

The Madison Sustainability Plan:

Environmental, Economic and Social Resilience



City of Madison ~ Sustainable Design & Energy Committee
March-April, 2011

NEW Madison Sustainability Plan

Update of 2005 Plan

Sustainable Design & Energy Committee

Expanded = broad stakeholder representation

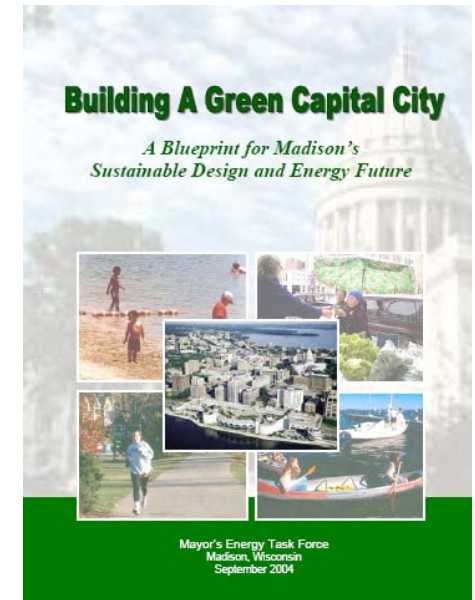
Broader vision, community-responsive sustainability

- ✓ Focus beyond Energy and Green Building
- ✓ Includes business and resident initiatives, partnerships
- ✓ 10 Sustainability Categories

Incorporates TNS principles – “compelling vision”

Guidance document for sustainability efforts

- ✓ Link to Agency work plans
- ✓ Education of citizens
- ✓ Short, medium and long-range recommendations



YOUR To-Do...

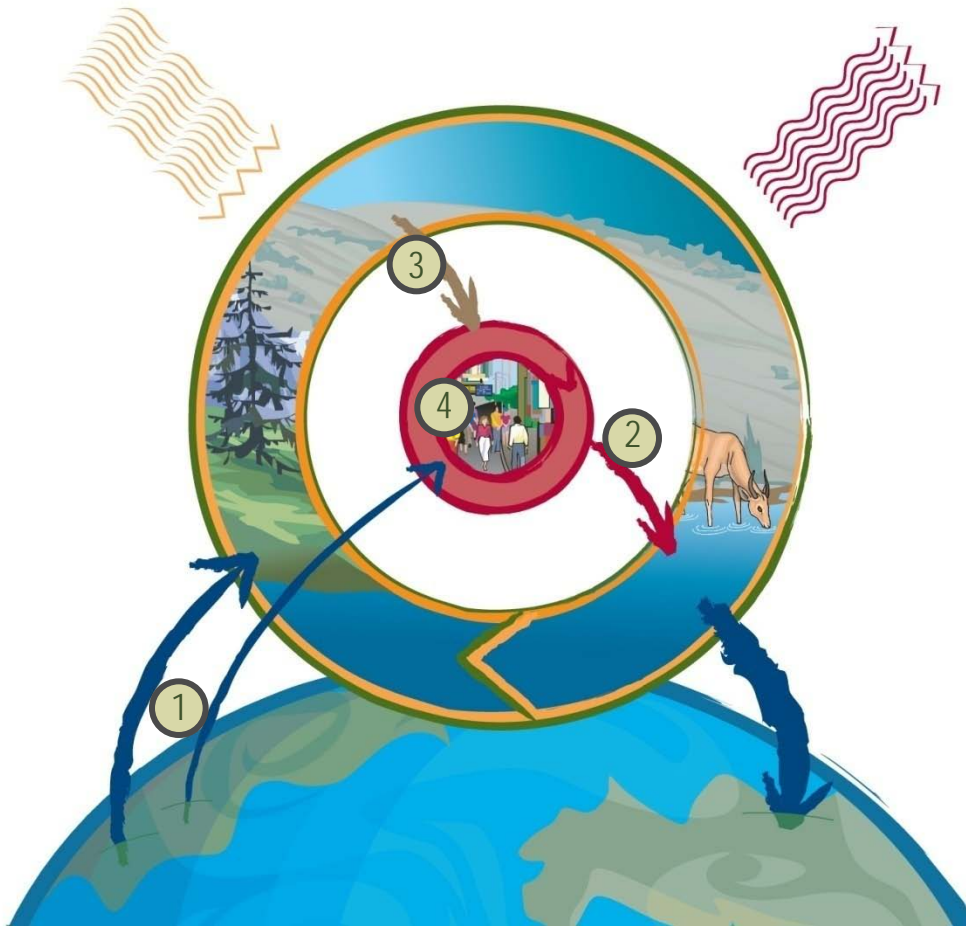
- ✓ Review Goals and Actions ~ anything missing?
March-April 2011

SDEC To-Do...

- ✓ Gather additional public comment
 - meetings
 - surveys
- ✓ Review plan w/ City committees & community groups
- ✓ Submit finalized plan for Council approval
- ✓ Implement Plan initiatives with employees, community groups, non-profits, businesses, etc.
- ✓ Other????

The Natural Step (TNS) System Conditions for A Sustainable Society

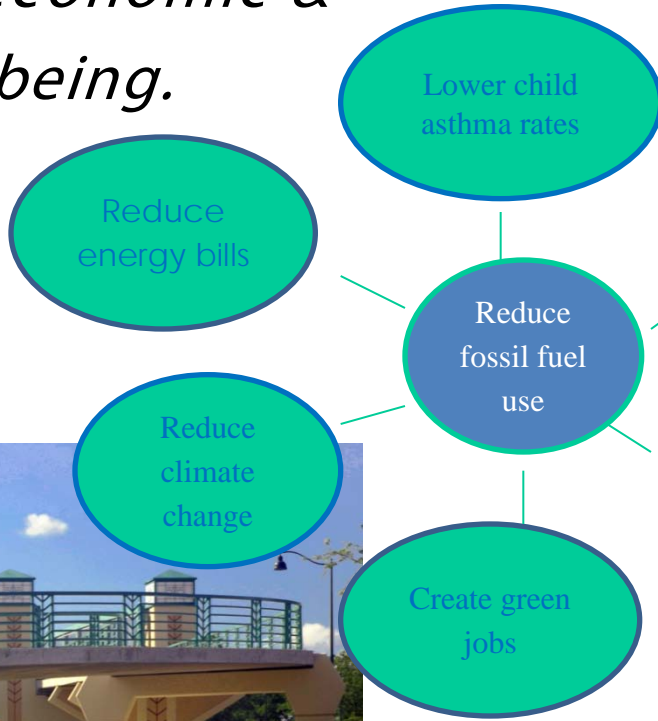
In a sustainable society, nature is not subject to systematically increasing:



- ① concentrations of substances extracted from the earth's crust
- ② concentrations of substances produced by society
- ③ degradation by physical means and, in that society...
- ④ people are not subject to conditions that systematically undermine their capacity to meet their needs or the needs of future generations.

People, Planet, Prosperity

A healthy environment underpins economic & social well-being.



Sustainability Categories

1. Natural Systems
 2. Carbon & Energy
 3. Planning and Design
 4. Transportation
 5. Economic Development
 6. Employment & Workforce Training
 7. Education
 8. Affordable Housing
 9. Health
 10. Arts, Design & Culture
-
- The diagram consists of a numbered list of 10 sustainability categories on the left. To the right of the list, three large curly braces group the items into three main categories. The first brace groups items 1 through 4, the second groups items 5 through 6, and the third groups items 7 through 10. Each group is followed by a bold, blue label: 'ENVIRONMENT', 'ECONOMIC PROSPERITY', and 'SOCIAL CAPITAL & COMMUNITY HEALTH' respectively.
- ENVIRONMENT**
- ECONOMIC PROSPERITY**
- SOCIAL CAPITAL & COMMUNITY HEALTH**

Plan Format

Overview

- ✓ Introduction
- ✓ Plan Purpose
- ✓ Plan Structure
- ✓ Acknowledgements

Accountability

Background

- ✓ Systems Thinking
- ✓ Additional Research and Input

Categories

- ✓ Background on category
- ✓ Vision statement
- ✓ Goals
- ✓ Action items
 - Timeframe
 - Strategy type
 - Funding
 - Lead Agencies or Partners
 - Related Sustainability Categories



Sustainability Category Components

- Vision
- Goals
- Actions
- Timeframe
- Funding
- Lead agencies & partners



Example: ECONOMIC DEVELOPMENT

VISION:

Madison strengthens its overall economy by engaging entrepreneurs, growing the workforce, developing spaces and a built environment that support and encourage a regenerative green economic climate while reinforcing the expansion of existing businesses and encouraging the development of new green business.



Example: ECONOMIC DEVELOPMENT

GOALS

1. Encourage sustainable business practices
2. Share resources
3. Increase market for green product/services
4. Foster initiatives
5. Create sustainability index tool
6. Promote local food consumption
7. Support diversified economy

ACTIONS

- ✓ *Develop a sustainable purchasing consortium*
- ✓ *Create database of sustainable products/services & negotiate with local vendors*
- ✓ *Develop scope and a plan*

Public Outreach

for this Draft

Audiences ...

- ✓ Neighborhoods/ businesses/
general groups
- ✓ “Sustainability interested”
organizations
- ✓ Harder-to-reach organizations

Via...

- ✓ Email alerts
- ✓ 2 public meetings – SD&E
Committee
- ✓ One-on-one - meet with
organizations upon request
 - DMI
 - Thrive
 - Chamber of Commerce
 - Urban League
 - Latino Business Association
 - United Way
 - Multi Cultural Center
 - Others...



Natural Systems

- • • City residents will breath clean air, drink clean water, swim and boat in clean water and enjoy those waters from the shore...

Goals:

1. Improve air quality
2. Improve groundwater/drinking water quality
3. Improve surface water quality
4. Increase water conservation
5. Prevent solid waste from entering landfill
6. Restore and maintain natural habitat
7. Improve storm water management

Actions:

- Create comprehensive water-shed based (“upstream”) storm water management plan
- Provide developer incentives to increase on-site storm water retention
- Promote projects that increase infiltration and aquifer replenishment, similar to Odana Golf Course project
- Others.....



Planning and Design

Our built environment respects the natural environment and provides convenient access to food, health, recreation, economic livelihood, and other basic needs for individuals and families through compact urban design....

Goals:

1. Improve transportation planning
2. Foster holistic land use
3. Support sustainable infrastructure and buildings
4. Promote and foster local food systems

Actions:

- Plan and create walkable neighborhood opportunities...upgrade already built neighborhoods
- Maintain, utilize and re-invest in existing public and private infrastructure...
- Create an inventory of underdeveloped land parcels (e.g., large surface parking lots and brownfield sites and encourage development
- Others....



Transportation

Madison's sustainable transportation system significantly reduces greenhouse gas and other air emissions while offering convenient, efficient, comfortable and safe transportation choices for anyone who lives, works, or visits the City...

Goals:

1. **Implement existing City, County and regional alternative transportation plans**
2. Expand the number of neighborhoods where sustainable transportation choices enable mobility without a car
3. Increase sustainable transportation funding and incentives programs
4. Establish uniform, consistent evaluation methods for understanding sustainable transportation usage and goal achievement
5. Maximize the use of alternative transportation infrastructure by implementing and/or improving marketing strategies
6. Foster better communication between City transportation departments and agencies

Actions:

- **Identify owners of current transportation plans**
- **Create a realistic timeline, overall funding strategy, needs assessment and process for implementation of each transportation plan**
- **Implement a transportation plan progress reporting process to appropriate City committees**
- **Others.....**



Carbon & Energy

Madison embraces sustainable approaches to fuel our economy and community, achieving an 80% carbon reduction by 2050. Our City government and staff set examples of reduced energy use and emissions for businesses and individuals to emulate.

Goals:

1. Influence reduction in transportation related carbon impacts
2. Systematically upgrade existing buildings, equipment and infrastructure
3. Improve new buildings and developments
4. Engage the public in energy efficiency and climate change programs
5. Obtain clean energy and install renewables
6. Report carbon footprint to the public

Actions:

- City government prioritizes and accelerates city's building and equipment upgrade schedule
- Reallocate portion of all City agencies operating budget to the annual replacement of capital assets to improve energy efficiency and reduce carbon emissions
- Others.....



Economic Development

Madison strengthens its overall economy by engaging entrepreneurs, growing the workforce, developing spaces and a built environment that support and encourage a regenerative green economic climate while reinforcing the expansion of existing businesses and encouraging the development of new green business...

Goals:

1. Encourage sustainable business practices
2. Share resources
3. Increase market for green products/services
4. Foster initiatives that promote sustainable economic development
5. Create Sustainability Index tool
6. Promote consumption of local foods
7. Support diversified economy

Actions:

- Create a task force to review planning, zoning, ordinance and code requirements to reduce obstacles to sustainable business practices and to offer incentives to encourage sustainable business growth
- Assess incentives for the redevelopment of development of sustainable buildings, businesses and industries. Encourage a marketplace of users who rank sustainability as an essential decision point when locating a business or household
- Others....



Employment & Workforce Development

All citizens in Madison are able to access the training they need to secure quality jobs and to advance along a career pathway

Goals:

1. Develop policies that promote job quality
2. Help businesses transition to the Green/Cleantech economy
3. **Foster Sustainability Policies**
4. Support and promote Green/Cleantech business development
5. Promote and support Green/Cleantech job training

Actions:

- Adopt policies that will overcome market barriers that keep individuals or businesses from instituting sustainable practices and allow the City to increase the market for energy efficiency, renewable energy and other sustainable industries
- Enact, promote and support policies that develop and support the markets for renewable energy, high performance buildings, recycling and recycled materials, sustainable agriculture, water conservation, energy efficiency products and sustainable transportation options
- Others.....



Education

Madison is a sustainable city that ensures social equity by building diverse neighborhoods with equal access to quality education, affordable housing and basic health care.

Goals:

1. Help close the achievement gap
2. Support inclusive education
3. Help ensure sustainable school buildings
4. Foster place-based education
5. Promote sustainable purchasing initiatives

Actions:

- Encourage and support: reorganizing schools, decreasing class size, continuing support for professional development for teachers, providing after school tutoring and clubs, balancing curricula across all schools
- Advocate for nutritious lunch programs



Affordable housing

Madison is a sustainable city that ensures social equity by building diverse neighborhoods with equal access to quality education, affordable housing and basic health care.

Goals:

1. **Diversify neighborhoods**
2. Build affordable housing on sites that are currently underutilized or unsightly to revitalize neighborhoods and provide housing for the vulnerable
3. Locate affordable housing near transit and employment hubs
4. Decentralize social services
5. Upgrade energy efficiency and sustainable materials use in low-income housing
6. Provide more green affordable housing

Actions:

- Implement a City-wide plan to encourage diversification within our neighborhoods to build bridges between socioeconomic classes that result in greater stability
- Use NH Indicators to analyze economic diversity, target NHs most likely to welcome the challenge, develop pilot projects, and analyze results
- Promote urban and suburban use of subsidies (Section 42 & 8)
- Encourage mixed-income buildings and development



Health

Good health for all Madison and County residents by improving daily living conditions, making good choices available and easier, and providing access to affordable healthcare.

Goals:

1. Promote and create healthy neighborhoods
2. Monitor community health conditions
3. Equalize health care access
4. Promote wellness activities
5. Promote healthy eating
6. Increase physical activity levels
7. Enhance health care accessibility

Actions:

- PHMDC will work with residents, healthcare and community partners to inform and drive action to address factors that influence the health of the community (e.g., education, economic health, physical environment, access to resources, social connectedness, safety, food security, access to health and social services) by compiling, analyzing, interpreting and reporting existing health status data and other population data.
- Assess asthma rate and other environmentally impacted diseases annually and report it to the community



Arts, design and culture

Sustainability is an integral part of Madison's art program and sustainable design efforts.

Goals:

1. Promote sustainable art
2. Include sustainable art in City infrastructure projects

Actions:

- Encourage development of projects that serve our community and ecosystem by maintaining high design and environmental standards, creativity and community involvement.
 - Artists-in-residence, community design charrettes or hire artists to participate in the project planning
- Require artists and designer participation in municipal projects over \$1 million and reserve a percentage of the project budget to fund the art/design fee.

New Sustainability Plan Launch

Representatives from:

- Madison schools
- UW
- Water Quality
- Planning
- Green Building
- Renewable Energy experts
- Utilities
- Healthcare
- Sustainability organizations
- Alders
- Developers
- Builders
- Construction
- Local Agriculture
- Financial Industry
- Transportation experts
- Faith Based Groups
- Energy Law
- Neighborhood Advocates

October, 2009 launch with
40 people on 2 subcommittees



URPL 912

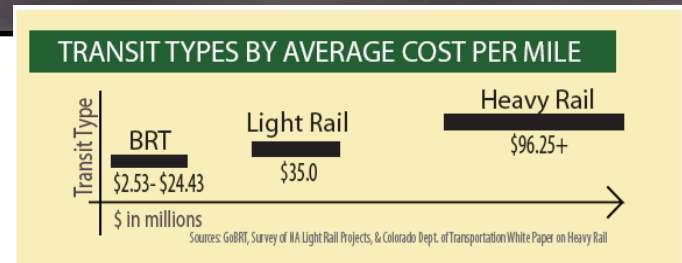
Planning Workshop

UW Urban & Regional Planning
Prof. James LaGro

19 Students

Precedent Study = best practices
in US & the world:

- Sustainable Neighborhoods
- Transportation
- Buildings
- Energy & Natural Resources
- Parks & Open Space
- Food Systems



Public Input

3 public meetings
around the city 2009



Surveys and evaluations

Energy, Natural Resources, Waste & Water (Survey 1)

Which 3 of these issues do you think Madison should focus on the most to become more sustainable?
(check 3)

- Ecosystems and habitat Land use
- Water and storm water Transportation
- Air quality Energy & Climate
- Waste

What are your top 3 priorities for protecting our water resources for present and future generations? (check 3)

- Swimmable lakes and rivers
- Wetland protection & restoration
- Fishable lakes
- Ground water quality (drinkable water)
- Ground water quantity (availability of drinkable water)