



**Partnership for a Green City**  
Louisville

**Engaging Students in Sustainability**

AHMP National Conference - Orlando  
September 16, 2013  
Brent Fryrear, Director

**Four Large Public Partners**



**Jefferson County Public Schools**  
Shaping the Future


**Jefferson Community & Technical College**  
HIGHER EDUCATION BEGINS HERE

**UNIVERSITY OF LOUISVILLE**  
It's Happening Here.



**History**

- First public partnership of its kind
- Started August, 2004 (easily replicated)
- Originally to improve
  - Environmental education, health & management
  - Stewardship of tax dollars
- Environmental Principles
  - Strengthens Partnership and each Partner's commitment to sustainability



**Statement of Environmental Principles**

*As stewards of metro Louisville and of all its resources, we understand the interdependence of human and the environment. We must apply thoughtful and creative planning to achieve a thriving community built on the principles of sustainability. We must foster conservation, pollution prevention, and restoration of ecosystems with both public policy and personal behavior. We must promote a common agenda for Louisville as a priority, preserve and enhance the quality of life for our citizens and future generations, and value recognition of the importance of good stewardship of the community's natural resources.*

- Leadership Commitment and Measures**  
We will implement these principles by demonstrating community leadership and collaborative planning and by adopting best environmental practices. We will establish goals, objectives, and indicators; conduct an annual self-evaluation of our progress; and publicly issue a public report.
- Sustainable Use and Protection of Natural Resources**  
We will value and conserve natural resources and will seek to preserve and make sustainably use of air, water, soil, and forests. We will protect and conserve environmentally sensitive resources through efficient use, careful planning, and collaborative land management programs. We will reduce the use of substances that may cause environmental damage to the air, water, earth, and its inhabitants. We will safeguard all habitat affected by our facilities and operations, especially the public lands we manage, while promoting biological diversity. We will conserve open spaces through comprehensive planning.
- Land and Water Management**  
We will promote natural areas for biological diversity, protect areas along streams and water bodies, and plant native species. We will enhance, enlarge, and protect our urban forests. We will practice responsible water use.
- Reduction and Disposal of Waste**  
We will encourage resources to reduce or eliminate waste through reuse, reduction, reuse, and recycling in our own facilities and operations and for the entire area we govern. We will benefit and dispose of all waste using safe and responsible methods.
- Energy Use**  
We will conserve energy and improve the energy efficiency of our buildings, vehicles, and equipment and of the goods and services we use. We will use environmentally safe and sustainable energy sources, while reducing energy. We will increase our use of energy from renewable sources.
- Transportation**  
We will build and encourage our community to minimize transportation demands, while providing pedestrian and bicycle-friendly pathways and an effective public transit system. We will work to reduce vehicle miles traveled in the community, while implementing the value of our transportation using energy-efficient vehicles.
- Purchasing Products and Services**  
We will post our own buying and receive to jointly purchase green products and services. We will work with our suppliers to adopt sustainable approaches and solutions. We will partner to create a stronger market for environmentally friendly and regionally produced products and services.
- Design and Management of the Built Environment**  
We will design, build, restore, and manage our facilities and neighborhoods in ways that promote and protect health and safety. We will use robust, compact, green buildings, and lands as settings for learning.
- Public Health**  
We will monitor our policies and practices to assess and reduce public health risk. Where potential risks are identified, we will identify and implement solutions.
- Environmental Education**  
Through environmental education, we are committed to developing and supporting environmentally literate citizens. We will involve colleges, students, and citizens in demonstrating the ability to implement these principles.

**Partnership for a Green City**  
UofL Jefferson Community & Technical College



**Partnerships**


- Why public partnerships?
  - Large employers
  - Huge number of students
  - Purchasers of energy, food & products
  - Given scale, small changes have big impact
  - Set developmental standards in the community
  - Positioned to lead by example



**It's a Resource Issue**

- **Employees** 27,500+
- **Students** 136,000+
- **Land (acres)** 25,135
- **Vehicles** 7,000+
- **Gas/Diesel used (gallons)** 12 million+
- **Buildings** 531+
- **Square feet of space** 30 million+
- **Annual energy cost** \$49 million+

**Increasing 5% - 7% per year**



## Sustainability Definition

"meet present needs without compromising the ability of future generations to meet their needs"

Brundtland Commission (WCED, 1987).



[www.gcbl.org/economy](http://www.gcbl.org/economy)



## Synergies of Partnership

- Improved education of community
- Shared expertise
- Economies of scale
- Joint research studies & demonstration projects
- Coordinated fundraising
- Improved capacity building
- Peer to peer, not top-down, advocacy



## Environmental Education

- Youth Summit twice/year
- Bioneers
- Conducted >100 PD environmental classes
- EE courses for Honors Program
- Link EE to core content
- Environmental Resource Directory



## Youth Summit

- 20+ year history
- Sponsors
- Interactive hands-on experience
- KY Green & Healthy Schools Program
- <http://www.greenschools.ky.gov/>
- Students investigate sustainability
- Promote personal responsibility
- Leadership in schools



## Students

- Public, parochial & private schools
- 300 regional students
- Classes, clubs, leaders
- Select a project
- Lead efforts back at school
- Report outcomes



## Mentors

- From public and private businesses
- Provide hands-on experiences
- Visit schools 1 hour/month (4 months)
- Work on selected project
- Advise on how to improve outcomes
- Assist teachers and students



### Hands-on Experiences

- Energy Conservation
- Green Spaces
- Transportation
- Resource Management
- Stormwater
- Leadership
- Teacher’s Measurement and Outcomes



### Energy Conservation

- Kill A Watt EZ
  - Appliances, technology, etc.
- Light meters
  - Classrooms, halls, restrooms
- Visual Thermal Imager
  - Building envelope



### Green Spaces

- School gardens
- Tree planting
- Native plants
- Raised-bed gardens
- Land use
- Outdoor classrooms
- Composting



### Green Spaces



### Transportation

- Anti-Idling
- SOV
- Fuel Efficiency
- Car pooling
- Biking
- Public Transportation
- License plate survey



### Resource Management

- Dumpster diving
- Recycling
- Composting
- Characterize streams
- Develop plans to reduce waste



### Stormwater

- Combined sewers
- Sanitary sewers
- Stormwater flow
- Green infrastructure
- Rain gardens
- Flooding events
- Label sewer grates



### Leadership

- Leading initiatives at school
- Selecting a project
- Teaching classmates
- Being an example
- Metrics
- Working with teachers



### Teacher Session

- KY Green & Healthy Schools Inventories
- Planning Projects
- Measuring outcomes
- Working with mentors
- KY Environmental Literacy Standards



### Vendor Fair



### Why?

- Demonstrates leadership (by example)
- Three schools received \$500 awards
  - Cane Run Elementary – Composting project
  - Portland Elementary – Single Stream Recycling
  - Islamic School of Louisville – Energy Audit
- Students learn sustainable behavior
- **Working together, little things add up to big results**



### Sustainability Champions



Larry Owsley, Mayor Fischer, Pamela Dumm, Dr. Hargens, and Dr. Newberry



## Questions?

Comments?

Thoughts?

Thank you!

“Like” us on Facebook...

Contact Information:  
Brent Fryrear, Director  
502-852-8854



[brent@partnershipforagreencity.org](mailto:brent@partnershipforagreencity.org)