



# **Regional Sustainability Inventory**

**November 2010**

## **Regional Sustainability Inventory for Champaign County**

The inventory of sustainability initiatives was completed with participation from several entities in Champaign County. Each participant provided information regarding their initiatives to staff at the Champaign County Regional Planning Commission (CCRPC) for summary and analysis.

### Contributing agencies include:

Champaign-Urbana Mass Transit District  
Champaign County  
Champaign County Forest Preserve District  
Champaign County Regional Planning Commission  
Champaign Park District  
Champaign School District  
City of Champaign  
City of Urbana  
Parkland College  
University of Illinois  
Urbana Park District  
Urbana School District  
Village of Savoy

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November 2010

# Inventory of Sustainability Initiatives

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This inventory is not a comprehensive list of sustainability initiatives within Champaign County, nor for the entities who participated in the survey. The goal of this document is to develop information that supports regional cooperation towards sustainability, and market the region as a leader in sustainability.

Thirty-nine sustainability themes identified in the ICLEI - Local Governments for Sustainability, Sustainable Communities Framework report were used to categorize regional sustainability efforts. Ten agencies participated by completing and returning a survey form or provided other information to be included in the inventory. Project names, goals, strategies, time frame, funding source, and existing or potential partnerships were requested through the survey. This information was entered into a spreadsheet where it could be analyzed.

The resulting inventory is organized by theme and contributing organization. At the top of each page, the theme is identified followed by a list of goals and strategies that each entity is currently pursuing. The eight themes with the greatest number of initiatives are reported in this document. Additional themes may be added in the future.

Theme	
<b>Organization Name</b>  Goal 1 <ul style="list-style-type: none"><li>Initiative 1</li><li>Initiative 2</li></ul> Goal 2 <ul style="list-style-type: none"><li>Initiative 1</li></ul>	<b>Name of Highlighted Initiative</b> Organization Name  Detailed information about initiatives.

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## Scottswood/Weaver Park Wetland

Champaign County, City of Urbana, Urbana Park District

The construction of the new Champaign County nursing home and parking lots adjacent to Weaver Park necessitated the planning and construction of a facility to handle the increased volume and flow of rainwater. Weaver Park contains 2-3 acres of low lying, periodically wet areas that provided an opportunity for conversion into a wetland. The City of Urbana, Urbana Park District and Champaign County partnered together to construct the wetland.

The County constructed the wetland to manage the increased water flow from the new nursing home site with an added benefit of alleviating surface flooding problems in the Scottswood Subdivision. The wetland environment in the park filters and cleans the water and serves as a bird and wildlife sanctuary. Further development of the park will establish recreational opportunities and an educational site.

The project received the 2008 Public Works Project of the Year Award from the Illinois Chapter of the American Public Works Association.

[http://www.city.urbana.il.us/\\_agendas\\_-\\_packets\\_-\\_Minutes/Agendas\\_2007/11-05-2007/Ordinance\\_2007-10-123.pdf](http://www.city.urbana.il.us/_agendas_-_packets_-_Minutes/Agendas_2007/11-05-2007/Ordinance_2007-10-123.pdf)

<http://www.urbanaparks.org/documents/e559e6b3fb215167df4a84d3294533c8/WetlandAward2008.pdf>

## Champaign County, City of Urbana, Urbana Park District

Cleaner waterways.

- Constructed the Scottswood/Weaver Park wetland to treat stormwater.

## Champaign-Urbana Mass Transit District

Reduce water runoff.

- Replaced parking lot blacktop with permeable pavers.
- Installed low flow water fountain heads.

Reduce water consumption.

- Install bus wash bays and recycling equipment.

*Expected completion in Spring 2011*

- Installation of new urinals and flush valves (0.25 gpf)
- Installation of new toilets and flush valves (1.28 gpf)

*Expected completion in Fall 2011*

- Eliminate the need for irrigation by planting native drought resistant plants in all islands.

## Urbana School District 116

Water efficiency.

- Install low flush facilities.

# Water (Stormwater)

## City of Urbana

Cleaner waterways.

- Continue to comply with the Illinois Environmental Protection Agency's Storm Water Permit Program.

Less water going into stormwater sewers.

- Worked with the University to install a rain garden.
- Reduce water consumption in city operations and throughout the community.
- Use water absorbing crystals in city planters to reduce watering needs.
- Convert flower beds from annuals to perennials.
- Install motion detector water faucets.

## City of Champaign, City of Urbana

Less water going into stormwater sewers

- Offer a \$25 rebate to residents who purchase and install a rain barrel on their property.

## Urbana Park District

Reduce water consumption.

- Use plant species that require less irrigation. Install sustainable irrigation systems.
- Collect and reuse rainwater throughout the district.
- Install water-efficient faucets and toilets.

Manage and retain stormwater onsite.

- Use of retention ponds, rain gardens, and bioswales to help manage rainwater onsite.
- Collect rainwater to be reused for irrigation.
- Install storm sewer screens to reduce the amount of sediment and debris entering the storm sewers.

## Stormwater Management System

City of Urbana

The City of Urbana currently manages infrastructure and services related to stormwater management. Rain gardens and rain barrels offer residents an excellent opportunity to help to reduce storm water runoff and pollution from their property.

Rain barrels collect and hold rainwater from rooftops, which can be used for watering lawns and gardens. Water collected in rain barrels is kept from flowing over paved surfaces, picking up pollutants, entering a storm drain, and eventually discharging into local waterways.

A rain garden is a vegetated depression specially designed to capture and use rain and snowmelt. Rain gardens receive storm water runoff from upstream drainage areas such as roofs, driveways, and lawns. Water that pools in rain gardens nourishes the plants and filters into the soil. Rain gardens imitate natural filtering systems such as wetlands.

<http://urbanaillinois.us/residents-0>

## John Street Drainage Improvement

City of Champaign

The John Street Watershed is a 458 acre drainage area located southwest of downtown Champaign. The area has experienced floods dating back to the 1930s, and John Street itself used to be a stream bed.

The project will install a 60-inch storm sewer as well as “green infrastructure if funds are available. Approximately, \$500,000 of IEPA loan/grant funds are being sought to incorporate “green” infrastructure into the John Street Drainage Improvement Project. If successful, the City would include in the drainage project pilot programs to construct pervious concrete pavement, concrete curbs/gutters and concrete sidewalks. A right-of-way rain garden would also be constructed.

The City of Champaign, residents, and University of Illinois students and faculty came together through a grant from the University’s Office of Public Engagement. A multidisciplinary approach was used to study the problem stormwater in the area and build support for ‘green’ infrastructure solutions. Several steering committee and public involvement meetings were held. This outreach resulted in combining conventional and alternative strategies.

Summary provided by Teri Legner at City of Champaign

## University of Illinois

Water conservation and protection.

- Construct tile-drainage wetlands built at 5% wetland-to-watershed to reduce nitrate-N into Embarras River by 50%.
- Conduct an assessment and study of carbon emissions from South farms, and develop a plan and specific commitments.
- Complete a study of the true cost of water for campus.
- Develop a plan for introducing non-potable water to campus.
- Connect campus raw water by 2020.

## City of Champaign

Manage and retain stormwater on site.

- Implement John Street stormwater management project.
- Implement Drainage Master Plan.

## Champaign County Forest Preserve

Improve water quality.

- Reduce the amount of chemicals used to control algae.

Manage and retain stormwater on site

- Bioswales in parking areas at golf course, River Bend and Sangamon River Forest Preserve.

Improve water efficiency.

- Install water efficient fixtures.

# Environment (Natural Resource Management)

## **Champaign County Forest Preserve District**

Reduce likelihood for herbicide resistance in invasive species.

- Reduce quantity of herbicides used.

Maintain parks and natural areas.

- Removal of invasive plants, introduce native species, prescribed burns, wetland maintenance.

## **Parkland College**

Increase natural prairie areas.

- Designate areas on outer edges of property as no mow, expand prairie areas.

## **Champaign County**

Champaign County will strive to conserve and enhance the County's landscape and natural resources and ensure their sustainable use.

## **Urbana Park District**

Maintain parks and natural areas.

- Removal of invasive plants, introduce native species, prescribed burns, wetland maintenance.

## **Champaign Urbana Mass Transit District**

- Utilize environmentally friendly snow/ice melt.
- Utilized prairie grass to control erosion on the railroad embankment east of Illinois Terminal.

## **Land Resource Management Plan**

Champaign County

The Land Resource Management Plan is a set of land resource conditions and a refinement of policies and actions that describe a future for the residents of Champaign County. The plan integrates existing goals and policies from three existing resources with emerging concepts and initiatives into a single guiding document for land use related decisions.

Goals and objectives about natural resources categorizes the landscape and natural areas of Champaign County as a resource that should be conserved or used sustainably (without degradation or negative impact). These resources include groundwater, soil, underground resources, surface waters, aquatic and riparian ecosystems, natural areas and habitat, parks and preserves, and air. One of the suggested implementation items is a natural resource assessment system. This would provide a useful tool for evaluating environmental resources and identify considerations for each of those resources.

<http://www.co.champaign.il.us/pandz/LMRP.htm>



## Electric Vehicle Plug-in Station

City of Champaign

A report from the Executive Office of the President of the United States highlights investments in advanced vehicle technology and high speed rail. The report states that modernizing transportation and advanced vehicle technology (among others) will rescue a deteriorating economy, put the country on a path to recovery by putting Americans to work, and make the U.S. economy more competitive by investing in innovative and transformative programs.

Champaign, Illinois is listed as contributing to this effort with having the only electric vehicle charging station for a route from Chicago to St. Louis. This type of infrastructure will make the use of alternative energy vehicles feasible, increasing our energy security and reducing our environmental impact.

[http://www.whitehouse.gov/sites/default/files/uploads/Recovery\\_Act\\_Innovation.pdf](http://www.whitehouse.gov/sites/default/files/uploads/Recovery_Act_Innovation.pdf)

## City of Champaign

- Adopted the Transportation Master Plan, Complete Streets Policy, and Trails Master Plan.
- Installed an electric vehicle plug-in station in downtown parking deck.
- Inventory City infrastructure and add bicycle and pedestrian features where possible

## City of Urbana

To become a bike- and pedestrian-friendly community that supports multi-modal transportation.

- Construct Safe Routes to School improvements as funds are available.
- Coordinate with agencies on regional bike facilities.
- Implement the Bicycle Master Plan.
- Plan for bicycle facilities.
- Implementing bicycle parking retrofit program.
- Support public transportation including CUMTD and high speed rail.
- Bicycle friendly community award in 2010

## Champaign Urbana Mass Transit District, City of Champaign, City of Urbana, and University of Illinois

- Zipcar car sharing program established in 2009

# Transportation (Mobility)

## Champaign-Urbana Mass Transit District

- Purchase only hybrid buses for all future busses.
- Use of filters to reduce bus particulate output by 90%.
- Reduce cost for annual pass fares
- Increased frequency for high capacity routes
- Bike rack systems installed on all buses.

## Champaign Urbana Urbanized Area Transportation Study (LRTP)

Non-single occupancy vehicle travel will be a principles consideration of the transportation planning process

- Construct new and maintain existing bike facilities.
- Implement plans for bike facilities.
- Encourage new residential development to locate within 1/4 mile of a transit line.
- Continue the expansion of transit service area to be coterminous with the urbanized area boundary.
- Encourage redevelopment and infill development within existing municipal boundaries.
- Continue enforcing zoning and subdivision ordinances requiring new development to construct pedestrian facilities.
- Encourage redevelopment and infill where pedestrian facilities already exist.

## Champaign Urbana Mass Transit District, City of Champaign, City of Urbana, and University of Illinois

- Zipcar car sharing program established in 2009

## Zipcar Carsharing Program

Champaign Urbana Mass Transit District, City of Champaign, City of Urbana, and University of Illinois

The MTD, cities, and university united to bring the Zipcar carsharing program to our communities and university in an unprecedented partnership. The local program is the only one in which a college or university and the local community have worked together to introduce Zipcar. In order to attract Zipcar to this small market and to offer vehicles beyond the boundaries of the UI campus, the partners and Zipcar agreed that Zipcar would be guaranteed minimum monthly revenue. If usage of the vehicles did not generate the minimum revenue, the partners made up the difference. By guaranteeing a monthly minimum, it was possible to locate vehicles in downtown Champaign and downtown Urbana as well as on the University of Illinois campus. Zipcar usage has been robust for the first 15 months of the program and membership has grown every month since inception. The program has grown from six cars at the beginning to the current ten cars.

*From the Zipcar Website:*

- *Zipcar members report an average monthly savings of more than \$500 compared to car ownership.*
- *Zipcars are good for the planet and the wallet. Each Zipcar takes 15-20 personally owned vehicles off the road.*

<http://www.cumtd.com/about-us/news/article/160>  
<http://www.zipcar.com/is-it/>

## Climate Action Plan

University of Illinois

In 2008, the University of Illinois at Urbana-Champaign signed the American Colleges and Universities President's Climate Commitment. This action committed the campus to reduce our emissions of greenhouse gases from current levels to zero by the year 2050. This Illinois Climate Action Plan (iCAP) describes a path towards the fulfillment of this commitment. As the flagship public university in the State of Illinois, we have a moral and ethical responsibility to lead, to set aggressive goals, to work to meet them, and to serve as a model for our Community, our State, and our Nation.

This Illinois Climate Action Plan (iCAP) represents a road map to a new, prosperous, and sustainable future for the University of Illinois at Urbana-Champaign (Illinois). It outlines strategies, initiatives and targets towards meeting our stated goal of net zero greenhouse gas (GHG) emissions by 2050.

iCAP  
A Climate Action Plan for the University of Illinois at Urbana-Champaign  
V 15 April 2010

## University of Illinois

### Energy Conservation

- Weatherize existing campus buildings.
- Convert fume hoods from CAV to VAV.
- Reduce the number of fume hoods.
- Update standards for new construction, major renovations, and replacement units.
- Insulate hot water tanks.
- Recover heat from chiller condensers and other sources.
- Setback thermostats.
- Update and enforce campus computer policy.
- Implement energy conservation purchasing standards.
- Retrofit lighting.
- Install lighting sensors.
- Complete steam system maintenance.
- Complete the retrocommissioning of existing buildings.
- Complete green roof feasibility study.
- Implement energy chargeback system.
- Update maintenance procedures.

## Urbana School District 116

### Reduce Energy Consumption

- Install efficient lighting.
- Install motion sensors.
- Install digital HVAC thermostat controls.

## Champaign County Forest Preserve District

### Energy Efficiency

- Winterize and close buildings.
- Install ceiling fans and programmable thermostats.
- Lighting retrofits
- Use of geothermal system at Museum Annex

# Energy Efficiency / Conservation

## City of Champaign

### Reduce Energy Consumption

- Convert traffic signals to LED's.
- Convert streetlights to LED's.
- Install energy efficient lighting in downtown parking deck.
- Provide energy audits to non-profit agencies and financial support for implementation of recommendations.
- Implement server and PC virtualization.

## Champaign County

### Energy Efficiency

- Implement de-lamping plan.

## Urbana Park District

### Decrease energy use

- Install energy efficient interior lighting. Use solar timers (only turning on at dusk) on outdoor lights. Program computers and printers for sleep mode when not in use. Use natural light whenever possible. Install digital thermostats.

## Regional Planning Commission

### Conserve Energy

- Install efficient lighting in conference room.

## Village of Savoy

### Reduce Energy Consumption

- Replace the least efficient HVAC units with new energy efficient units.
- Replace or seal doors and windows that contribute to energy loss.
- Encourage employees to turn off lights.

## De-lamping Plan

### Champaign County

In May 2009, Champaign County adopted a De-lamping plan for its courthouse complex. De-lamping is a strategy for reducing energy costs by maximizing natural light and minimizing artificial lighting based according to light level guidelines. Increasing energy efficiency is sustainable because it reduces demand on power plants, stabilizes greenhouse gas emissions, and potentially improves air quality. Energy efficiency in government can also impact the economy and tax payers by saving money needed for energy costs.

The County has employed two approaches to reduce energy costs,

- De-lamp the same percentage of lamps in all areas that exceed foot candle guidelines.
- Measure light levels and de-lamp the appropriate number of lamps.

Champaign County is undergoing this change to meet the objectives of the Energy Policy for Champaign County Facilities which states:

- Operate energy efficient County facilities.
- Incorporate energy management into County facility management and decision making processes.
- Balance life/safety with responsible energy usage.
- Implement practices that insure efficient use of energy.
- Promote energy efficiency by example and education.

The goal is to reduce energy cost by .50/square foot by November 2010.

<http://www.co.champaign.il.us/countybd/CB/090521AGENDAFULL.pdf>  
pages 22 - 28

# Energy Efficiency / Conservation

## Energy Efficiency at CUMTD Main Office

Champaign-Urbana Mass Transit District

The Champaign-Urbana Mass Transit District (CUMTD) makes every effort to operate its buses and facilities as efficiently as possible, to minimize the environmental impact.

Capital improvements for their facilities have included:

- installing a high energy efficient Geothermal Heat Pump System to replace conventional heating and cooling systems.
- renovating 25,400 square feet of roof in the operation/administration as a white roof to reduce solar heat gain.

CUMTD has implemented many smaller but high impact initiatives including lighting sensors, and programming electronic equipment to “sleep” when not in use reducing the energy consumption of that equipment. Plans are in place to increase the energy efficiency of this agency over the next year.

<http://www.cumtd.com/gogreen/policy>

## Champaign-Urbana Mass Transit District

Reduce energy consumption

- Install a white roof over administrative offices.
- Programmed all applicable building electronics to “sleep” when not in use.
- Made upgrades and changes to Illinois Terminal’s HVAC system which reduced this systems operating cost by more than 30% from 2005 numbers.
- Installed automatic light sensors which also shut off lights when the programmed light level is present.
- Installed rapid roll doors to reduce heat loss in winter.
- Install LED interior lighting

*Expected completion in Spring 2011*

- Convert interior lighting to LED’s. Convert exterior lighting to LED’s.
- Replace Illinois Terminal’s chiller unit with a high efficiency chiller with thermal storage units.
- Utilize multiple static pressure sensors throughout the commons areas of Illinois Terminal to control positive building air pressure.

*Expected completion in Fall 2011*

- Completion of lighting automation where applicable at Illinois Terminal.
- Replace all hand dryer units with new high efficiency units.
- Replace ceiling tiles sections where necessary with renewable-recyclable ceiling tiles.

## Champaign Unit 4 School District

- High efficiency boilers at Centennial
- Implement energy monitoring and Savings at every district building
- Geothermal at Garden Hills Elementary
- Ten Year Capital Improvement Plan Completed
- Install solar panel on roof at Centennial.

# Energy Efficiency / Conservation

## Parkland College

Reduce energy use by 20% by 2020

- Lights turned out on Thursday night by custodial staff. Discharge air temp set 2 degrees higher during long weekends.
- Systematically replace LED exit lights and occupancy sensors throughout campus.
- Closed campus on Fridays in the summer.
- Purchase and install occupancy sensors.
- Institute computer energy management programs.
- Adjust thermostats to reduce heating and cooling demands.
- Build new buildings to at least LEED silver certification, with strong emphasis on reduced energy buildings.
- Purchase Energy Star labeled appliances.
- Installation of more efficient lighting.

## City of Urbana

Energy efficiency for municipal operations.

- Retrofit lighting.
- Retrofit a portion of the City building with a white roof.
- Replace lamps where practical.
- Install programmable thermostats.
- Install motion detector light switches.
- Complete an Energy Audit

Energy efficiency for the community

- Assist 900 households in receiving energy audits and/or retrofits.
- Partner with Conservation Services Group to coordinate audits and retrofit activities.

Increase the percentage of building stock that is sustainably built or retrofitted.

- Adopt new energy conservation standards.

## Energy Efficiency for the Community

City of Urbana

The City partnered with Ameren Illinois Utilities' Act on Energy Program to provide free energy performance audits of Urbana homes. These audits typically cost \$25, but Energy Efficiency and Conservation Block Grant (EECBG) funds from the Dept. of Energy are being used to provide services at no cost to residents. Audits involve trained technicians conducting a thorough visual inspection of the home, performing a computer analysis of the home, and generating a custom report that pinpoints problem areas and recommends improvement measures. The report also estimates the payback period for improvements. While on-site, technicians also install CFLs in high-use areas, high-performance shower heads, limited hot water pipe insulation and new faucet aerators. In the program's first month (Sept. 2010), over 200 Urbana residents called to inquire about the program and 51 audits were completed.

Residents implementing recommended shell improvement measures are eligible for incentives through the Act on Energy program. The City is also covering an additional 20% of the improvement costs above and beyond the incentive from Ameren. Residents must use a contractor certified by Ameren (there are four in Urbana-Champaign). The goal for this program is to conduct 709 home audits and implement shell improvements on 260 homes by the end of December 2011. These efforts will save 12,134 metric tons in carbon dioxide equivalent emissions.

Summary provided by Bart Hagston at City of Urbana

## Natural Areas and Stewardship Saturdays

### Urbana Park District

The Urbana Park District's manages four natural areas and the public helps the district with their maintenance in an ongoing program called Stewardship Saturdays.

Busey Woods is a 59-acre forest nature preserve at the north end of Crystal Lake Park. Meadowbrook Park contains approximately 80-acres of re-created tallgrass prairie, as well as savanna and river corridor habitats. Weaver Park features a 5-acre woodland/savanna restoration and an award-winning watershed management wetland. And the district is undertaking restoration of 35 acres of wet prairie located on park land south of the dog park on Perkins Road.

The Urbana Park District's goals for these natural areas are to restore ecosystems characteristic of Illinois' most diverse habitats. Restoration includes planting and seeding native plants, removing nuisance plants, and conducting prescribed burns to encourage healthy growth. For more than 20 years the district has provided opportunities for volunteers to assist with natural areas management. Offered twice a month in the morning and afternoon, Stewardship Saturdays enable volunteers to learn about local natural areas while tackling management tasks such as invasive plant removal, seed collection, trail maintenance and wildlife monitoring. Tools, gloves, instruction and refreshments are provided. For volunteers with a drive to do even more, the district also offers stewardship training. Individuals who complete training are able to assist with long term management strategies for a given natural area while assisting with coordinating Stewardship Saturday opportunities.

Summary provided by Judith Miller at Urbana Park District

## Urbana Park District

Inspire children to explore nature

- Offer hikes, songs, stories and hands-on activities for children.
- Provide demonstrations by staff.

Assist the public in viewing and identifying the types of plants and animals in their parks.

- Provide staff to help identify animals and their sounds. Identify hikes through the various natural areas the park district has to offer.

Get the public out and into the different parks.

- Stewardship Saturdays
- "Wild about Parks" quest where prizes are offered for participants who find 10 - 20 clues.

Provide a safe outlet for students after school.

- Offer several different activities including: ultimate frisbee, fashion design, baby-sitting classes, dodge ball, dancing, water sports, and more.

Get children and their families to take the recycling pledge

- Offer prizes from U-cycle for children who take the pledge.

## Parkland College

Maintain collection of green building materials.

- Build collection.

# Education and Outreach

## City of Urbana

Reduce water consumption in city operations and throughout the community.

- Held a symposium on the Mahomet Aquifer that addressed the limits to the aquifer with respect to ethanol plants and urban development.

To become a bike- and pedestrian-friendly community that supports multi-modal transportation.

- Offer bicycle safety education programs.
- Establish enforcement, education, and signage for bicyclists and pedestrians.

Encourage tree planting by residents and businesses.

- City Arborist discusses trees and landscaping on TV and radio.
- City Arborist presents information around the state.
- Publish “Under the Canopy” statewide.

Cleaner waterways.

- Annual Boneyard Creek Community Day to install markers on storm water inlets.
- Stormwater management presentation at Urbana Middle School.
- “You are the Solution to Storm Water Pollution” public educational brochure.

## Champaign County Forest Preserve District

Inspire children to explore nature

- Offer hikes, songs, stories and hands-on activities for children.
- Provide demonstrations by staff.

Assist the public in viewing and identifying the types of plants and animals in their parks.

- Provide staff to help identify animals and their sounds. Identify hikes through the various natural areas the park district has to offer.

## Bike Safety and Education

City of Urbana

The City of Urbana encourages the use of bicycles as a logical alternative to the automobile for access to local amenities. Bicycling provides for the public health and well being of Urbana’s citizens, contributes to good air quality, and reduces congestion. One of the City Council’s goals is to “Become a multi-modal, bike and pedestrian- friendly community that supports sustainable transportation.” Three ways in which the City is achieving this goal is with the creation of the Urbana Bicycle and Pedestrian Advisory Commission, the adoption of the City of Urbana Bicycle Master Plan in April of 2008, and receiving Bicycle Friendly Community recognition in May 2010.

In addition to many bicycling students, many people employed by the University and private businesses bicycle to and from work each day—8% of Urbana’s population bicycles for transportation. One of the goals of the Bicycle Master Plan is to increase bicycle mode share in Urbana for all trip purposes by 50% by 2013. In an effort to achieve this goal, the City of Urbana organized Urbana-Champaign’s first community-wide Bike to Work Day on May 25, 2010. The event was hugely successful, with over 700 people registering.

The City of Urbana is working towards making bicycling a safe, efficient, and practical travel option for all residents and visitors in the city for both recreation and daily needs thereby increasing Urbana’s sustainability as bicycling uses far less non-renewable resources than other modes of transport, causes almost no air or noise pollution and requires only a small fraction of the space needed for the use and parking of cars.

Summary provided by Rebecca Bird at City of Urbana



## Energy Displays

### Urbana School District 116

In 2007 the planning began to reduce the energy consumption at the USD116 buildings. In the summer of 2007 all the high sodium lights in all the gym areas throughout the district were replaced with high bay T-5 fixtures.

In 2008, the district contacted Smart Energy Design Assistance Center (SEDAC) to audit Urbana Middle School (UMS) and review energy consumption and make recommendations for improvement. The goal is to reduce the kilowatt demand for power at UMS and eventually at all the buildings owned by the school district.

The same year the district sold working cash bonds funding lighting replacements with T-8 lighting, the installation of motion sensors at all elementary schools and motion sensors at UMS. (UMS already had T-8 lighting) Over the next two summers of 2008 and 2009 this work was accomplished.

An energy display will be installed in the main lobby of Urbana Middle School. This will be connected to solar panels installed on the roof of the school and display real time energy generation and consumption at the school.

Summary provided by Ota Dossett at USD 116

## University of Illinois

### Behavior Change

- Install real-time energy displays.
- Provide energy liaison presentations for campus buildings.
- Establish eco-reps program.
- Provide education regarding fume hoods.

### Sustainability Education

- Create an interdisciplinary 2-semester research seminar for grad students.
- Assess current courses that teach core competencies in sustainability and identify gaps.
- Define plans for educational programs around iCAP and sustainability.
- Enhance U of I engagement activities in arena of sustainability like CCNet, SEDAC and collaborations with corporations.
- Encourage student efforts in community energy efficiency projects like weatherization for low-income homes.

## Champaign Urbana Mass Transit District

- Implement awareness campaign through monthly newsletter as well as an employee sustainability committee.
- Provide webinars and speakers to the community regarding sustainability.
- Safe Routes to School Program
- Bike friendly business
- Website: <http://www.cumtd.com/gogreen>

## Urbana School District 116

Educate people about energy efficiency and renewable energy.

- Install energy consumption display at high school.
- Install solar panel with information at the middle school.

# Green Building

## City of Urbana

Increase the percentage of building stock that is sustainably built or retrofitted.

- Encourage integration of green building for city sponsored projects.
- Funded two eco-lab "Passiv" homes.
- Encourage green building for planned unit developments and through zoning ordinance.
- Maintain erosion and sediment control ordinance to reduce the amount of sediment flowing off construction sites.

## Urbana School District 116

Construct buildings to achieve Leadership in Energy and Environmental Design (LEED) certification.

- Use construction and operational changes to achieve LEED certification.

## Urbana Park District

Plan and construct buildings and sites that qualify as sustainable sites.

- Use of Forest Stewardship Council (FSC) or salvaged wood, use of sustainable building materials, recycled concrete materials, recycled building materials for windows and siding, energy efficient materials and appliances, use of geothermal HVAC system, etc. Focus on stormwater management and efficient site layouts.

## Eco-Lab Passiv Haus

City of Urbana

The City of Urbana has been working with Ecological Construction Laboratory (e-co lab) since 2004 to construct affordable, super energy efficient housing that uses 10 to 20 percent of the energy of an average home. In June of 2006, e-co lab became an Urbana HOME Consortium certified Community Housing Development Organization (CHDO). A CHDO must be a non-profit whose stated mission is to provide affordable housing in the community. As a CHDO, e-co lab is eligible to receive HOME Investment Partnerships funding for administrative costs and CHDO project funds to be utilized for affordable housing projects.

Utilizing HOME funds, e-co lab has completed two Super Energy Efficient homes in Urbana, has a third home under construction, and is under contract to complete a Super Energy Efficient Duplex in the near future.

In response to a request for proposals to develop affordable and sustainable housing on a 3.19 acre City-owned site on Kerr Avenue, east of Crystal Lake Park, e-co lab's proposal included a project with bio swales, permeable pavers and community gardens consisting of 48 ultra energy-efficient dwelling units. Since 2008, the City and e-co lab (as project designer) have been working to identify a development partner (for financing, construction and marketing) to utilize e-co lab's proposed site plan and building concepts on the project. Recently, e-co lab has been working with Newhouse Development Company of Atlanta who has proposed using Low Income Housing Tax Credits (LIHTC) to finance the project and create a rent-to-own development. In early 2011, Newhouse and e-co lab plan to apply for LIHTC tax credits for the Kerr Avenue project from the Illinois Housing Development Authority.

Summary provided by John Schneider at City of Urbana

## Energy Efficiency and Conservation Block Grant

City of Champaign

The City applied for EECBG funding from the U.S. Department of Energy in June 2009. The grant was in the total amount of \$763,200 and was available to the City on a formula basis which meant that the City had access to the money without competition from other eligible recipients. The City requested funding for the following projects which focus on making buildings greener through energy efficiency:

- Energy Efficiency Upgrade to City Building - \$306,000
- Energy Efficiency Upgrade to Station #1 - \$81,700
- Mechanical Engineer (technical expert) - \$70,000
- EECS (technical expert) - \$5,500
- Sustainability Plan (technical expert) - \$100,000
- Non-profit energy audits - \$100,000
- Non-profit seed grants - \$100,000

The energy efficiency upgrades to the City Building and Fire Station #1 as proposed were recommendations from the facilities audits conducted by the Smart Energy Design Assistance Center (SEDAC) in 2009. Additional funding was requested to contract with SEDAC to conduct audits for non-profits and administer seed grants that would be available to the non-profits to implement the recommendations.

## City of Champaign

- Energy efficiency upgrades to City Building and Fire Headquarters.
- Complete energy audits for several buildings.
- Maintain membership to the U.S. Green Building Council.

## Champaign-Urbana Mass Transit District

- Continue the use of floor and wall coverings made with 100% recyclable products - as replaced
- Installed cork flooring in the second floor commons area of Illinois Terminal
- Installed cradle to grave certified carpeting in several areas of Illinois Terminal

# Waste Management (Resource Conservation)

## Champaign County

Greater proportion of materials purchased by the County has recycled content or is designed to be recycled.

- Maintain purchasing policy that encourages the County to cooperate with other governmental bodies in joint procurement of recycled products and products designed to be recycled.

## Champaign County, City of Champaign, City of Urbana, Village of Savoy

Promote reduction, re-use and recycling as a means of diverting waste from landfills

- Continue joint recycling initiatives when practical and cost-effective to provide recycling of materials such as household hazardous waste as an option to area residents.

## Champaign-Urbana Mass Transit District

Reduce the need for new material use, reduction of hazardous materials introduced to landfills.

- Encourage employees to recycle materials by making collection areas accessible and the overall process easier.
- Implemented a recycling program for bottles and cans, batteries, paper and cardboard, light bulbs, waste oil, metals, and yard waste.
- Use of "green" cleaning chemicals

## Parkland College

Reduce restroom paper goods use and conserve natural resources.

- Use metered paper towel dispensers and do not replace toilet tissue until completely gone, do not throw out partial rolls.

## County wide Residential Electronics Collection

Champaign County, City of Champaign, City of Urbana, Village of Savoy

The County wide Residential Electronics Collections are organized to allow residents in vehicles to drop off unwanted electronics items as safely and as efficiently as possible.

There is no fee to residents (from anywhere) who participate. The unloading of electronics items from each vehicle is done by a team of five or six community service volunteers -- from small electronics to larger electronics, including huge projection tv's or old wood console tv's.

The collections are coordinated by the Champaign County Regional Planning Commission and cosponsored by the local government jurisdictions of City of Urbana, City of Champaign, Village of Savoy, Champaign County, and Champaign County Probation and Court Services. Private sponsors of the collections includes the News-Gazette which offers its Distribution Center as the host site for the collection.

Electronics recycling diverts waste from the landfill and reduces the chance that heavy metals and chemicals found in electronics will contaminate landfills and their surroundings. Much of the materials in electronics are recyclable reducing demand for raw materials and the impacts associated with obtaining raw materials.

Beginning January 1, 2012, televisions, computers, monitors and printers will be banned from Illinois landfills. More information about please see the Illinois Electronic Products Recycling and Reuse Act at:

<http://www.ilga.gov/legislation/publicacts/95/095-0959.htm>

# Waste Management (Resource Conservation)

## Recycling

City of Champaign

The City's current recycling program was implemented in 1993. Waste haulers are required to provide curbside recycling at no additional charge for residents living in structures up to four units.

Participation in curbside recycling is voluntary; the resident decides whether or not to participate. Recycling collection bins are not provided.

The waste hauler is required to collect newspaper, glass jars or bottles, tin cans, aluminum cans, and HDPE plastic containers. The waste hauler can offer to collect and recycle additional materials. The annual amount of recycled materials collected by the residential program in FY08 and FY09 was 1,615 tons and 1,699 tons, respectively.

A multi-family recycling program is scheduled to begin in December of 2010. The program will serve residences with five or more units and shared housing, such as fraternities and sororities. A modest fee of approximately \$2.60 per month per residential unit (apartment) will be assessed to the property owner to cover the cost of the program. For group housing (e.g., fraternities and sororities), the fee will be approximately \$1.30 per resident, based on the capacity of the facility.

[ci.champaign.il.us/departments/public-works/residents/recycling/](http://ci.champaign.il.us/departments/public-works/residents/recycling/)

## Regional Planning Commission

Reduce consumption.

- Reduce paper consumption through a friendly competition. Provide feedback through company newsletter.

## City of Champaign

Reduce the amount of solid waste that is landfilled.

Provide quality, cost effective solid waste and recycling services.

Reduce litter in the City.

Support intergovernmental programs for solid waste and recycling.

- Reduce and optimize the number of printing, copying, scanning, and faxing devices in City locations.
- Continue yard waste collections.
- Continue recycling (Multi-family, curbside, electronic, concrete, battery, facilities and on-street bins).
- Continue leaf composting from street sweeper.
- Implement landfill closure and reuse plan.
- Install low flow toilets for all new replacements.
- Install dual flush toilets at Champaign Public Works.

## Urbana Park District

Reduce paper waste

- Employees are encouraged to print only when needed and to print on both sides of the paper to reduce waste and use of post-consumer recycled paper district-wide.

## Champaign County Forest Preserve

Continue recycling.

- Install more receptacles.
- Recycle construction waste.

# Waste Management (Resource Conservation)

## City of Urbana, City of Champaign

- Maintain and support the Landscape Recycling Center

## City of Urbana

Reduce waste and increase recycling

- Continue special materials collection.
- Maintain municipal operations recycling.
- Maintain U-Cycle residential recycling program.

Reduce waste.

- Set duplex printing as default setting.
- Increase the number of recycling containers.

## University of Illinois

Reduced waste.

- Implement food composting by 2012.
- Expand recycling and increase recycling rate.
- Eliminate purchase of non-recyclable material when suitable substitutes exist.
- Purchasing entity is responsible for paying disposal cost upfront.
- Use carbon indicators to avoid environmentally irresponsible products and corporations.
- Easy access to reusable durable goods.
- Work to allow the University to resell used goods.
- Develop zero waste policy by 2012 with incentives or fees.

## Landscape Recycling Center

City of Urbana, City of Champaign

The Landscape Recycling Center (LRC) is a not-for-profit facility operated by the Urbana Public Works Department. We provide service to Urbana-Champaign and all of Champaign County. At LRC, we turn your grass clippings, brush and plant cuttings into products that can be used to beautify our local landscape. We offer fertile mulches and composts specially produced to benefit specific types of plants.

Materials that are accepted include sod, wood chips, clean soil, tree shrub material, leaves and grass clippings, paper bags for lawn and leaf refuse, brush and plan cuttings, bulkwood.

Yard debris accounts for 25% of all waste in Illinois. The Landscape Recycling center provides an ecological and economic method of transforming waste into products that are helpful for the environment. The LRC not only diverts waste from a landfill, but also recycles organic materials into useful products including mulch and compost. This loop system gives residents of Champaign County a way to maintain and develop our built environment using local materials and resources.

<http://urbanaininois.us/LRC>

## Comprehensive Plan Revision

### City of Champaign

The Comprehensive Plan is a guidebook for the growth and development of the City over the next 20 years. Though the term 'sustainability' may not be overtly stated, sustainability concepts are integral to all components of the Plan, as the City strives to be fiscally as well as environmentally responsible. The major components of the Comprehensive Plan are the vision and guiding principles and the future land use map and descriptions.

The Plan has six vision chapters that describe what the City should be like in 20 years if the plan is implemented. Each vision has three to five guiding principles that provide more focused values. The City's vision and guiding principles are listed on page 2. Each vision includes principles of sustainability including purposefully located growth, walkability and multi-modal transportation, access to health care, local food systems and concurrently constructed infrastructure. The 'Sustainable City' vision specifically addresses issues of environmental sustainability.

The future land use map and descriptions are used to implement the vision for the City's growth and development. To address the expansion of the City's boundaries, growth area criteria were developed based on the availability of infrastructure and services like sewers, public safety services and arterial street condition. The maps use criteria that indicate if a location is appropriate for future urbanized development or not. The growth area criteria follow three tiers, with tier one being ready for urban development with infrastructure and services in place, tier two being possible if infrastructure and services are extended and tier three being not appropriate for urban development at this time. This system will help tie the outward expansion of the City to complete public infrastructure and result in a more compact urbanized area.

## City of Champaign

- Comprehensive Plan revision.
- Zoning Ordinance re-write and building code review with sustainability in mind.
- Curtis Road Interchange Master Plan with green requirements/initiatives included.

## Champaign Urbana Urbanized Area Transportation Study (Long Range Transportation Plan 2035)

Compact development and mixed-use forms should be principal considerations for new development and redevelopment in the urbanized area to create a more walkable, sustainable, and efficient development pattern

- Develop new zoning and subdivision standards while encouraging compact development.
- Encourage new development to achieve higher gross densities.
- Encourage redevelopment and infill development within existing municipal boundaries.
- Work with municipalities to provide standards for identifying mixed-use projects and other measures to encourage increased density.
- Track the number of existing and new mixed-use buildings in the urbanized area.
- Encourage new development and redevelopment to pursue mixed-use options where appropriate.

The Regional Sustainability Inventory for Champaign County was produced with the help of staff from numerous local agencies and community members who attend the Champaign County Sustainability Practitioners (CCSP) meetings. CCSP is an ad hoc intergovernmental discussion group which facilitates regional coordination of sustainability initiatives.