&club_id=631861

Mississippi River Trails
www.mississippirivertrail.org

Nature Conservancy
www.nature.org

Nature Conservancy of Tennessee
www.tnc.org

Park Friends
www.parkfriends.net/

Project Green Fork
[//web.mac.com/garymargot/projectgreenfork.org/Home.html](http://web.mac.com/garymargot/projectgreenfork.org/Home.html)

Revolutions Bike Shop
<http://revolutionsmemphis.com/>

Share The Road Mid-South
www.sharetheroadmidsouth.org

Shelby Farms Park
www.shelbyfarmspark.org

Sierra Club, Memphis
[//tennessee.sierraclub.org/chickasaw/](http://tennessee.sierraclub.org/chickasaw/)

SkateLife Memphis
www.skateparkformemphis.org/

Slow Food USA
www.slowfoodusa.org

Smart Growth Leadership
www.sgli.org

Trust for Public Lands
www.tpl.org

U.S. Green Building Council (Memphis Region)
[//chapters.usgbc.org/memphis/](http://chapters.usgbc.org/memphis/)

West Tennessee Clean Cities
www.wtccc.com

Wolf River Conservancy
www.wolfriver.org

Appendix H

Acronym Glossary



#**501.C3**

Non-profit agencies

A**AIA**

American Institute of Architects

APC

Automatic People Counters

AVL

Automatic Vehicle Location

C**CAO**

Chief Administrative Officer

CCC

Center City Commission

CDC

Community Development Corporations

CIP

Capital Improvement Program

CMAQ

Congestion Mitigation and Air Quality Improvement Program

CO₂

Carbon dioxide

CRA

Community Revitalization Agency

D**DPD**

Memphis and Shelby County Division of Planning and Development

E**EOC**

Equal Opportunities Compliance

EEM

Energy Efficient Mortgages

EIM

Energy Improvement Mortgages

H**HCD**

City of Memphis Division of Housing and Community Development

HERS

Home Energy Rating Systems

I**ICLEI**

International Council for Local Environmental Initiatives

L**LEED**

Leadership in Energy and Environmental Design

LEED AP

Leadership in Energy and Environmental Design Accredited Professional

LEED ND

Leadership in Energy and Environmental Design for Neighborhood Development

LUCB

Memphis and Shelby Land Use Control Board

M**MATA**

Memphis Area Transit Authority

MLGW

Memphis Light Gas and Water Division

MPO

Memphis Urban Area Metropolitan Planning Organization

P**PD**

Planned Development

PILOT

Payment-in-lieu-of taxes

S**SUP**

Special Use Permit

T**TIF**

Tax Increment Financing

U**UDC**

Memphis and Shelby County Unified Development Code

W**WIN**

Workforce Investment Network

Appendix I

Glossary



A**Adaptive re-use**

The process of adapting old structures for new purposes.

Arterial Road

An arterial road is a moderate or high-capacity road which is immediately below a highway level of service. An arterial road carries large volumes of traffic between areas in urban centres.

B**“Best Practices”**

The most efficient and effective way of accomplishing a task, based on repeatable procedures that have proven themselves over time for large numbers of people.

Bicycle Sharing

A system that provides the public with free or affordable access to bicycles for city transport in order to reduce the use of automobiles for short trips inside the city thereby diminishing traffic congestion, noise and air-pollution.

C**Carpooling**

An arrangement whereby several people travel together in the same car in order to save costs and reduce pollution.

Car-Sharing

Car sharing is an alternative to car ownership, taxis or car rental. Car sharing provides a network of vehicles in both on-street and off-street parking spots. Members of the program can book vehicles for short periods of time, from one hour to a few days. Car sharing can offer the freedom of having a car without the hassles and costs of ownership such as maintenance, insurance and repairs.

Connectivity Analysis

A method for measuring how well a specific area's transportation network is connected.

E**Ethos**

The character or fundamental values of a person, people, culture, or movement.

Ex-officio member

A member of a body (a board, committee, council, etc.) who is part of it by virtue of holding another office.

Entitlements

Access to benefits because of rights, or by agreement through law.

I**Infrastructure**

The basic facilities, services, and installations needed for the functioning of a community or society, such as transportation and communications systems, water and power lines, and public institutions including schools, post offices, and prisons. It also refers collectively to the roads, bridges, rail lines, and similar public works that are required for an industrial economy, or a portion of it, to function.

Intermodal Rail Yards

A railroad yard where freight is transferred between different modes of transportation, such as between rail and truck or cargo ship and rail.

K**Knowledge Economy**

An economy where knowledge and education can be treated as a business product or productive asset.

L**Land bank**

A public authority created to efficiently hold, manage and develop government owned property. Land banks act as a legal and financial mechanism to transform vacant, abandoned and tax-foreclosed property back to productive use.

LEED Accredited Professionals

A professional that has demonstrated a thorough understanding of green building practices and principles by passing the LEED certification exam.

Liner Buildings

A building, parallel to the street, designed to conceal a parking lot or parking garage from the street with habitable spaces at the ground-level and above. Spaces can be used for commercial or residential uses.

M**Mayors' Kyoto Accord**

An agreement signed by a City's leader pledging to reduce carbon dioxide per the targets set by the Kyoto Protocol. The United Nations brought countries together to ratify the Kyoto protocol and commit to reducing emissions of greenhouse gasses, or to engage in emissions trading programs.

Mitigation

An action to make something less severe.

Multi-Service Fiber Network

A specific type of high speed broadband network based on the use a fiber optic technology that allows for multiple services such as cable, internet and phone on the same network.

N**Neighborhood Completeness**

A tool to measure the proximity of residents to daily goods and services in their neighborhoods.

Non-Conformities

Refusal or failure to conform to accepted standards, conventions, rules, or laws.

P**Pedestrian Oriented Neighborhood**

Neighborhood design that encourages more people to consider walking for short trips by providing for connections between private buildings and to the public sidewalk and trail system. The design also provides for pedestrian sized public space and amenities at the entrance to buildings.

Public realm

Outdoor areas accessible to the public such as publicly owned streets, sidewalks, rights-of-ways, parks and other publicly accessible open spaces, and public and civic buildings and facilities.

S**Schematic Design**

Schematic Design represents the period in which questions about the project are identified and general concepts are refined.

Silos

Silos is a term referring to the fact that within government, and in many other organizations, different departments do not communicate or collaborate but work in isolation. This often results in multiple departments doing the same or similar work and wasting resources in the process.

Streetscape

The elements within and along the street right-of-way that define its appearance, identity, and functionality, including adjacent buildings and land uses, street furniture, landscaping, trees, sidewalks, and pavement treatments, among others.

Sustainability

Sustainability means using, developing, and protecting resources at a rate and in a manner that enables people to meet their current needs and also provides that future generations can meet their own needs. Sustainability requires simultaneously meeting environmental, economic, and community needs.

Synergy

A term used to describe a situation where different entities cooperate advantageously for a final outcome.

T

Tax Abatement

When a taxing board grants a taxpayer a stay of paying a tax for a short or long term, for a total or percentage of the tax.

Transit-ready density

The number of individuals living and working within a walkable distance of a transit stop needed to support transit ridership.

U

Urban Art

Art in cities public spaces.

Urban Farming

The practice of cultivating, processing and distributing food in, or around a village, town or city.

Urban Homestead

The Urban Homestead Program is designed to provide opportunities for the development of vacant government owned land for residential uses.

Urbanists

A person knowledgeable and interested about issues affecting cities.

W

Waste Audit

A report detailing the type and volume of waste that is generate in a particular facility or building.

Appendix J

Photography Attribution

IMPLEMENTATION PLAN

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PAGE 26 <i>“Farmers Market 2, Cordova”</i> Jeno Lehel <i>“Farmers Market, Botanic Gardens”</i> Melissa Petersen	PAGE 68 <i>“Bluffwalk”</i> Andy Kitsinger	PAGE 101 <i>“Butterfly 2”</i> Mary Baker <i>“U of M Joffre Clean Up”</i> Memphis City Beautiful	PAGE 122 <i>“Habitat for Humanity EcoBuild”</i> Becky Williamson
PAGE 27 <i>“Welcome to Memphis Farmers Market”</i> Memphis Farmers Market	PAGE 78 <i>“BRIDGES Center”</i> Timothy Hursley		

IMPLEMENTATION PLAN (continued)

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PAGE 131 "Bikes" Joe Royer "MRT" Joe Royer	PAGE 146 "Fisher Steel Charette 1" Code Studio "Sign Brigade 2" Memphis City Beautiful	PAGE 166 "GAC Volunteers" Memphis City Beautiful??	PAGE 282 "Memphis College of Art Team" Ryan Steed
PAGE 136 "Child with Gourd" Memphis Farmers Market "Botanic Gardens" Becky Williamson	PAGE 147 "2008 Rivers Arts Festival Presenting Award" Doug Bloom "Court Square" Sustainable Shelby Team	PAGE 167 "Memphis College of Art, Rust Hall" Natalie Hoffmann	
PAGE 137 "Habitat for Humanity EcoBuild 2" Becky Williamson	PAGE 148 "Botanic Gardens" Janice Smythe	PAGE 168 "Sunflower 2, Agricenter" Virginia Hester	
PAGE 138 "Americorps Volunteers" Memphis City Beautiful	PAGE 154 "Alley, Midtown" Roy Barnes	PAGE 174 "Government Fleet" Sustainable Shelby Team	
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BROADSIDE

FROM LEFT TO RIGHT

“Sun Studio”
Bill D’Agostino

“Downtown Main Street”
Andy Kitsinger

“Lakeland Horses”
Amie Vanderford

“Americorps Volunteers”
Memphis City Beautiful

“Mississippi River”
Naomi Van Tol

“2007 River Arts Festival Dancers”
Chuck Mitchell

“Trolley”
Terri Brown

“Bikes”
Joe Royer

“2008 River Arts Festival Fat Sonny”
Chuck Mitchell

PACKAGING

“Overton Park”
Amie Vanderford



COLOPHON

The written documents which comprise *The Sustainable Shelby Implementation Plan* were composed by the Sustainable Shelby Committee under the auspices of Mayor A C Wharton and the Shelby County Government of Memphis, Tennessee. The series of formats which encompass the *Plan* were designed and produced by: Ms. Katie Benjamin '09, Mr. Anthony Carter '09, Mr. James Hart '09, Mr. Eric Huber '09, and Mr. Bryan Rollins '09 during the 2008–2009 academic year. This project served as a supplement to the undergraduate course, *Design System 06*, within the Division of Design Arts | Department of Design at Memphis College of Art, Memphis, Tennessee [mca.edu]. The project was under the tutelage of Department Head and Associate Professor David Charles Chioffi. The project's physical implementations are in association with, and response to, realized experimental and theoretical issues of a *successful balance between eco-friendliness and aesthetics*.⁰² This moral obligation to the environment is evident not only in the varied implementation of materials and processes used, but in the selection of merchants who share this rightful philosophy.

The formats were composed on a Macintosh platform using the professional design software of the Adobe *Creative Suite 03*: *Adobe Illustrator*, *Adobe InDesign*, and *Adobe Photoshop*. Imagery was scanned on an Epson *Perfection 4490*. The print house of Toof Commercial Printing of Memphis, Tennessee [toofprinting.com], rendered processes on a *Heidelberg CD102*, 40.0 inch, Six Color with Tower Coater Sheet Fed Offset Press; a *Heidelberg Cylinder Press*; a *Stahl Folder*, 26.0 x 40.0 inch with Right Angle; and, a *Polar-Mohr-Heidelberg Cutter*, Computerized Autotrim 52.0 inch with Off-loader.

Toof Commercial Printing continues to make strides in reducing its carbon footprint. This commitment is achieved by the use of inks with a high soy content; environmentally friendly aqueous-based coatings; the recycling in their entirety of used aluminum-based plates; and a rapidly approaching totality in the reclaiming of its scrap paper. These and all applicable methods within its industry were initiated to remain a good steward of the environment. In order to obtain additional advantages through the sustainable use of paper products, Toof Commercial Printing received the Forestry Stewardship Council certification in June 2009.

Continued

Inks were manufactured by Monarch Color Corporation of Charlotte, North Carolina [monarchcolor.com]. The printing of these formats utilized soy based inks and foundations wherever possible. Monarch is dedicated to Green Ink Compliance with a goal to reduce or eliminate Volatile Organic Compounds and enable renewable resources.⁰² French Paper Mill of Niles, Michigan [frenchpaper.com] created each of the stocks adopted: Dur-O-Tone *Butcher Extra Blue*_Identification 3519, 60# Text; and, Muscletone *Hot Fudge*_Identification 5001, 140# Cover. Established in 1871, French Paper Mill is a business of independence and wholly directed by its namesake. The patriarch of the family, Mr. Jerry French, believes that “*Environmentalism* is more than a marketing gimmick for us. It’s part of our survival.” This commitment to topical practices is illustrated as each sheet of French Paper “was manufactured with 100% clean, renewable hydroelectric energy produced” at their mill. Upon reflection, French concludes: “We’ll be using *Green Power* long after it makes good headlines. Maybe by then they’ll just call it *common sense* unless that’s become a scarce resource too.”⁰³ Typography was digitally composed in the family of *Vista Sans* designed by Mr. Xavier Dupré for the foundry Emigre, Incorporated of Berkeley, California [emigre.com]. Dupré first began his development of *Vista* while traveling in Sumatra in the Summer of 2002. He was influenced by the storefront typography of his host Indonesian island—“idiosyncratically decorative lettering, such as extreme slab serifs and triangular serifs.” This experience enabled him to design each of the six weights of the family introduced in 2005. Mr. Dupré retains the culture of the font’s origin, in particular the minuscule a—for it became the most indicative letter. “It’s the soul of *Vista*.”⁰⁴

The production of the Digital Versatile Disc [DVD] was undertaken by Triple Disc of Fredericksburg, Virginia [tripledisc.com] using the latest technology in the sector, the *Flex VCD*[™]. “This flexible disc weighing only eight grams, utilizes fifty percent fewer polycarbonates, and does not require the use of non-biodegradable bonders.”⁰⁵ Each readable disc is replicated from a master digital format in an International Organization for Standardization [ISO] 9002 plant, after which the signature is silk-screened with vegetable based soy inks. Upon completion of all processes, collation was accomplished by hand in Memphis, Tennessee; environmentally slip-sheeted for manual allotment; and placed in *EarthCor* recycled corrugated boxes for distribution.

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Each student assumed an active role in the overall academic research and conceptual constitution of the project, upon which individuals assumed independent provenance. Their attribution is so noted: Ms. Benjamin and Mr. Carter: *Design_Digital Implementation Plan*; Mr. Hart: *Design_Broadside and Production_Digital Versatile Disc*; Mr. Huber: *Design_Broadside* and *Digital Versatile Disc Enclosure Format*; and, Mr. Rollins: *Digital Versatile Disc Signature*.

⁰¹ “eco-friendliness n.” *The Oxford English Dictionary*. Second edition. 1989. *OED Online*. Oxford University Press. 01 June 2009 <www.oe.com>.

⁰² *Monarch Color Corporation*. 01 June 2009 <www.monarchcolor.com>.

⁰³ *French Paper*. 01 June 2009 <www.frenchpaper.com>.

⁰⁴ *Emigre*. 01 June 2009 <www.emigre.com>.

⁰⁵ *Triple Disc*. 01 June 2009 <www.tripledisc.com>.

