

Partnership for a Green City



2009-2010 Report



Partnership for a Green City
Louisville

A Collaboration of:



The Partnership for a Green City Steering Committee

Russell Barnett

Kentucky Institute for the
Environment and Sustainable Development
202 Patterson Hall
University of Louisville
Louisville, KY 40292
(502) 852-1851
r.barnett@louisville.edu

Allan Dittmer

Office of the Provost
Houchens Building
University of Louisville
Louisville, KY 40292
(502) 852-5198
allan@louisville.edu

Mary Lou Northern

Louisville Government
Metro Hall
527 West Jefferson Street
Louisville, KY 40202
(502) 574-6256
mary.northern@louisvilleky.gov

Michael Mulheirn

Jefferson County Public Schools (JCPS)
Facilities and Transportation
C. B. Young Service Center
3001 Crittenden Drive
Louisville KY 40209
(502) 485-3178
mike.mulheirn@jefferson.kyschools.us

Arthur Camins

Jefferson County Public Schools (JCPS)
Gheens Institute for Innovation in Education
4425 Preston Highway
Louisville, KY 40213
(502)485-7633
arthur.camins@jefferson.kyschools.us

Brent Fryrear, Director

Partnership for a Green City
100-G Jouett Hall
University of Louisville
Louisville, KY 40292
(502) 852-8854
Fax (502) 852-8361
brent@partnershipforagreencity.org

Table of Contents

Introduction	5
Organization.....	5
Definition of Sustainability	6
Accomplishments	6
• Energy Efficiency (E2).....	7
• Open Space and Biodiversity—	7
• Stormwater Management (Green Infrastructure) —	7
• Promotion of Alternate Transportation to Reduce Vehicle Miles Traveled—	8
• Zero Waste Community—	8
Climate Change	10
Environmental Education	11
Environmental Health.....	11
Green Buildings	12
Green Fleets	14
Green Infrastructure	14
Green Issues Orientation.....	14
Green Jobs.....	15
Green Purchasing.....	15
Local Foods	16
Urban Forestry	16
Waste Management	16
Presentations	17
2010 Joan Riehm Memorial Environmental Leadership Award Recipient.....	18
Strategic Planning.....	19

Vision Statement.....	20
Mission Statement.....	20
Strategic Priorities.....	20
Strategic Priority 1 – Increase influence through collaboration.....	20
Strategic Priority 2 – Increase influence through resource enhancement.....	20
Strategic Priority 3 – Increase influence through advocacy.....	20
Strategic Priority 4 - Increase the level of sustainability research and demonstration.....	20
Strategic Priority 5 – Increase influence through measurement.....	21
Looking to the Future.....	21
Conclusion.....	22

Introduction

The Partnership for a Green City is an innovative environmental collaboration of Louisville-Jefferson County Metro Government, Jefferson County Public Schools and the University of Louisville, three of the largest public employers in the Commonwealth of Kentucky. The initial focus of the group was environmental management, environmental education and environmental health initiatives, however, over the past several years, there has been growth in both the team structure as well as opportunities while we work to create a greener, more sustainable community, while improving the health of our students and our employees. Our efforts are improving sustainability within the organizations themselves.

Collaboration allows the Partners to take advantage of vast resources that were unavailable previously, such as professional expertise, services and contracts. Additionally, it increases educational opportunities, creates cost-savings opportunities through economies of scale and 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 (employees and students) and more efficient public institutions.

Organization

The Partnership process convenes peers from each public entity to address problems and share ideas. Peer pressure, rather than top-down decision-making, has produced significant changes in operating procedures within each partner. Over 150 employees participated on Partnership teams during the year, often consulting with external individuals or organizations to receive additional assistance. Quasi-governmental agencies participate including the Transit Authority of River City (TARC), the Louisville Water Company (LWC), the Metropolitan Sewer District (MSD) and the Louisville Regional Airport Authority (LRAA).

The Steering Committee, along with the Director, continues day-to-day leadership activities of the Partnership, setting priorities

“The University of Louisville has taken giant strides in the past year toward becoming more sustainable, and the Partnership for a Green City has helped make that happen.

We are now nearly through a \$21.7 million renovation of our Belknap Campus that we expect to trim our energy consumption by almost 30 percent. We have moved to single-stream recycling in every campus building, a step that should dramatically reduce our landfill waste. Researchers at our Conn Center for Renewable Energy Research and Environmental Stewardship are working hard to develop alternative energy sources to reduce our dependence on fossil fuels. We’ve adopted sustainable building practices in all of our construction and renovation projects. In fact, our new Clinical and Translational Research Building recently earned a LEED Gold rating, making it one of Kentucky’s greenest buildings.

We opened our first green dorm room a few months ago, and a group of university and community volunteers just broke ground on Garden Commons, an organic garden on our campus created to bring people together to grow healthy local food.

There’s a reason our students, faculty and staff have fully embraced the goal to lower UofL’s carbon footprint. In 2004, the Partnership for a Green City began opening our eyes to the urgent need to protect the local environment. Now, six years later, the seed that organization planted is coming into full flower.

As we continue to work closely with Louisville Metro Government and Jefferson County Public Schools in this partnership, we remain committed to being more sustainable in everything we do. Together, we can make our community a greener and healthier place for our children, our grandchildren and all the generations to come”.

James R. Ramsey
President, University of Louisville

and providing guidance to the teams. The current Partnership committees are Climate Change, Environmental Education, Environmental Health, Green Buildings (formerly Energy Use Partnership), Green Fleets, an expanded Green Purchasing Team, Waste Management, Green Infrastructure, Green Issues Orientation, Green Jobs, Local Foods Initiative, and Urban Forestry.

Definition of Sustainability

When referring to sustainability, the Partnership is looking holistically at a combination of environmental sustainability, economic sustainability and social sustainability. More easily stated, we follow the definition of the Brundtland Commission, formally known as the World Commission on the Environment and Development (WCED), which is **"Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs"** (Our Common Future, 1987).

Accomplishments

The Partnership and its teams achieved a number of accomplishments during 2009 and 2010.

The Partnership focused on making climate change the overarching focal point for 2009-2010. There are activities of our three organizations and the community that can and will directly or indirectly affect climate change. Louisville Government and the University of Louisville have both signed national commitments to reduce greenhouse gas (GHG) emissions. Former Louisville Mayor Abramson signed the original U.S. Conference of Mayors Climate Protection Agreement, pledging to reduce the city's greenhouse gas emissions by 7% from 1990 levels, and new Mayor Greg Fischer signed it as well on his first day in office. UofL President Ramsey signed the American College and University Presidents Climate Commitment pledging that the University will become climate neutral by 2050. These documents require these two partners to prepare GHG emission inventories and to prepare plans to reduce their emissions. The plans entail energy reduction, energy conservation, transportation, education, recycling, carbon sequestration by vegetation, and open-space creation and management.

"The Partnership for a Green City is a community best practice in breaking down silos to achieve meaningful change. Air and water quality cut across institutional boundaries. We are one city, one community, one family. Metro Government, the University of Louisville and Jefferson County Public Schools are working together to create a healthy environment where imagination thrives and ideas come alive." **Louisville Mayor Greg Fischer**



"Our schools are among the most energy efficient in the country and we continue to develop new ways to create greener classrooms. Through this partnership with Metro Government and the University of Louisville, we're shaping the future by showing our students what it means to be responsible citizens." **Jefferson County Public Schools former Superintendent Sheldon Berman**

While focusing on climate change, we have continued working on:

• **Energy Efficiency (E2)**— Jefferson County Public Schools, UofL, and Louisville Government have signed on as ENERGY STAR partners. ENERGY STAR is a joint program of the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Energy. ENERGY STAR helps save money and protect the environment through promoting energy-efficient products and practices. The Partners measure current energy performance, set goals, track savings, and reward improvements. The Partners' total energy bill is currently \$40 million a year and is increasing 5 to 7 percent annually. E2 includes work with the green buildings, green fleets, environmental education, waste management, and green purchasing teams.

• **Open Space and Biodiversity**—Louisville is currently engaged in the largest urban park expansion program in the United States. The ambitious City of Parks Program includes not only land purchase but also tree planting, protection of streams, inventorying and enhancing biodiversity, promoting access of children to natural settings, education programs, and the construction of sustainable green infrastructure. The program includes environmental education, environmental health, biodiversity research and green infrastructure, and use of public property to develop community-wide ecological corridors. The Urban Forestry Team has taken a lead role for this category.

• **Stormwater Management (Green Infrastructure)** —The Metropolitan Sewer District has entered into an agreed order with the U.S. EPA, the U.S. Justice Department, and the Kentucky Environmental and Energy Cabinet (KEEC) to spend \$800 million to \$1 billion in the next decade to manage combined sewer overflows. The three partners collectively own more than 25,000 acres (10 percent of the county excluding roads), that could be managed to reduce or eliminate off-site stormwater flows to reduce combined sewer overflows. The program includes physical plants, engineers, education, and environmental health to develop model approaches to wet-weather management. The Green Infrastructure Team addresses stormwater management.

“Participation in the Partnership’s committees has provided invaluable opportunities for APCD staff to share strategies about what all of us can do to help improve air quality. Most recently, for example, Metro government has received grant funds to reduce diesel emissions that came about from past collaboration with other Partnership personnel.”

Cynthia Lee, Environmental Manager

Louisville Metro Air Pollution Control District

“When I speak to my peers at other universities around the country, one of the things they are most jealous about is the Partnership for a Green City! It is truly a privilege to have this level of collaboration on environmental-responsibility amongst Louisville's largest public institutions. The challenge for us now is to expand this partnership into the private sphere - to collaborate even more deeply with local businesses and non-profit organizations to put Louisville solidly on the map as a green leader.”

Justin Mog, Ph.D.

Assistant to the Provost for Sustainability Initiatives UofL



• **Promotion of Alternate Transportation to Reduce Vehicle Miles Traveled**—Louisville

Government is actively working to create new bikeways and to improve pedestrian-friendly walkways such as the Louisville Loop. JCPS has received grants to identify pedestrian-friendly walkways to schools to reduce dependence on fossil-fuel powered transportation. Cumulatively, more than 24 million vehicle miles are driven each day in Jefferson County, which is equivalent to 1,000 times around the globe. JCPS school buses travel 87,000 miles daily or the equivalent of four times around the world. The Partners work collaboratively to identify ways to reduce their transportation demands by making the community more pedestrian and bike friendly, promoting bus and shared vehicle transportation, and working to reduce total transportation demands. This work involves transportation, environmental education, green buildings, fleets, and environmental health.

• **Zero Waste Community**—The Partners collectively dispose of tons of waste annually. Many corporations and communities are moving to Zero Waste Goals. Zero waste suggests that the entire concept of waste should be eliminated. Instead, waste should be thought of as a “residual product” or simply a “potential resource” to counter our basic acceptance of waste as a normal course of events. Opportunities, such as reduced costs, increased profits, and reduced environmental impacts, are found when returning these “residual products” or “resources” as feed stock to either natural and/or industrial systems. Zero waste focuses on investing in green businesses and infrastructure rather than in landfills. Corporations in our area that have adopted this concept include Toyota and Lexmark. Cities that have adopted Zero Waste Goals include Boulder (CO), Seattle (WA), Berkley and San Francisco (CA), Bellefontaine (OH), Carrboro (NC), and the Central Vermont Waste Management District. This goal involves physical plants, waste, recycling, economic development, purchasing, and education.

“We came together seven years ago with a simple idea, to make Louisville a healthier, greener city. I’m proud to see what we’ve accomplished by working together. With Louisville Metro Government, the University of Louisville and JCPS leading the way, we’ve been able to get other leaders in our community involved in a way that’s yielded real results.

Our efforts have also garnered national attention. In March, the U.S. EPA named Louisville Metro Government an ENERGY STAR Partner of the Year. We earned the honor through our efforts to be more energy efficient. The inaugural Kilowatt Crackdown competition was a key accomplishment, challenging building owners and operators to reduce their energy use. This helped us reach out to schools, businesses, large and small, and engage them in our movement.

Louisville Metro Government was also able to attract \$7 million in federal stimulus funding through the U.S. Department of Energy. The money is creating meaningful changes across the city, including new energy-efficient street lights, synchronizing stop lights along major suburban roads and retrofitting government buildings so they use less energy.

Whether it’s a building upgrade, renovation or new construction, we look for the best green practices. Just this year, the city installed its first green roof on top of the Metro Development Center at 444 S. 5th Street. Similar projects are on the horizon.

We opened two new firehouses, with features like geothermal heating and ENERGY STAR rated appliances. Our new library in Newburg has a rain garden and utilizes light harvesting, incorporating a system of sensors to adjust artificial light according to the amount of natural light.

Most importantly, we’ve been able to change the mindset of not only our employees but also our citizens. Supporting sustainable practices is the right thing to do, for now and for the future. With dedication to this collaborative effort and its goals, I’m confident we will continue to make a difference for our city”.

**Jerry E. Abramson, former Mayor
Louisville Metro Government**

• **Local Food Initiative**—Louisville’s Economic Development Department has studied the economic potential of locally grown food. UofL has committed to purchasing at least 20 percent of its produce used in on-campus food preparation from local (<250 miles) growers and is promoting Community Supported Agriculture on campus. The area surrounding the Louisville metropolitan area is primarily rural, and the economic vitality and sustainability of the area is enhanced if local agricultural markets are strengthened. The Partners currently, directly and indirectly, purchase food that on average travels 1,500 miles to reach Louisville. This model of food delivery is unsustainable. Viable rural economies would help reduce Louisville’s urban sprawl. The Partnership will focus on using its collective purchasing power to support local agriculture. In addition to produce, the purchase of local eggs, dairy, poultry, and meat products would support farmers in Kentucky. Other opportunities to indirectly support local agriculture through additional Community Supported Agriculture (CSAs), community gardens, farmers markets, and food fairs will also continue to be explored. The initiative would also be an excellent healthy eating initiative and would be something in which the public would be interested. Supporting local growers is another sustainable practice and should also decrease transportation costs for food delivery. The local food initiative team was created to engage this issue.

The Steering Committee continued meeting on a bi-weekly basis moving the Partnership forward, although there were a number of changes in membership during that time. The group set out to create and populate new teams to address the areas set forth in the Partnership focus. New members became quick studies of sustainability and everyone had a positive contribution to our collaborative efforts. The Steering Committee members are to be commended for the work that they do, both in the Partnership and their regular positions in the three partner organizations. There is not a group of more committed individuals who endeavor to make a difference, not only for their respective employers, but also for sustainability and leading Louisville to Green City status. The year 2009 produced six new committees and resulted in one committee achieving its mission. In 2010, we refined things a bit and undertook a strategic planning process

"In the past three years I have witnessed more effort toward becoming more sustainable than anything I have seen over the past fifteen years. Green buildings, energy efficiency, green purchasing, single stream recycling, expanded environmental education programs. All of them linked to the Partnership."

Russ Barnett, Director

Kentucky Institute for the Environment and Sustainable Development (UofL)

"As I make presentations around the community and at conferences, I promote some important roles the Partnership plays in Louisville. One of the major tenets is demonstrated leadership by example. Our leaders and employees are committed to making their organizations more sustainable. Another belief is that each incremental change that people make at work and at home are additive and create "real" results.

It is vital to understand the culture of each organization to know how to create positive transformation. Awareness and behavior change initiate the process. Working together as public partners, we can truly help Louisville achieve green city status."

**Brent Fryrear, Director
Partnership for a Green City**

The teams generate the majority of the accomplishments and will be detailed in each particular section.

The Partnership continued to 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 research classes had students conducting studies on issues, such as green infrastructure, being addressed by the Partnership. The research and participation of students has helped the Partners in understanding and addressing environmental issues. Additionally, one of the courses traveled to China and Taiwan in 2010 to learn about climate science, protecting biodiversity, renewable energy and environmental issues in those countries.

Climate Change

Public concern over climate change, in addition to some aberrant local weather, has motivated communities to take action. The Climate Change Committee of the Partnership, led by the Louisville Metro Air Pollution Control District, published the Partnership's Climate Action Report, complete with a comprehensive greenhouse gas emission inventory, culminating over two years of diligent efforts. This was a monumental accomplishment working with stakeholders from throughout the community. The report is posted on the Partnership website at www.partnershipforagreencity.org and details 60 plus years of climate data for Louisville, along with sections on local impacts, energy efficiency, utility regulations, policies and procedures, land use, transportation, urban forestry and waste. The 175 recommendations serve as a framework for the partners to create individual climate action plans as well as a community-based climate action plan.

The Climate Change Committee (CCC) is different from the other teams in that it has members from outside the three Partners who participated in creating the report. Those representatives from many community agencies, organizations and corporations have participated in the work of the CCC and have also provided valuable resources on other teams.

Work has continued in the Air Pollution Control District and the Partnership to gauge what is happening with regard to the recommendations locally and within the partner organizations.

Several Climate Change Committee members and Partnership team leaders participated in the national Teach-in on Climate Change in February of both years at the University of Louisville, presenting information on the Climate Action report process, including the greenhouse gas emissions inventory results and climate change in Louisville. The partner organizations' emissions amount to almost five percent of the emissions in the community meaning that in order to meet the city's reduction goal of 7%, people will have to make personal changes in their residential utility use and transportation choices. Nearly 150 attendees had an excellent opportunity to learn and ask questions of the subject matter experts present. The individuals presenting also made a number of presentations locally and across the country about how Louisville is working on climate change.

Environmental Education

The Environmental Education Committee was active on a variety of environmental education initiatives in 2009 and 2010. 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 the middle school environmental education pilot program at two middle school magnets.

The Environmental Education Committee has participated in the Brightside Youth Summit, a joint event of Brightside and the Partnership, hosting two summit dates each year (spring and fall) that focused on hands on environmental exercises and Kentucky Green & Healthy Schools inventories. Over 300 students attended both the spring and the fall summit at UofL, where the Partnership leaders addressed the students and answered their questions.



The Environmental Education Committee was also integral in bringing Bioneers to Louisville in both 2009 and 2010. Bioneers is an internationally broadcast teleconference where localities can convene educational sessions regarding the environment and sustainability. As a new site, the group reached 200 – 250 attendees and explored ways to increase participation with regional colleges and universities.

The Committee also undertook the creation of a resource document *What Every Environmental Educator Should Know About Jefferson County* in which committee members wrote “chapters” about topics of local relevance. This document is in the graphic design phase and will be available on line and in a limited first-print edition.

The Group also made strides by holding a grant-writing workshop, multiple professional development sessions, participating in the Healthy Foods/Healthy Farms workshop, collaborating with the Kentucky School Garden Network, and working with the school gardens at Manual High School and at UofL. The EEC supported the environmental magnet schools, the Living Lands and Waters cleanup on the Ohio River, Brightside cleanups and always kept the group up to date on what was happening at the various schools, school gardens, etc., by way of announcements and invitations to participate.

Environmental Health

The Environmental Health Team worked in 2009 and the first half of 2010 on a variety of health topics, goals and objectives. Early in 2009, the Community Farm Alliance met with the committee to discuss how the team could work in concert with them to bring fresh produce to the food deserts of west Louisville. Another program that the committee reviewed was “You, Me and Trees”, a program that incorporated yoga and environmental awareness and advised its director on ways to make it a pilot program in

elementary schools. There was also discussion with the UofL *Get Healthy Now* program to find ways to incentivize environmental health with the personal health fitness program. The team also had a presentation from the Louisville Water Company on its 100th anniversary and the environmental health importance of clean drinking water.

The Environmental Health Team was also the first team to complete goals and objectives based on the Climate Action report. Several grant proposals were submitted for additional research funding on asthma in JCPS, but given the competitive nature of grants and the economic downturn, funding was not obtained.

Green Buildings

The Green Buildings Team has been active meeting monthly to bi-monthly throughout the years. All three organizations are Energy Star Partners. In 2010, the Partnership organizations spent about \$40 million with energy costs increasing at 5-7% annually. The Partners have led efforts to decrease their carbon footprints as well as their utility bills. Changing how employees and students use energy could result in savings of 10 – 15%, or \$4 - \$6 million dollars.



Farmer Elementary Solar Hot Water Panels

All three partner organizations have entered into Energy Savings Performance Contracts over time. JCPS has had contracts these on individual schools and other district facilities over several years. In the first five years, after the 15 buildings implemented energy conservation measures, JCPS realized actual energy savings of over \$1.251 million, 12% above the energy savings guaranteed by the Energy Service Company (ESCO). Louisville Metro entered into a \$13 million ESPC for 24 government buildings, which includes alternative energy, both solar and wind, on one building. LMG also has a 10% energy reduction goal for energy and fuel. UofL entered into a \$22 million

ESPC for the Belknap Campus where the upgrades are now complete and a \$25 million ESPC for the Health Science and Shelby campus upgrades which is now underway. With the first contract, UofL is saving \$6,500 a day on its utility bills. The year 2010 was the first year that the university did not bring coal on campus to fuel its steam and chill plant. As part of the energy savings, one of the boilers was converted to natural gas.

Both JCPS and Louisville entered buildings into the Louisville Energy Alliance 2010 Kilowatt Crackdown – JCPS entered 150 buildings, mostly schools and the Louisville Metro entered several government buildings.

Numerous facilities received recognition for their energy reductions. Because of the work of the City with the Louisville Energy Alliance, Louisville was a 2010 Energy Star Partner of the Year.

There are numerous buildings recognized with either an Energy Star rating or LEED certification: In Louisville, the Newburg Library received a LEED Silver rating and the Old Jail on Liberty Street was the first Energy Star rated government building. The renovations done on this building, built in 1902, prove that buildings do not have to be new to be energy efficient. JCPS has achieved Energy Star ratings at Ballard High School, Cane Run Elementary, Conway Middle, Farmer Elementary, Isaac Shelby Elementary, Myers Middle, Ramsey Middle and Stopher Elementary. Other schools are tracking their energy usage and working toward the Energy Star rating. The University of Louisville has received LEED Gold certification from the U.S. Green Building Council for two new buildings – the Clinical and Translational Research building (the largest laboratory building to achieve LEED Gold) and the Center for Predictive Medicine (with 256 solar panels on the roof). The renovation of the Duthie Center for Engineering, originally built in the 1940s, also received LEED Gold certification. All new buildings built by the University will be built to LEED standards as will all renovations over \$500,000.



Photovoltaic Array (256 panels) on the roof of the UofL Center for Predictive Medicine at Shelbyhurst.

The Green Buildings Team has had a variety of resource speakers including the leadership of the local chapter of the U.S. Green Building Council, Engineers from Harshaw Trane, regarding their energy management system and Louisville Gas & Electric Energy Efficiency Group and Demand Side Management staff.

In 2009, the Partnership held its second energy pledge drive among the three partner organizations and gave away some energy efficient door prizes to employees of all three partners and a bicycle to a student at Breckinridge-Franklin Elementary School who was drawn at random from all the students filling out an energy pledge. Another part of the team's energy awareness efforts included conducting energy assessments of each of the leader's offices. We found that all three were extremely aware of their energy use and were committed to being good energy stewards at work and at home.

Green Fleets

The Green Fleets Team made major progress in developing matrices and baselines to measure mileage, fuel, and number of vehicles by type. 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 hybrid vehicle. Louisville 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 Infrastructure

In 2009, the Partnership convened a Green Infrastructure team including the partners plus the quasi-governmentals – Metropolitan Sewer District, Louisville Water Company, Louisville Regional Airport Authority and the Transit Authority of River City. The primary goal of this committee was to work with MSD to create an agreement where the public partners could work with MSD on green infrastructure projects, using the money that they would have normally spent as stormwater conveyance fees to actually install green infrastructure. MSD is working on an \$800 million consent decree of which a part is dedicated to green infrastructure. The three partners and quasi-governmentals are interested in mitigating their stormwater impact to the combined sewer systems in Louisville and assisting MSD wherever possible.

The Committee did not take off with projects. Instead, the Facilities personnel at the three partners worked directly with MSD to design and construct green infrastructure projects.

Green Issues Orientation

The Green Issues Orientation Team initiated orientation sessions with JCPS Classified New Employees in February 2009. The Partnership now presents "Sustainability Awareness and the PGC" to each incoming group. These sessions generally occur twice a month. Within a month of starting at JCPS, the Partnership also started presenting about the Partnership and Sustainability at weekly new employee orientation sessions at the University of Louisville. Both sustainability awareness sessions are tailored to each particular partner organization so each receives an overview of the partnership, along with the particular sustainability efforts at their respective institutions. Louisville does its own sustainability presentation during new employee orientation.

JCPS also used the Partnership for its summer professional development Institute for classified employees in both 2009 and 2010 where staff can receive 18 hours of required training over three days. Teacher's Assistants and other classified employees from a variety of JCPS schools participated in different training

sessions. The first session began with a dumpster dive to see what recyclables are discarded in the trash. The second session was on energy efficiency where the staff members conducted an energy assessment looking at classroom plug loads, foot-candles of light in areas of the school, and what power was on that was unnecessary. Those taking the PD sessions were extremely active in both.

Having met its goal of getting sustainability in orientation sessions, the Green Issues Orientation Team has discontinued meeting.

Green Jobs

The Partnership convened a Green Jobs Team that met one time in 2009 how green jobs could be created through the American Reinvestment and Recovery Act (ARRA). Since the focus of ARRA was on immediate capital infrastructure and not job training, the committee was put on hold until we can move the green jobs and green economy to the forefront of the Partnership's efforts.

Green Purchasing

The Green Purchasing Directors created a new memorandum of agreement between the Partners and the Transit Authority of River City (TARC), the Louisville Water Company (LWC), the Metropolitan Sewer District (MSD), and the Louisville Regional Airport Authority (LRAA) on all purchasing issues. The first RFP that the group created was a new 30% post-consumer recycled content white paper contract as a follow up to the first contract, which had expired after five years. The new contract is in place for all seven organizations.

Collectively the Partners consume over 500,000 reams of paper annually. That is the equivalent of one tractor-trailer load a week or 26,000 pulp trees. As a result of the joint recycled paper purchasing contract executed in 2005 - 2010, the partners have saved 5,000 tons of paper, which is the equivalent of saving 85,000 mature trees and 120 million gallons of water.

The three original partners have a joint contract for electronics recycling, which any of the quasi-governmentals can use. There is also a joint purchasing contract for containerized waste collection at JCPS, Louisville and the Regional Airport Authority. Louisville, JCPS and TARC purchase biodiesel fuels and discuss joint contract opportunities.

A joint contract for office supplies could potentially save each partner 5-10% and is currently being studied for feasibility.

The partners have worked on green purchasing policies (see example at <http://louisville.edu/purchasing/sustainability/greenpolicy.html>). Sharing information and policies increases capacity in all participating organizations.

Each of the partners has contracts for purchasing "green cleaning chemicals" and single stream recycling. The team is investigating options for proposals for joint purchasing of office supplies, energy efficient

lamps, hazardous waste disposal, fluorescent lamp recycling, universal waste recycling, vending machine contracts, road salt, ink jet and toner recycling, mulch and landscaping materials, Tee shirts and logo wear, and “green restroom paper products.”

Local Foods

The Partnership convened a local foods team in an effort to increase local foods into the kitchens and food service at the partner organizations in support of Louisville Metro’s efforts at supporting local farmers. This team found that working individually was more productive, so the group has disbanded.

Urban Forestry

In response to a request from Public Works and Assets, the Partnership convened an urban forestry team with the goals of:

- A. Developing a model to assess damage to trees: (value of trees – can dollar values and other values be assigned?)
 - 1. Economic loss
 - 2. Ecological loss (carbon sequestration value and other environmental values)
 - 3. Canopy Loss
 - 4. Other?
- B. Developing a management plan –
 - 1. Carbon sequestration is part of the goal
 - 2. What trees have the greatest ability to absorb VOCs?
 - 3. Manage trees to protect air quality
- C. Creating a comprehensive inventory the trees in Louisville Metro – we are not managing trees from a long-term perspective
 - 1. City Green and Arc View are two of the programs used in the past.
 - 2. Educate nurseries about native and non-native plants as they can be part of the problem or part of the solution.
- D. Creating a green layer in LOJIC. Developing public outreach & education

This team met over 2009 and 2010, establishing a damage assessment model, expressing concern over the emerald ash borer and starting an inventory of the urban tree canopy, including a grant application for educational outreach and training for citizens about the ecological benefits of trees and urban tree management.

This team turned out to be a duplication of efforts of the Community of Trees, so the group was merged into the already existing group at the end of 2010.

Waste Management

Waste and recycling efforts have proven to be beneficial on many fronts. With recycling as a focus, all three partners have contracted with QRS for single-stream recycling programs.

All three partners have internal single-stream recycling programs. Louisville's curbside recycling collection is also single stream allowing for plastic, tin and aluminum containers (except polystyrene foam), glass containers, paper and cardboard. We are recycling millions of pounds of materials, increasing each year while our solid waste disposal is decreasing.

The Waste Management Team has toured the QRS facilities to see how the process works. The participants were impressed at the cleanliness of the operation as well as the efficiency.

Besides the electronic recycling mentioned in the Purchasing section, we have a joint contract for fluorescent lamp and light ballast recycling that was completed by the Waste Management Team.

Presentations

The Partnership has been represented at a number of events, conferences or leadership meetings. As a part of the Louisville community, in March 2009 Bellarmine University invited the director to present on the Partnership and Sustainability at Bellarmine's Green Week. The 50 – 60 students were extremely receptive and left with many ideas on how they could improve sustainability at their school. In April 2009, the Fetter Group hosted a session for its clients and the Young President's Club and asked the Partnership to present on "Being Green and More Sustainable – Opportunities for any Business". The 45 – 50 attendees received some common-sense opportunities to take away and try at their own workplaces.

In May 2009, the director attended the National Environmental Partnership Summit in San Francisco, California after being invited to present on the Partnership's Climate Action Report (CAR) and Planning. This was an excellent conference with attendees from all over the country discussing ways to create and sustain environmental partnerships. The CAR session was an hour and a half long and was well received by the 30 or so people in attendance. That same month, Michelle Stites with the Louisville Metro Air Pollution Control District (APCD), presented the CAR with updates to the Air Pollution Control Board. The Climate Change and the Partnership's CAR were also the topic of discussion when the PGC director and Chair of the Climate Change Committee, Cynthia Lee from APCD, presented at the University of Louisville Teach in on Climate Change on September 18, 2009 and at the local Bioneers Conference on October 18, 2009. Ms. Lee also presented on the CAR with "Louisville's Approach to the Challenge of Climate Change" at the Software Testing and Quality Services Conference in Tampa Florida.

The leaders of the Partnership also requested presentations regarding the Partnership. September 2009 had update presentations with the UofL Leadership Team (the President and Executive Vice Presidents) and Mayor Abramson. They were interested in seeing the successes of the PGC and know how the committees worked. All of the leaders were pleased with the progress and look forward to additional successes. The Metro Council Health & Human Needs Committee requested a presentation in November 2009 to learn more about the PGC and the Environmental Health Team. The meeting allowed the PCG to connect a Councilwoman who was interested in children's' asthma issues in her district with someone in JCPS who worked with asthmatic children in the schools.

The Partnership for a Green City also met with members of the Bluegrass Partnership in November 2009 to see if there were some opportunities to work together on some projects. Unfortunately, that did not pan out, but we will keep working on it.

In 2010, the year started off in February with another Teach-In for Climate Change at the University of Louisville, where the PCG presented on the CAR and what the committees were working on with respect to Climate Change. Later that month, the director of the Partnership, along with one member of the Steering Committee and the Interagency Coordinating Committee traveled to Chicago for the “Expert Meeting: Climate Change Solutions for U.S. and German Cities” where the PCG had been invited to speak on the Climate Action Report and how Louisville was addressing climate change. There were American cities from all over the U.S. present with their German city counterparts. After spending two days in Chicago seeing the green sights and conferencing about climate change, we brought the Deputy Mayor of Mainz, Wolfgang Reichel, back to Louisville to see how Louisville was becoming “greener”. While he was here, he toured some of the new LEED certified buildings, the Kentucky Pollution Prevention Center, Waterfront Park and met one-on-one with Mayor Abramson. There was some press from this visit (see: <http://louisville.edu/uofltoday/campus-news/mainz-deputy-mayors-green-louisville-tour-brings-him-to-uofl>) Herr Reichel also presented to the Bingham Fellows (BF) at their 2010 class kick-off session speaking about green issues and collaboration. Leadership Louisville and the Bingham Fellows topic for the 2010 BF class was a Green City, and the Partnership director and Steering Committee presented a panel discussion of green issues and climate change in Louisville at the same event with the Deputy Mayor. The Fellows and Leadership Louisville used the Climate Action Report as the starting point for their topic and the Partnership as a resource.

In March 2010, the director was invited to present on Sustainability Leadership to the National Forum for Black Public Administrators Executive Leadership Institute. This was a relatively small group of 12 or 13 people who were very interested in taking sustainability back to their public sector jobs across the country. Later that same week, the Partnership director made a presentation to the Sustainable City Series on Sustainable Universities, Schools and Cities. In May, the Partnership was invited to present again at the National Environmental Partnership Summit in Orlando, Florida. The topic was Public-Public Partnerships: A Five-Year Case Study of the Partnership. There were between 20 to 25 people who were interested in learning more about how Louisville’s Partnership worked and what it takes to start such a partnership.

In November 2010, the Green Convene had a workshop or conference in Louisville and asked the Partnership to present on its successes and its strategic planning process. Somewhere between 30 and 40 people attended and discussed sustainability in Louisville. These forums provide the Partnership the opportunity to let people know about the leadership of the public sector partners in Louisville.

2010 Joan Riehm Memorial Environmental Leadership Award Recipient

The late Joan Riehm was a staunch friend to the Partnership for a Green City and was instrumental in having Louisville become a partner and establish a director’s position through a memorandum of

agreement between the partners. She passed away in 2008, leaving many of her friends and colleagues saddened and a leadership void in the community. In recognition of her environmental and leadership efforts to Louisville and Kentucky, the Partnership established the memorial award as a way to continuing her enduring legacy.

To be eligible for the award, people must be public service employees or groups, within the Partnership entities (Jefferson County Public Schools, Louisville Metro government and University of Louisville) and quasi-governmentals (Louisville Regional Airport Authority, Louisville Water Company, Metropolitan Sewer District and Transit Authority of River City). All nominees should possess a leadership role in the promotion of environmental sustainability. Self-nominations are not permitted.

The Partnership received a number of wonderful nominations for the premier environmental leadership award to honor Joan Riehm. The recipient, Larry Owsley from UofL, as nominated by Barbara Burns and Joy Hart, exemplified Ms. Riehm's concern for the environment and her tenacity to make Louisville a better place. Mayor Abramson, Dr. Berman and Dr. Joy Hart presented the award and the honorarium to Mr. Owsley at the dedication of the Joan Riehm Memorial Garden at Metro Hall on Earth Day 2010 in the presence of Joan's family and friends. The following nomination letter excerpt from Dr. Burns and Dr. Hart, details why Mr. Owsley was the first recipient.

“Our nomination for the very first recipient of the Joan Riehm Memorial Environmental Leadership Award is **Larry L. Owsley**, the Vice President for Business Affairs and the Chair of the Operations Committee of the Sustainability Council at the University of Louisville. Larry has been the key leader at the University of Louisville in implementing a greener more sustainable campus—not only in terms of operations, the focal point of his university work, but also in terms of financial and community issues as well as research and teaching. Thus, the outcomes of his sustainability efforts extend far beyond the issues in which he is tasked to work. They can be felt across campus and into the community. Further, he is a role model to students, staff, faculty, and administrators. Larry is always the first to volunteer and always does an excellent job. He encourages others and is open to students, who clearly are the next generation of leaders in this movement. In short, we are nominating Larry for the important outcomes of his work and also for the manner in which he accomplishes these outcomes.”

Strategic Planning

The Steering Committee and Director convened a strategic planning committee on August 3, 2010. The group included members of the Partnership leadership, the partner organizations and community members. Since the Partnership works to make Louisville a green city, we valued and needed input from community stakeholders.

We followed a traditional strategic planning format, starting with information gathering and assessment, then identification of strategic priorities to the organization, development of a strategic vision statement, creation of a mission statement, development of strategic goals, and formulation of strategies. Upon

approval of the leaders of the three organizations of this strategic plan, an operational plan will be developed with action steps.

Vision Statement

The Partnership for a Green City envisions Louisville as an innovative national leader for economic sustainability and environmental quality. As founding members, the Jefferson County Public Schools, Louisville Government and the University of Louisville make a long-term commitment to lead by example, educate, engage and collaborate with the community.

Mission Statement

Inspire and promote a sustainable green city through innovation, collaboration, action and measurable progress.

Strategic Priorities

Strategic Priority 1 – Increase influence through collaboration.

Since 2004 the Partnership has had many successes with sustainable projects. Now we plan to use those success stories to embed sustainable practices within the culture of the Partners' operations, investments and policies. We will use the successes of the Partnership to collaborate with businesses, civic organizations and the community-at-large to make Louisville a sustainable green city.

Strategic Priority 2 – Increase influence through resource enhancement.

The Partnership's operating budget is limited to the salary of the director. In addition, the Partners contribute resources when needed. The Partnership will increase environmentally-friendly, cross-institutional, cost-saving opportunities. We will work together to better align our resources. We will seek additional opportunities to collaboratively purchase green products and services. We will act as a team to secure external funding.

Strategic Priority 3 – Increase influence through advocacy.

The Partnership will increase attention to sustainability. We will identify areas that are ready for change and that pose the greatest risks to the environment, and to fiscal and social equity. We will recommend legislative concerns of common interest to the Partners leaders. We will seek avenues to influence environmentally sustainable individual behavior among our employees, students and citizens. We will collaborate with business and nonprofit groups to develop media opportunities to educate the community of the benefit and value of living and working in a sustainable green city.

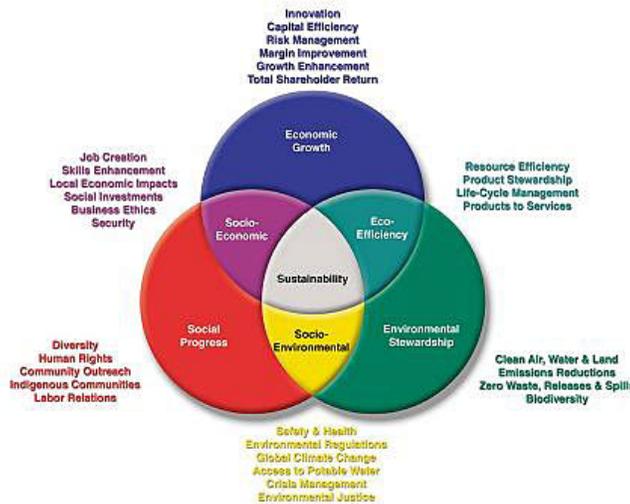
Strategic Priority 4 - Increase the level of sustainability research and demonstration.

The Partnership will actively support and disseminate cutting-edge research that furthers sustainable practices. We will seek joint projects under the Partnership umbrella to demonstrate best practices based on the environmental principles. We will work with other groups seeking to

solve sustainability issues. We will publicize our efforts through a variety of publication and media sources.

Strategic Priority 5 – Increase influence through measurement.

To track progress toward achieving the Partnership mission, we will develop for each Environmental Principle specific cross-institutional metrics. By measuring our successes, we will make progress toward practices that make us a sustainable green city. We will also measure our effectiveness so that we can continue to improve.



Looking to the Future

Develop action steps for each strategy.

- Short-term actions steps.
- Steps to complete in one year.
- Steps to achieve in two years.
- Steps to accomplish in five years.

Annual update of the strategic plan and report to the public.

Work with Bingham Fellows to establish ways we can work together to make Louisville a Green City.

Seek ways to connect with the community.

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.

While operating largely internally, the three Partners intend to welcome new partners where feasible, so that the benefits of collaboration can be further shared through the Louisville community. The Partnership will continue to lead the community, demonstrating by example and becoming the envy of organizations while seeking continuous improvement in its own efforts.

Conclusion

The Partnership for a Green City continues working to implement its strategic plan and update the committee structure and seek new public partners to make Louisville a greener city. The focus on sustainability is evolving, but we are seeking ways to connect with the community as well as the partner employees and students. It will take everyone's efforts to increase the City's green profile. Every little incremental change will lead to big results.