

Western Pennsylvania Brownfields Center at Carnegie Mellon

Presented by Deborah Lange, Executive Director
Steinbrenner Institute for Environmental Education and Research

National Brownfields Conference, April 2011
Philadelphia, Pennsylvania

Why Brownfields?

- Multi- and inter-disciplinary teaching and research platform
- Prevalence in SW Pennsylvania
- I am a Civil and Environmental Engineer
- Practitioners and policy makers?
 - Tools
 - Case studies
 - Guidance to minimize risk

National Brownfields Conference, April 2011
Philadelphia, Pennsylvania

Life Cycle Assessment

- Brownfield vs. Greenfield – residential developments
- Funded by the US Environmental Protection Agency
- Training, Research and Technical Assistance
 - Training – in collaboration with the Pennsylvania Downtown Center Main/Elm Street Managers
 - Research – Economic Input Output – Life Cycle Assessment (EIO-LCA)
 - Site prep, construction and 'operation'
 - Structure and transportation
 - Technical Assistance – Multi-attribute Decisionmaking tool
 - Inventory
 - Prioritize

National Brownfields Conference, April 2011
Philadelphia, Pennsylvania

Community Driven Workshops

- Project –Based funding
 - Small Business Administration
 - Foundations
- Facilitate stakeholder discussion
 - Understand 'climate' of development
 - Identify barriers
- Facilitate extended workshop
 - Outside experts
 - Stakeholder meetings
 - Preparation of a implementation plan

National Brownfields Conference, April 2011
Philadelphia, Pennsylvania

Job Training
(outlet to practitioner/policymaker discussion)

- Funded by USEPA and US Department of Labor
- Target population – un- and underemployed folks from former 'steel making' neighborhoods
- Training for energy and environmental technicians
- Support of local business and non-profit community
- Market focus – plug and train

National Brownfields Conference, April 2011
Philadelphia, Pennsylvania

Recent Publications ('10-11)

- Brownfields and Neighborhoods: Contamination and History, submitted to *Environmental Engineering Science*
- Brownfields and Environmental Justice: Income, Education, and Race, accepted to *Environmental Justice*
- Commuting from US Brownfield and Greenfield Residential Development Neighborhoods, accepted to *ASCE Journal of Urban Planning and Development*
- Costs of Automobile Air Emissions in U.S. Metropolitan Areas, accepted to *Transportation Research Records*
- The Role of Brownfield Developments in Reducing Household Vehicle Travel submitted to *ASCE Journal of Urban Planning and Development*

National Brownfields Conference, April 2011
Philadelphia, Pennsylvania

University Collaboration for Applied Brownfield Solutions

- Promote the respective and collective leading research of the member universities
- Provide a credible voice for delivery of the right messages to congressional, agency, non profit and business leaders on technical and policy issues relating to brownfields
- Provide a forum for academic to share ideas with each other and pursue joint venture opportunities.
- Provide an impartial forum for the review, analysis and discussion of brownfield public policy issues, concerns, problems and opportunities
- To provide a stage and create additional tools for education on best practices in brownfields remediation and redevelopment technology, planning and design
- To provide a forum for innovation, research, and dissemination of creative solutions for brownfield remediation and redevelopment problems.

National Brownfields Conference, April 2011
Philadelphia, Pennsylvania