Central Arkansas Green Agenda

Sustainability: Living today like you really believe there will be a tomorrow

4 Focus Areas • 13 Strategies • 106 Actions

Prepared by the Green Task Force
For the Metroplan Board of Directors

April 2011
While the Central Arkansas Green Agenda will be used primarily as a guide for area leaders as they work collectively to improve the future sustainability of our region, the plan was developed by you, for you. With that in mind, here are 10 things you can do today to contribute to your Green Agenda, your region, and your future.

10 Things You Can Do Today

1. Reduce driving by taking advantage of alternative work arrangements, such as telecommuting, flextime, four-day workweeks, or staggered work hours.
2. Plant a tree. It can help reduce flooding, provide shade and reduce energy costs.
3. Set your air conditioner’s thermostat to the highest comfortable temperature. For every degree you raise the setting, you reduce cooling costs by 3 to 5 percent.
4. Use plants native to Central Arkansas for landscaping. Native plants do not need fertilizers and require much less water than non-native plants.
5. Unplug electronics when they are not in use.
6. Turn in your unused and expired medications instead of flushing them down the toilet. This will keep the chemicals out of our water supply.
7. Try alternative forms of transportation instead of driving. For example, use public transit, join a car pool, or walk or bicycle to different destinations.
8. Shop local. It will not only reduce your transportation costs and emissions, but it will also support our local economy.
9. Encourage youth to get involved in local efforts to protect their future environment.
10. Get involved with local planning efforts and express your opinion about including Green Agenda concepts.

Of course this is just a sample of the many things you can do to help make central Arkansas a greener place. We encourage you to do more by always living today like there will be a tomorrow.

Using the Central Arkansas Green Agenda as a guide, local leaders are committed to supporting local communities, businesses, organizations, and individuals who want to do the right thing for the region and our future.

Find out what we’re already doing at www.metroplan.org.
Recognizing that today’s leaders have an obligation to responsibly plan for future generations, the Metroplan Board of Directors initiated the development of a regional Green Agenda in spring 2009. The Green Agenda is intended to inform and inspire actions leading to a more vibrant and sustainable region.

A Green Task Force, created and appointed by the Board, guided the development of the Central Arkansas Green Agenda. The public provided the substance of the Green Agenda through early and meaningful engagement as a part of the Grassroots Initiative. The public outreach effort was designed to engage our region to help identify and enact a plan that will ensure a greener future for central Arkansas and beyond.

The future leaders of Central Arkansas played a significant role in the development of the Green Agenda. Students ranging from elementary to high school identified regional sustainability issues and solutions crucial to the future of Central Arkansas.

People from throughout the region contributed by attending events and meetings, and by submitting more than 200 ideas and casting more than 22,000 votes online to help prioritize the challenges and solutions that should be included as part of the region’s Green Agenda.

The Green Agenda development process produced four focus areas, 13 strategies, and 106 actions that together make up the Central Arkansas Green Agenda. It provides a blueprint for steps the region, local governments, businesses, and individuals can voluntarily take to support our regional goals.

The Green Agenda is designed to evolve and respond to the changing needs of the region. Several of the strategies and actions in this report can be implemented immediately, while others may need to be developed further. The Green Agenda will be used as a reference that will evolve as central Arkansas grows. Like cultivating anything worthwhile, this initiative will start small, seeded by ingenuity and passion.

Similarly it will require patience, vigilance, and care to nurture it to its true potential.

Please join us by finding your role in implementing the Central Arkansas Green Agenda.
Key Facts

Central Arkansans drive 34.3 daily miles per capita compared to 22.2 miles per capita for all US urbanized areas.¹

79% of households in our region spend more than 45% of household incomes on combined housing and transportation costs.²

43% of households spend more than 28% of their incomes on transportation.³

On average, fuel is the second-largest cost of vehicle ownership, at 26% over five years.⁴

The average cost of owning a car is $8,485 per year. Only $1,390 of that stays in the local economy.⁵

¹Federal Highway Administration, Highway Statistics 2008
³“The Housing + Transportation Affordability Index.”

Strategies

1. Improve Bicycling Options
2. Improve Walking Options
3. Improve Transit Options
4. Reduce Congestion

Improve Bicycling Options

- Promote Bicycle Master Plans in local government and the Regional Strategic Bicycle Network.
- Make safe routes for children a priority, whether walking or riding bikes to schools, parks, recreation facilities, and other destinations.
- Enhance bicycle infrastructure (lanes, paths, routes, and bike racks).
- Enhance personal safety through lighting and street design.
- Make community aware of existing bicycle facilities.

Improve Walking Options

- Promote Master Pedestrian Plans in local government.
- Enhance pedestrian infrastructure (sidewalks, paths, connections, and street furniture).
- Enhance personal safety through street design and lighting.
- Encourage pedestrian-friendly design of roads and land development through policy.

Improve Transit Options

- Continue to develop the Regional Strategic Transit Network.
- Secure dedicated funding sources.
- Focus on supporting transit hubs and development around hubs.
- Plan for spoke transit, i.e. Little Rock to Conway, Benton/Bryant, and Cabot.
- Develop branded bus routes with high frequency as pilot project.
- Make transit schedules easier to read and access.

Reduce Congestion

- Continue to develop the Regional Arterial Network, which provides alternative routes to the freeway system and facilitates regional travel.
- Analyze regional traffic congestion and recommend congestion mitigation strategies through the Congestion Management Process.
- Coordinate traffic signals to reduce stop and starts in traffic.
• Promote carpooling, flex work schedule, and telecommuting to reduce rush hour congestion and the number of vehicles on the roads.
• Encourage mixed use and mixed income development to reduce the need for driving and provide options like public transit, walking, and bicycle use.
• Implement a street design program that responds to urban contexts and the role of streets as public spaces and multiple modes. Incorporate green streets, featuring sustainable landscaping standards, streetscape elements, and effective storm water management practices, into this program.
• Improve multimodal connections and choices so that transit connects with bicycle/pedestrian pathways and destinations.

Co-benefits of an improved transportation system (it’s about more than just the environment)

Reduced energy costs
• Non-motorized transportation does not require fossil fuel.
• Reducing congestion will increase vehicle efficiency and reduce fuel consumption.

Economic Development
• Most of the dollars spent on fuel leave the region. In contrast, what residents save on lower fuel costs tends to be spent locally. As people are able to spend less on transportation costs, they have more disposable income available to contribute to the local economy.
• Road projects including pedestrian and bicycle facilities have positive impacts on direct, indirect, and induced jobs.
• Leaving one car home two days a week would save the average person in Central Arkansas $55/month and $660/year in fuel costs.

Quality of Life
• Creating opportunities for walking and biking will increase the percentage of adults and youth engaged in physical activity. The U.S. Centers for Disease Control’s daily recommended amount of exercise can be met by a 15-minute commute to and from work by walking or bicycle.
• Business and personal health care costs can be reduced dramatically by reducing preventable conditions such as those caused by poor nutrition and lack of physical activity.
• Poor air quality caused by transportation emissions and stationary sources can aggravate respiratory problems like asthma. By improving transportation options, emissions can be reduced.
• Providing multiple transportation options can lead to increased independence, especially for populations that cannot/should not drive, such as people with disabilities, children, and the aging population.
• Decreasing the time spent commuting, means more time people can spend doing things they enjoy.
Key Facts

Arkansans with incomes below 50% of poverty level pay 52% of their income for home energy bills.\(^\text{10}\)

Middle class Arkansans pay 15% of their income for energy bills.\(^\text{11}\)

25-40% of energy used for heating and cooling a typical home is lost to air leakage.\(^\text{12}\)

Per capita, Arkansans use over 30% more energy than the national average.\(^\text{13}\)

Energy efficiency investments have been shown to increase property values by 2 to 40 times the initial investment cost.\(^\text{14}\)

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Strategies

1. **Encourage Energy Efficiency**
2. **Promote Renewable Energy**

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**Energy Efficiency**

**Government**

- Conduct comprehensive energy evaluation of municipal buildings and recommend modifications.
- Develop and adopt energy and resource-efficient building standards for all existing municipal facilities.
- Work to develop energy reduction plan for communities.
- Align regional and local energy plans with state and federal energy plans to maximize funding and efficiency.

**Policy**

- Update municipal codes to incorporate the latest provisions for energy efficiency and healthy buildings.
- Align local energy codes with the latest state and international energy codes.
- Promote energy audits by encouraging them at point of sale to inform buyers of the true cost of housing.
- Incentivize Energy Star buildings.
- Promote “Time of Use Rate” policies to incentivize the reduction of peak electricity loads.
- Reduce the heat island effect and energy consumption by promoting urban forests, cool roofs, and cool pavement.
- Encourage energy efficiency in affordable housing by working with Housing Authorities.
- Identify metro-area vulnerabilities to high energy prices and develop risk management strategies.
- Assist small businesses, community organizations, and public agencies in gaining access to energy efficiency services.
Renewable Energy

Research
- Identify local and feasible renewable energy sources (methane, hydro, solar, biofuel, etc.).
- Identify metro-area vulnerabilities to high energy prices and develop risk management strategies.
- Evaluate potential energy savings through more efficient use of transportation technology and alternative fuels.

Policy
- Identify barriers in municipal codes for small scale renewable energy installation and deployment.
- Promote the establishment of renewable energy generation and management systems (e.g., geothermal, solar, wind, co-generation, smart grid, etc.) on a district and neighborhood scale.
- Encourage the use of renewable and sustainable energy systems in new and existing buildings.
- Encourage local energy providers to use renewable energy for a percentage of their total energy production by exploring the development of a regional renewable portfolio standard.

Co-benefits of an improved energy system (it’s about more than just the environment)

Economic Development
- Lower monthly bill cost for residents and businesses can increase the amount of walking around money to be spent in Central Arkansas’ local economy.
- Lower energy costs will reduce the cost of doing business, which can increase revenues.
- Encouraging energy efficiency and renewable energy can help create demand for energy-related career fields and jobs.
- By creating more options for energy generation on a local level, we can increase our energy security.

Quality of Life
- Increasing the variety of energy sources can reduce the demand on coal-based energy, which will positively impact regional air quality.
- When citizens spend a smaller portion of their income on energy, they are able to spend more on things they enjoy.
Key Facts

About one out of every three people in the United States is at a higher risk of experiencing ozone-related health effects.\(^{20}\)

Vehicles on the road create more than 25% of all air pollution nationwide.\(^{21}\)

Mixed use, walkable developments now claim a value premium of 30 to 50 percent over comparable single-use, auto-oriented development in many urban and suburban settings.\(^{22}\)

The sales premium on property within 100 feet of a park of any size is 24 percent.\(^{23}\)

87 percent of people planning to buy a home in the next three years say that a shorter commute is their top priority.\(^{24}\)

The first hour of urban stormwater runoff has a pollution index greater than raw sewage.\(^{25}\)

Strategies

1. Protect Air Quality in Central Arkansas
2. Plan for Thriving Communities
3. Reduce Waste Stream
4. Protect Water Sources and Watersheds

Protect Air Quality in Central Arkansas

- Promote Ozone Action Days Program to reduce harmful vehicle emissions and number of ozone alert days.
- Promote alternative modes of transportation like walking, biking, ride sharing, and transit.
- Improve fuel efficiency of municipal fleets and explore cleaner fuel sources.
- Promote anti-idling policies for municipal and commercial fleets.
- Support programs to retire and recycle inefficient vehicles, which will increase private citizen fuel efficiency.
- Identify barriers in municipal codes for electric vehicle charging stations and update the permitting process.

Plan for Thriving Communities

- Align local comprehensive development plans with regional transportation, economic development, housing, and other plans that address sustainability.

Support existing neighborhoods and infrastructure

- Promote incentives for infill development and innovative solutions for underutilized urban infrastructure.
- Strengthen neighborhood centers by maximizing the competitiveness of traditional centers, such as neighborhood business districts, and increase the walkability and coherence of potential neighborhood centers.
- Make neighborhood context and community identity the focus of redevelopment plans.
- Support community and neighborhood-based efforts to keep communities safe.
- Promote implementation of Form Based Codes as means to guide urban redevelopment and respect neighborhood context.
- Identify areas and nodes suited for mixed use development and make sure zoning ordinance allows mixed use.

Buildings

- Encourage the preservation of historic structures, because the greenest building is the one that’s already built.
- Remove impediments in existing codes and procedures to sustainable renovations of existing buildings.

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\(^{21}\)US Department of Transportation

\(^{22}\)Chris Leinberger, Brookings Institution

\(^{23}\)The Livability Challenge, CEOs for Cities, http://www.ceosforcities.org/work/livability


\(^{25}\)Low Impact Design Manual,” 2010, University of Arkansas Community Design Center
“Unless someone like you cares a whole awful lot, nothing is going to get better. It’s not.”
– Dr. Seuss, *The Lorax*

“When we build, let us build as if it would last forever”
– John Ruskin
• Create local design standards for infill and brownfield projects that receive government incentives.
• Provide incentives to encourage the use of sustainable building practices for new construction and renovation.

Housing
• Expand the definition of housing cost to include the true cost, which also takes transportation and energy costs into consideration.
• Accommodate diverse land uses and mixed-income housing.

Local Food
• Identify and reduce policy barriers to local farmers markets and local food production.
• Inventory establishments that provide healthy, affordable and quality food choices.
• Address access to healthy foods in local comprehensive plans.

Reduce Waste Stream
• Implement an Environmentally Preferable Purchasing program through regional coordination.
• Conduct waste audits in public buildings.
• Expand regional recycling efforts to serve the larger Central Arkansas region.
• Encourage publicly-owned and operated facilities to take the lead as recycling leaders.
• Encourage recycling and recycling-based businesses as part of a comprehensive economic development policy.
• Research the feasibility of a regional composting initiative.
• Encourage community collaboration to connect resources with needs in order to reduce waste.

Protect Water Sources and Watersheds

Stormwater Management
• Develop a regional green infrastructure plan that identifies areas to protect as natural in order to preserve watersheds, protect drinking water sources, and guide land development.
• Align local development plans with regional green infrastructure plan.
• Use low impact design principles to lessen the effects of stormwater run-off and flooding.
• Identify barriers in municipal codes for green roofs, porous pavement, and other low impact design features.
• Encourage the use of native vegetation that does not require irrigation.
Conservation

• Secure long-term drinking water sources for Central Arkansas.
• Protect future water supply by offering people a simple way to use less water.
• Demonstrate innovative water conservation strategies in buildings, with public facilities leading the way.
• Identify barriers in municipal codes for water conservation best practices.
• Identify and adopt best management practices and water conservation standards for new development.

Co-benefits of an improved natural system

Reduced Energy Costs

• Water conservation = energy conservation.
• Mixed use land development leads to more efficient heating and cooling of buildings.

Jobs/ Economic Development

• Connected and compact neighborhoods offer multiple transportation options for employees to get to work, reducing transportation cost barriers.
• Mixed use and more compact development is more cost effective for infrastructure maintenance.
• Street design that incorporates natural drainage techniques for stormwater management have lower maintenance costs than traditional underground drainage and catch basins.
• Lower energy costs mean more affordable housing and transportation and higher levels of disposable income to invest in the local community.
• Water is becoming more and more important to businesses and they are looking for places like Central Arkansas where water is available.
• Thriving communities trigger increased property values, tax base, and tax revenues.
• Reducing waste reduces costs to businesses and consumers through avoided removal costs, avoided supply purchases, and potential recycling profit.

Quality of Life

• Improved street design means improved safety for drivers, pedestrians, cyclists, and emergency access.
• Improving access to local and healthy foods can increase percentage of adult and youth who consume the recommended amount of fruits and vegetables and reduce chronic disease.
• People have more opportunities to interact with each other in communities that have multiple uses.
• Lower housing costs can prevent stress, homelessness, overcrowding, substandard housing conditions, and social isolation of some populations.

“What oil was to the 20th century, water will be to the 21st century.”

Key Facts

Plastic bags can take up to 20 years to decompose in a landfill. 10

About 30% of waste (including yard waste) is diverted from the Central Arkansas regional landfill by composting, recycling, and reusing. 31

“Keep America Beautiful

31Regional Needs Assessment,” Pulaski County Regional Solid Waste Management District, Jan 2008
Increase Public Awareness of Benefits

- Develop a communication strategy that includes multiple modes of communication, both online and offline.
- Identify easy steps to take for governments, businesses, and individuals to support the Green Agenda.
- Communicate in a way that is personal and understandable.
- Communicate the co-benefits of the Green Agenda actions, especially the economic impacts.
- Increase public awareness of the impact on quality of life.
- Work with vehicle maintenance providers to educate consumers about the potential savings and impact on fuel consumption of maintaining vehicles properly and practicing fuel-efficient driving techniques.
- Support efforts to raise public awareness and involvement in the planning and development review process.
- Develop community-wide demonstration projects and educational efforts that increase awareness of the value of existing buildings among building owners, designers and users.

Provide Educational Resources

Government

- Create and publish inventory of green government practices in Central Arkansas that support the Green Agenda.
- Inform local leaders about green issues.
- Organize fieldtrips to highlight projects that implement and support the Green Agenda.
- Increase communication between local governments and state-wide initiatives and organizations.
- Support a public information campaign to build and sustain support and participation in recycling programs.
- Provide a forum for sharing recycling information throughout region.

Business/ Industry

- Provide resources for designers, contractors and building officials regarding sustainability design, construction, retrofits, inspection, and code requirements.
• Create fact sheet for developers and residents with energy efficiency/renewable energy incentive information.
• Facilitate data and information sharing between government agencies.

General
• Involve residents and stakeholders with public forums and meetings to increase awareness of land use issues.
• Educate staff and citizenry about Green Agenda case studies, incentives, cost benefit analysis, co-benefits.
• Create leadership academy or speaker series.
• Educate the public about the importance of water resources and actions citizens can take.
• Teach awareness and encourage healthy lifestyles at an early age by connecting with school districts and teachers.
• Develop a pledge that individuals, businesses, and governments can take to express their commitment to the Green Agenda.

Showcase Successful Sustainability Efforts
• Present Green Agenda initiatives of local governments and communities at Metroplan Board meetings (Green Agenda Showcase).
• Apply for regional, state, and national recognition for sustainability efforts.
• Document and share government and business case studies of Green Agenda best practices.

Establish Incentives and Awards
• Identify effective incentives for encouraging implementation of Green Agenda.
• Develop a regional award for communities supporting the regional Green Agenda (Green Community Certification).
• Develop programs to encourage and recognize businesses and community members who take action to support the Green Agenda.

“You must be the change you wish to see in the world.”
– Mahatma Gandhi

“Good done anywhere is good done everywhere.”
– Maya Angelou
Green Task Force
Donald Anthony, City of Conway
Joy Ballard, Saline County
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Melinda Glasgow, City of Little Rock
Marsha Guffey, Metroplan
Terry Kessinger, City of North Little Rock
Mary Laurie, Faulkner County
Tim Lemons, City of Ward
Fredrick Love, Pulaski County
Chip McCulley, City of Jacksonville
Eric Meyerson, Central Arkansas Transit
Jasmin Moore, Metroplan
W. Todd Moore, Facilitator
Sam O’Bryant, Pulaski Co. Brownfields
L. Paige, Pulaski County
Danielle Shafer, City of Jacksonville
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Greg White, City of Benton

Green Youth Summit
Keavan Bances, North Little Rock High School East
Elliott Baxley, Benton High School
JR Baxter, Benton Mayor’s Youth Council
Jordan Betts, Benton High School
Kelli Black, Cabot High School
Grant Bodiford, Cabot High School
Cameron Bowden, Benton High School
Tess Bradford, Conway High School West
Kim Caldwell, University of Arkansas Clinton School of Public Service
Leah Chancellor, Bryant High School
Justin Dove, BACA
Julianne Dunn, University of Arkansas Clinton School of Public Service
Emily Dee, Little Rock Mayor’s Youth Council
Tyler Gwatney, Benton High School
Alexandra Hammock, Central High School
Taylor Harrington, Benton High School
Karis Hentchel, Benton Mayor’s Youth Council

Allysa Hicks, Sherwood Mayor’s Youth Council
Allyson Hicks, Sherwood Mayor’s Youth Council
John Hobbs, Lonoke High School
Shelby Holden, Sherwood Mayor’s Youth Council
Allison James, Lonoke High School
Erin Loraditch, Cabot High School
Korey Malloy, City of Sherwood
Lindsey Martin, Benton High School
Joshua Carreld Mendez, Benton High School
Julie Meyer, University of Arkansas Clinton School of Public Service
David Monteith, University of Arkansas Clinton School of Public Service
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Nancy Landrum, UALR
Ronnie Loe, City of Little Rock
JD Lowery, USGBC- Arkansas Chapter
Lindsey Matteson, Winrock
Eddy Moore, Attorney
Ellen Norvell, City of Sherwood
Marleen New, Hiefer International
Kay Mueller, L'Oreal
Sam O'Bryant, Pulaski Co. Brownfields
L. Paige, Pulaski County
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