



The Partnership for a Green City

2007 Annual Report

Sponsored by:
University of Louisville
Jefferson County Public Schools
Louisville Metro Government

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Introduction

The Partnership for a Green City was created in 2004 as an innovative environmental collaboration of Louisville-Jefferson County Metro Government, Jefferson County Public Schools and the University of Louisville. The Partnership focuses on environmental management, environmental education and environmental health initiatives. The Partnership is working to create a greener, more sustainable community, while improving the health of citizens and improving and institutionalizing environmental practices within the organizations themselves.

Collaboration allows the Partners to take advantage of resources that were previously unavailable, such as professional expertise, services and contracts. It also increases educational opportunities, creates cost-savings opportunities, and enables efficiencies of scale through collective purchasing power. Partners enable each other to expand programs and services to their constituencies and to the community in general, and to save tax dollars. The bottom line is healthier, more knowledgeable citizens and more efficient public institutions.

Organization

The Partnership has been described as “a model based on bottom-up collaboration, top-down support, stated goals and objectives and a focused plan of action.” The Partnership process has convened peers from each public entity to share ideas and address problems. Peer pressure, rather than top-down decision making, has produced significant changes in operating procedures within each partner. Over 150 employees participate on Partnership teams, which consult with external individuals or organizations to receive additional assistance.

The Steering Committee assumed day-to-day leadership activities of the Partnership, setting priorities and providing guidance to the teams while the Interagency Coordinating Committee assumed the role of making high-level management decisions. The structure of the Partnership remained the same

“A Greener City will be a place where young people choose to make their homes and raise their families and a desirable location for companies that use quality of life as a yard stick when they decide where to set up their headquarters.”

Jerry E. Abramson, Mayor,
Louisville Metro Government

“By partnering, we get better prices and greener projects. We need to change attitudes and consciousness about the environment. There is more potential now than ever before for successful partnering between Metro Government, JCPS and U of L.”

Rick Johnstone, Deputy Mayor,
Louisville Metro Government

as previous years, with the exception of the addition of the Climate Change team, which was added to implement the U.S. Conference of Mayors' Climate Protection Agreement.

The goal of the Climate Change team is to create a more sustainable community by decreasing greenhouse gas emissions in the community and creating an action plan to address issues resulting from climate change specific to Louisville. This team is a bit different than the other teams since it has representatives from the community and organizations outside the three Partners.

The other active teams in 2007 were Energy Use Partnership, Green Fleets, Environmental Education, Environmental Health, Green Purchasing and Waste Management.

The year 2007 also brought the Partnership its first full-time dedicated staff member who will work with the volunteers in the Partner entities. A 2005 Project Management Evaluation and Management Plan identified the need for a full-time Project Staff Director as an important element for long-term success. The leaders of the three organizations authorized funding for the position for the 2007-08 fiscal year, and in June 2007, the position was advertised in the job postings of the three Partners, as well as in national publications. The position drew 180 applicants. Brent Fryrear was selected and joined the Partnership in December 2007.

Representatives from many community agencies, organizations and corporations have participated in the work of the teams and have provided valuable resources. Quasi-governmental agencies also participate including the Transit Authority of River City (TARC), the Louisville Water Company, the Metropolitan Sewer District and the Louisville Regional Airport Authority.



"I am extremely pleased to join the Partnership and I am excited to work with the people at Louisville Metro, Jefferson County Public Schools and University of Louisville as we work to create a sustainable community."

Brent Fryrear, CHMM,
Director of the Partnership for a
Green City

Accomplishments

A number of accomplishments have been made during 2007 in the Partnership.

The Partnership for a Green City was among the 10 winners of the National Association of Counties (NACo's) Center for Sustainable Communities Awards. The awards are presented



Presentation of 2007 Award for Sustainability

every two years to communities that have developed effective public-private partnerships that encourage economic growth along with environmentally responsible actions. The partnership was chosen for its focus on environmental management, education and health initiatives. “I commend everyone who was involved in developing these outstanding community partnerships,” said NACo President Eric Coleman. “It is our hope that the national awards will spotlight your community’s great achievements and inspire others across the country to explore similar strategies to develop vibrant and sustainable communities.” The award came with a \$2500 prize for Outstanding Practices.

The Partners support each others’ endeavors such as the Louisville Metro Community of Trees project, an effort dedicated to inventorying, improving and maintaining the urban tree canopy and fostering tree planting as a climate protection measure. The UofL Department of Geography and the JCPS Center for Environmental Education are providing resources, as well as several state agencies.

Research indicates that Louisville is the first example in the US where a city, university and school district have partnered

“The Partnership for a Green City encourages collaborative work on the day-to-day environmental projects that face large bureaucracies. The Partnership for a Green City encourages out of the box thinking, and support for risk-taking when thinking about the larger more complicated environmental projects. It is about support, it is about encouragement, it is about moving forward in a non-threatening, non-confrontational manner.”

Dr. David Wicks, Director,
Jefferson County Public Schools
Center for Environmental
Education

together to work toward a sustainable community. The Steering Committee and Gordon Garner met with the City of Cincinnati Government, the University of Cincinnati, the Cincinnati Public Schools and Duke Energy who are interested in forming a partnership similar to the one in Louisville. Partnership members have also consulted with Lexington-Fayette Urban County government, the University of Kentucky and the Fayette County School system as they organized the Bluegrass Partnership, and have also met with Madison County, the cities of Richmond and Berea, Eastern Kentucky University and Berea College. In the state capital, the Mayor of Frankfort contacted the Steering Committee about forming a partnership between the City of Frankfort, Kentucky State University and Franklin County Public Schools. Community leaders can replicate this collaborative partnership in communities with access to higher education institutions.



Honor Students studying stormwater issues on the Belknap Campus

The Partnership helped support the development of a number of environmental courses in the University's Honor Program. The courses were taught by members of the Partnership and two research classes had students conducting studies on issues being addressed by the Partnership. The research and participation of students has helped the Partners in understanding and addressing environmental issues. The Honor Program Director, Dr. John Richardson, was the recipient of the 2007 Trustees Award in part due to working with Honor students in engaged scholarship of community environmental issues.

Another highlight of the year was EPA's publication of Gordon Garner's CD Rom: *Green City Partnerships: A Guide for Successful Environmental Partnerships; Sustainability and Best Practices*. It is available for download through the National Science Digital Library (NSDL) at: <http://nsdl.org/resource/2200/20080130090940716T> According to personnel at the NSDL, the site has been accessed to download the document over 100 times.

In 2007, the Partnership for a Green City started the process for a \$1 million grant for preschool environmental education with JCPS, Louisville Metro and UofL taking active roles.

On October 4, 2007, through the Partnership, Louisville was one of 70 communities across the country that offered citizens an opportunity to discuss the science behind climate change and talk about actions needed to solve global warming. It was all part of the National Conversation on Climate Action, a series of events convened by local government leaders and designed to build awareness of, grow support for and engage new allies in local climate action work.

Public concern over global warming has motivated communities to take action. This challenge is being met with local leadership and a commitment from stakeholders at the local level to find creative solutions. The National Conversation was inspired by the power to affect positive change on the climate front at the local level, and the October 4th events surely inspired more solutions and community action.

The Steering Committee worked all year to keep the teams on track and to incorporate the institutions' priorities into the teams' agendas. The Interagency Coordinating Committee and the Steering Committee worked together screening applicants, conducting interviews and selecting the new Director. Once the Director was in place, the Steering Committee worked to educate him about the Partnership Teams and create an action plan to guide the process. They are meeting together every other week and seeking ways to reenergize the teams. The teams are where the majority of the accomplishments are made and will be detailed in each particular section.

"I think it's great. We will give this project a high priority and look at it as a way to expand our success at UofL in environmental management."

Larry Owsley, Vice President for Business Affairs, University of Louisville

Climate Change

The Climate Change team, chaired by Art Williams, Director of the Louisville Metro Air Pollution Control District, was created after Mayor Jerry Abramson signed the U.S. Conference of Mayors Climate Protection Agreement. The Climate Change team meets every other month with the following working groups meeting monthly: Greenhouse Gas Emissions Inventory, Energy Efficiency, Outreach & Education, Local Impacts, Utility Regulations & Policy, and Land Use, Transportation & Urban Forestry. Each working group is focused on a portion of a local climate action plan that will be compiled at the conclusion of the greenhouse gas emission inventory process.

Greenhouse Gas Inventory Working Group

The focus of this working group is to work with a consultant to establish a current greenhouse gas (GHG) inventory for the Partners and the community. The Trinity Consultants, Erlanger Kentucky, has been chosen and has started working on the inventory. The scope includes Metro, JCPS, and UofL GHG emissions inventory projects, targets, offsets, registry, trading, federal legislation, etc.

Energy Efficiency Working Group

The focus of this working group is to promote energy efficiency across all sectors (the Partners' operations, as well as residential, commercial, industrial, public and other sectors) as one means of decreasing greenhouse gas emissions. It includes appliances, buildings, fleets (fuel, fuel efficiency, and transit incentives), pumps and motors, renewable energy (solar, hydro, methane, geothermal), etc.

Outreach & Education Working Group

This working group will seek ways to present environmental and climate change data to people of all ages (O&E to students, partner employees, the general public and businesses) in the community so climate change is understandable. This provides

"I see very significant opportunities for involving JCPS and U of L students in research projects involving urban and suburban ecology in Louisville. Many good things will come from this partnering project."

Dr. Margaret M. Carreiro (Ph.D.),
Associate Professor, Microbial
Ecology, Department of Biology,
University of Louisville

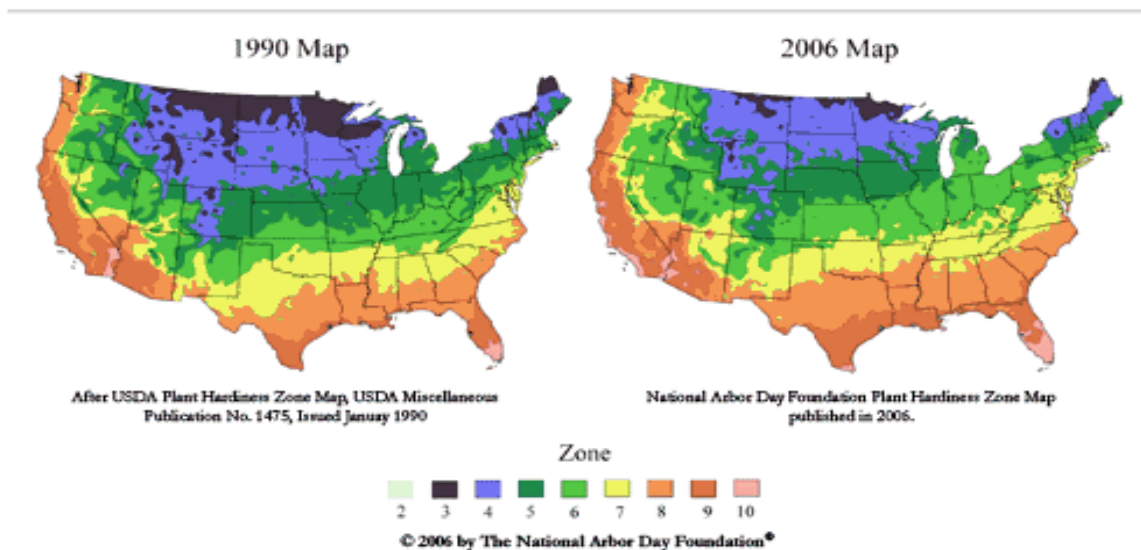
"We are very green and want to do our share as part of Metro Government to make the partnering project a success."

Bud Schardein (H. J. Schardein,
Jr.), Executive Director,
Metropolitan Sewer District

the population with opportunities to reduce their environmental impacts (or carbon footprint).

Local Impacts Working Group

The focus of this group are the local impacts of climate change, including public health effects, extreme climate events (heat, drought, floods, storms), ecological impacts, business disruption, food supplies, fuel supplies, adaptation, mitigation and response. The Plant Hardiness Zone Map below shows Kentucky's growing season has lengthened due to warmer temperatures.



Utility Regulations and Policy Working Group

The scope of this group's work includes the areas of utility regulatory policies and utility practices related to climate change issues. Demand side management strategies and programs, net metering, renewable portfolio standards, and energy efficiency projects are all areas of discussion and work.

Land Use, Transportation and Urban Forestry Working Group

The scope of this working group includes land use, forest practices, urban laws and policies, transportation, transit, mobile sources, urban heat island, etc. This working group has divided into sub groups covering each of the three title areas that meet individually and an integration group which will synthesize the findings of the three groups.

Energy Use Partnership

The Energy Use Partnership has been an active team meeting throughout the year. In 2007, EUP has worked to install solar hot water systems in the school district at Churchill Park School, Farmer Elementary and in the new Ramsey Middle School which is under construction. In this latest school, the hot water system will be instructional for the students and a wind turbine is under consideration. JCPS also installed dimmable light ballasts in classrooms which dim the fluorescent lights when sunlight comes through the windows and brightens the classroom when the ambient light is lower. Work has continued to install light shelves harvest sunlight into classrooms. After working on several designs, JCPS is now creating its own light shelves in its metal fabrication shop.



Farmer Elementary Solar Hot Water Panels

Future initiatives for this team could include promoting Green Building initiatives; further expanding and developing energy management software; implementing opportunities from previous pilot projects and audits; investigating demand-side management; promoting Green Power initiatives; and working with E-On/LG&E to increase incentives for Green Energy.

Green Fleets

The Green Fleets Team made major progress in comparing mileage, fuel, vehicles, types of equipment and such to create baselines of the fleets. Jefferson County Public Schools is using B2(2%) biodiesel in all of its school buses and has been in the planning stages of getting the new Superintendent a new hybrid vehicle. Louisville Metro government is using B5(5%) biodiesel in its diesel vehicles. Green Fleets also conducted fuel bid comparisons and has met with other fleet operators such as UPS to learn their best practices and pertinent experiences. Green Fleets has investigated car pooling and van pooling as well as Zip Cars as a possibility for UofL and the community.

Future initiatives for this team could include investigating increased use of alternative-fuel vehicles in fleets; increasing the use of biodiesel; promoting car pooling and increasing the number of people car pooling by incentives such as special parking; and working with Thornton's to provide 5% biodiesel at Thornton's stations throughout the community.

Green Purchasing

The Green Purchasing team worked with the Waste Management team to prepare a RFP and issue a solid waste management contract for containerized waste that all the partners can use. Louisville Metro and JCPS are utilizing the contract. The Partner Purchasing Managers are also meeting with their counterparts at the Transit Authority of River City, the Louisville Water Company, the Metropolitan Sewer District and the Louisville Regional Airport Authority on all purchasing issues. Green Purchasing will likely become a topic of that group as well and the Steering Committee is supportive of expanding the Green Purchasing group to include all these parties. The larger group is investigating lighting and fuel of all kinds. Expansion of E-Waste (electronic) recycling is also under consideration.



"This is a great project. All of these recommendations (August 2004 report) fit our mission and our goal for a healthy community. Partnerships are very important to us."

Dr. Adewale Troutman (M.D., MPH, MA), Director, Louisville Metro Health Department (now Louisville Metro Public Health and Wellness)

"Persuasion, modeling, and support are the approaches we must take to make this project successful for JCPS."

Pat Todd, Executive Director, Jefferson County Public Schools

Collectively the Partners consume 500,000 reams of paper annually. As a result of the joint recycled paper purchasing contract executed in 2005, the partners save 1,000 tons of paper a year, which is the equivalent of saving 17,000 mature trees and 24 million gallons of water.

Future ideas should include requests for proposals (RFPs) and contracts that specify minimal packaging and should require Energy Star specifications wherever applicable; a joint contract to purchasing energy efficient lighting; purchase reduced-toxicity chemicals and janitorial supplies; and require “VendingMisers” or Energy Star® approved vending

Environmental Education

The Environmental Education team was active on a variety of environmental education initiatives in 2007. The Committee has a long-term focus on environmental education but does most of its work in working groups which are convened, do their work and are disbanded. They have been working on outdoor classrooms, local foods, the youth summit, alternative energy and middle school environmental education pilot. A significant number of Environmental Education team members also participate on the Climate Change Outreach & Education working group. The education team is interested in having members of its team become liaisons to the other teams so that they have a better understanding what the teams are doing, but also so the liaisons can provide input on environmental education opportunities the other teams have.



Outdoor Classroom Lassiter MS, JCPS

The Youth Summit, a joint event of the Partnership and Brightside, hosted two summit dates that focused on implementing the environmental principles that were adopted by the partnership. Over 300 students attended both the spring and the fall summit.

The Partnership also resulted in greening the UofL Honors Program by developing a series of environmental courses for UofL juniors in the Honors Program. The courses will be taught in the fall, and then in the spring, independent research will take place. Courses include: Reading the Natural Landscape: Tools and Perspectives on Environmental History and Planning; Urban Water; Global Ecopolitics; Reading, Writing and Toxics: Children’s Health and Environmental Justice; and Environmental Education.

Future initiatives could include creating an Environmental Career Fair for high school students; securing funding for more outdoor classrooms; promoting stormwater management (water pollution prevention) education; and researching indoor air quality in schools.

Environmental Health

The Asthma Initiative at Lassiter Middle School is in its second year. The Principal of the school is actively involved and interested in the program. UofL's School of Public Health & Information Sciences has had two Master of Public Health students working with the school to identify sources of absenteeism. Out of a student body of 600, only 17 students officially identified themselves as having asthma. This is a small number, based on the student population in an Ohio Valley school. JCPS and UofL personnel designed a questionnaire and distributed it to two grades of students. With 300 responses to the survey, one third signaled a probability of having asthma. The Environmental Health team is working with students and parents to decrease the impact of asthma on students. The team projects \$32,000 of additional revenue to the school and school district by increased attendance. There is a plan to do an environmental audit of the school looking for asthma triggers.

Future initiatives could include the creation of an asthma registry, development of an environmental health report card for Louisville Metro, and research healthy indoor air quality.

Waste Management

The Waste Management Team worked with the Green Purchasing Team to secure a contract for solid waste disposal. Louisville Metro and JCPS are utilizing the contract and savings should be evident midway through the first year of the contract starting in 2008. The University decided to manage its solid waste disposal with its own waste truck and take the solid waste to the Metro Solid Waste Management Department near the campus.

Possible initiatives for 2008 include increasing diversity of recyclable materials partners recycle; investigating printer ink-jet and toner cartridge recycling among partners, which is already being done in Louisville Metro; determining the need for a joint hazardous waste lab packing and disposal contract; creating a joint recycling contract for fluorescent lamps, ballasts, and recyclable batteries (Louisville Metro and JCPS are already utilizing a joint contract) ; promoting grease recycling; investigating ways to become a zero-waste community; seeking polystyrene recycling opportunities; conducting dumpster dives in schools and increasing electronics waste (E-Waste) recycling.

Looking to the Future

The future is bright for the Partnership. The Partners are dedicated to protecting Louisville's environment and resources, to improving the health of its citizens, to improving its green infrastructure, and creating a sustainable climate that attracts development. Social equity is also advanced through Partnership activities, for example through its support of programs such as E-Corps, which provides meaningful work experience, involvement and financial support to youths who generally come from disadvantaged backgrounds, and especially through the work of the Environmental Health Team. For example, the highest incidence of unmanaged asthma occurs in households with lower socio-economic characteristics. While impacting the entire community, the work of the Environmental Health Team is expected to have the greatest impact on that population.

A new team will be started in 2008 - the Green Issues Orientation Team. This group will focus on a video presentation for new employee orientation and professional development of seasoned employees. The video will discuss the Partnership; tell employees how important their participation is to achieving the goals of the Partnership and enumerate things that anyone can do at work and at home to

"What I really like is being able to share my knowledge and skills with the students so they can make responsible decisions involving the environment. This compounds with helping out the schools, so we're literally impacting thousands of other kids while they're out playing during the summer. Outdoor classrooms must have a presence during summer time."

Bryan Thompson, Jefferson County Public Schools' naturalist: Bryan, who has provided environmental education for fifteen years, is an adult crew leader directing students at the worksites

be environmentally conscious. At the conclusion of the video, each partner organization can discuss internal sustainability initiatives, policies and plans.

A Communications Team will be recreated to increase publicity about the Partnership. The team will include the Director of the Partnership and one public relations person from each institution. A communication plan will be developed, detailing communication with the leaders, with the teams, with the partner organizations and with the local print and broadcast media. An update of the website is also planned.

The Partnership will promote better communication among the teams by having a quarterly Chairs' meeting with the Steering Committee where team leaders will discuss achievements and what each team is working on. The Chairs will also discuss overarching goals and themes of the partnership and make recommendations to the Interagency Coordinating Committee. The Steering Committee will meet with the Interagency Coordinating Committee at least twice a year to discuss the direction of the Partnership and make recommendations to Mayor Abramson, Dr. Berman and Dr. Ramsey.

Over time, some team members have left employment with the partner organizations leaving vacancies on some of the teams so replacements will be selected and placed on the various teams.

In 2008, the Director will meet and make presentations to Mayor Abramson, Dr. Berman and Dr. Ramsey along with the Metro Council, the Board of Education and the UofL Board of Trustees. A strategic Plan for the Partnership will be developed along with performance matrices to measure the sustainable practices of the partners.

While operating largely internally, the three Partners intend to eventually welcome new partners where feasible, so that the benefits of collaboration can be further shared through the Louisville Metro community.

Katie Harvey, E-Corps Crew Member:

"I could have been a camp counselor, but I thought this work could make a lasting change. This is my chance to keep Louisville green. I think E-Corps is a lot of fun, and I can't believe I get to spend the whole summer helping to manage the Earth."

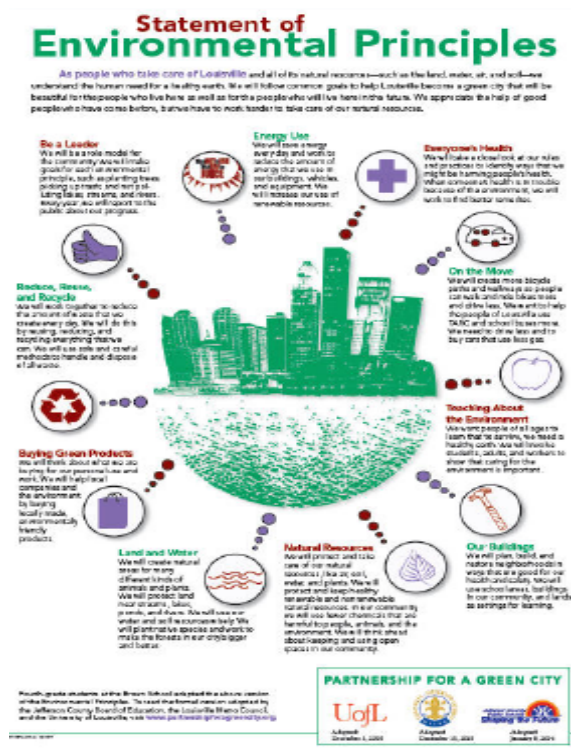
Katie is a graduate of Louisville's Ballard High School who went to the University of Kentucky to study Agricultural Biotechnology in the fall of 2007.

Jullian Green, E-Corps Crew Member:

"I chose it because it was a new experience. I could have worked at a movie theater but I wanted to work outside, doing things like landscaping. E-Corps is a great learning experience for the youth of Louisville."

Jullian moved to Louisville from Georgia and is working in the program along with his brother James, one of two adult crew leaders directing the students at different worksites.

The Partnership will continue to lead the community, demonstrating by example and becoming the envy of countless organizations while seeking continuous improvement in its own efforts.



“The Green City Partnership has brought much improvement and has led the way for others to follow. This partnership has encouraged great fellowship and information exchange among its members, whereas previously we were all islands unto ourselves. The Partnership has developed us as more responsible leaders, not only for our individual institutions but for the entire community.”

Michael Mulheirn, Executive Director of Facilities and Transportation, Jefferson County Public Schools

Environmental Principles adopted by UofL, JCPS, and Louisville Metro