

# **The Madison Sustainability Plan:**

*Fostering Environmental, Economic and Social Resilience*



**City of Madison ~ Sustainable Madison Committee**  
**May 2012**

# NEW Madison Sustainability Plan

Update of 2005 Plan

## Sustainable Design & Energy Committee (Sustainable Madison Committee)

Expanded = broad stakeholder representation

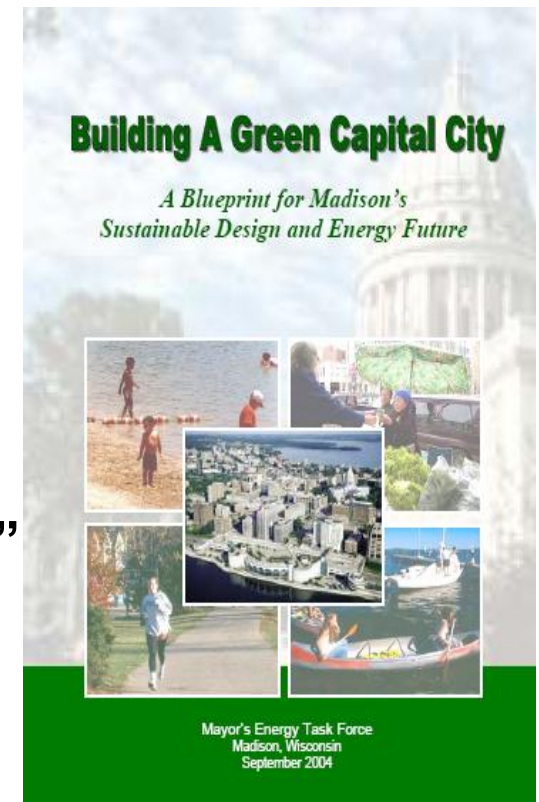
## Broader vision, community-responsive sustainability

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



## 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**



# Sustainability Plan Process

- 10 Board sustainability categories
- Wide Range of sub-committee inputs
- Discussions on initial draft
- Review by 15 city Committees
- Discussion on all committee and citizen inputs
- Final draft contains results of multiple inputs.

# Implementation

## Staff Action

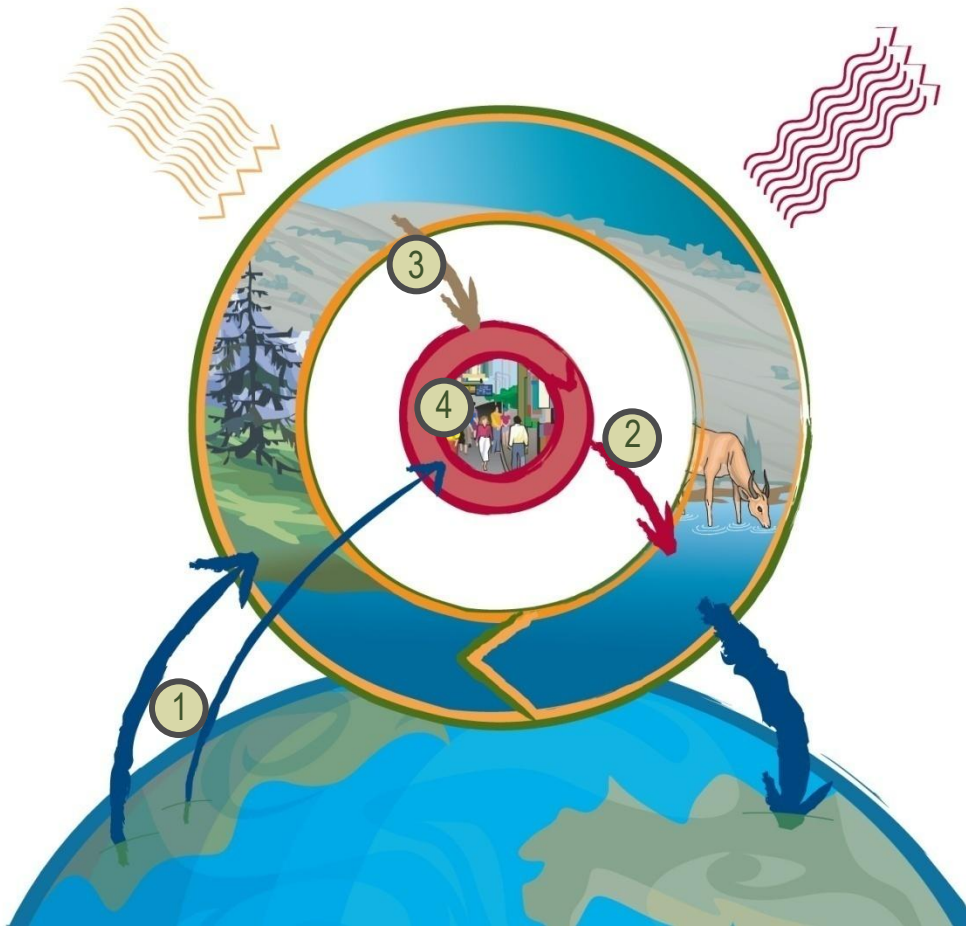
- City Staff teams created to implement projects and initiatives from Plan.
- Collaboration with community and other partners on sustainability initiatives.

## Committee Action

- Policy review and recommendations for action
- Follow up with staff on implementation

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

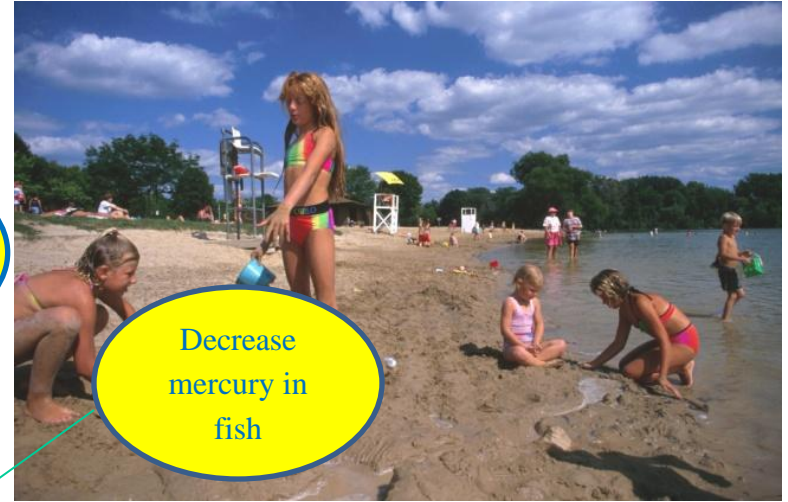
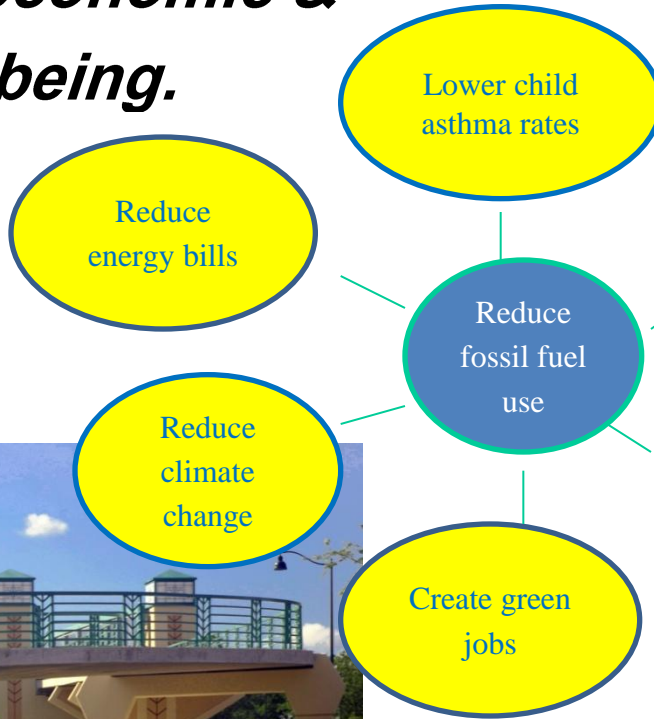
In a sustainable society, nature is not subject to systematically increasing:



- 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 uses three large right-facing curly braces to group the 10 categories into three main areas. The first brace groups items 1-4 under 'ENVIRONMENT'. The second brace groups items 5-6 under 'ECONOMIC PROSPERITY'. The third brace groups items 7-10 under 'SOCIAL CAPITAL & COMMUNITY HEALTH'. The category names are in blue, while the list items are in black.
- 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





# 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. **Improve storm water management**
5. Increase water conservation
6. Prevent solid waste from entering landfill
7. Restore and maintain natural habitat

## Actions:

- **Create comprehensive watershed based (“upstream”) storm water management plan**
- **Provide developer incentives to increase on-site storm water retention**
- **Promote projects that increase infiltration and aquifer replenishment, where appropriate**
- **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...
- Publicize/educate the public on the 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, MPO and regional alternative transportation plans**
2. Expand the number of neighborhoods where sustainable transportation choices enable mobility without a car
3. Establish a dedicated funding source for alternative transportation
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 agencies, departments and committees

## 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 25% of electricity, heating and transportation energy from clean energy sources by 2025
6. Report carbon footprint to the public

## Actions:

- City government prioritizes and accelerates City's government 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 an *ad hoc* task force to review planning, zoning, ordinance and code requirements
- 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

An informed citizenry that is committed to stewardship of resources, respect for place, and the health and well-being of the broader community, now and in the future..

## Goals:

1. Support and collaborate with educational institutions in their sustainability efforts and initiatives.
2. Ensure all youth have access to environmental stewardship programs and information.
3. Raise sustainability awareness within the Madison Community
4. Promote sustainable purchasing initiatives
5. Support “Healthy Schools” programming

## Actions:

- Collaborate with UW-Madison on initiatives in their Sustainability Plan...
- Support development of sustainability curriculum and projects, like learning in MMSD’s outdoor classrooms...
- Support efforts by MMSD to close the achievement gap through the “Building our Future” strategic plan





# 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 available subsidies (Section 42 & 8) evenly throughout the city
- 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. Integrate environmental sustainability into Madison's arts program and art and design into the City's sustainability efforts
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 \$1million and reserve a percentage of the project budget to fund the art/design fee.

# URPL 912

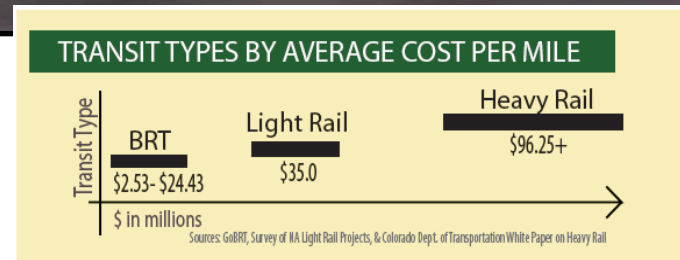
## Planning Workshop

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)

# **Energy Analysis and Policy Capstone Team**

- Spring semester 2012
- Developed “Definitions, Sources and Challenges” addenda for Plan
- 3 students and professor input
- Utilized data from sub-committees original work and also their own analysis

# The Madison Sustainability Plan:

*Fostering Environmental, Economic and Social Resilience*



[www.CityofMadison.com/Sustainability](http://www.CityofMadison.com/Sustainability)

**March-April, 2011**