

# **BEYOND NATURAL AND ECONOMIC IMPACTS:**

## **BROWNFIELD REGENERATION IN NORTHEAST WILMINGTON**

**Presentation for the Brownfield Advisory Committee**

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# ECONOMIC BENEFITS

**Economic and environmental benefits of brownfield regeneration have been well-documented. In Delaware:**

- **\$17.50 return on average per \$1 spent by the State**
- **Nearly 700 jobs created as a result of BDP remediation and development**
- **Total assessed property value of state-certified brownfields in New Castle County increased by more than \$455 million (UD CADSR, 2010)**

# WHAT ABOUT THE SOCIAL IMPACT OF BROWNFIELD REGENERATION?

Little has been evaluated in terms of social impacts. Why should we consider the intangibles?

# ENVIRONMENTAL JUSTICE MOVEMENT

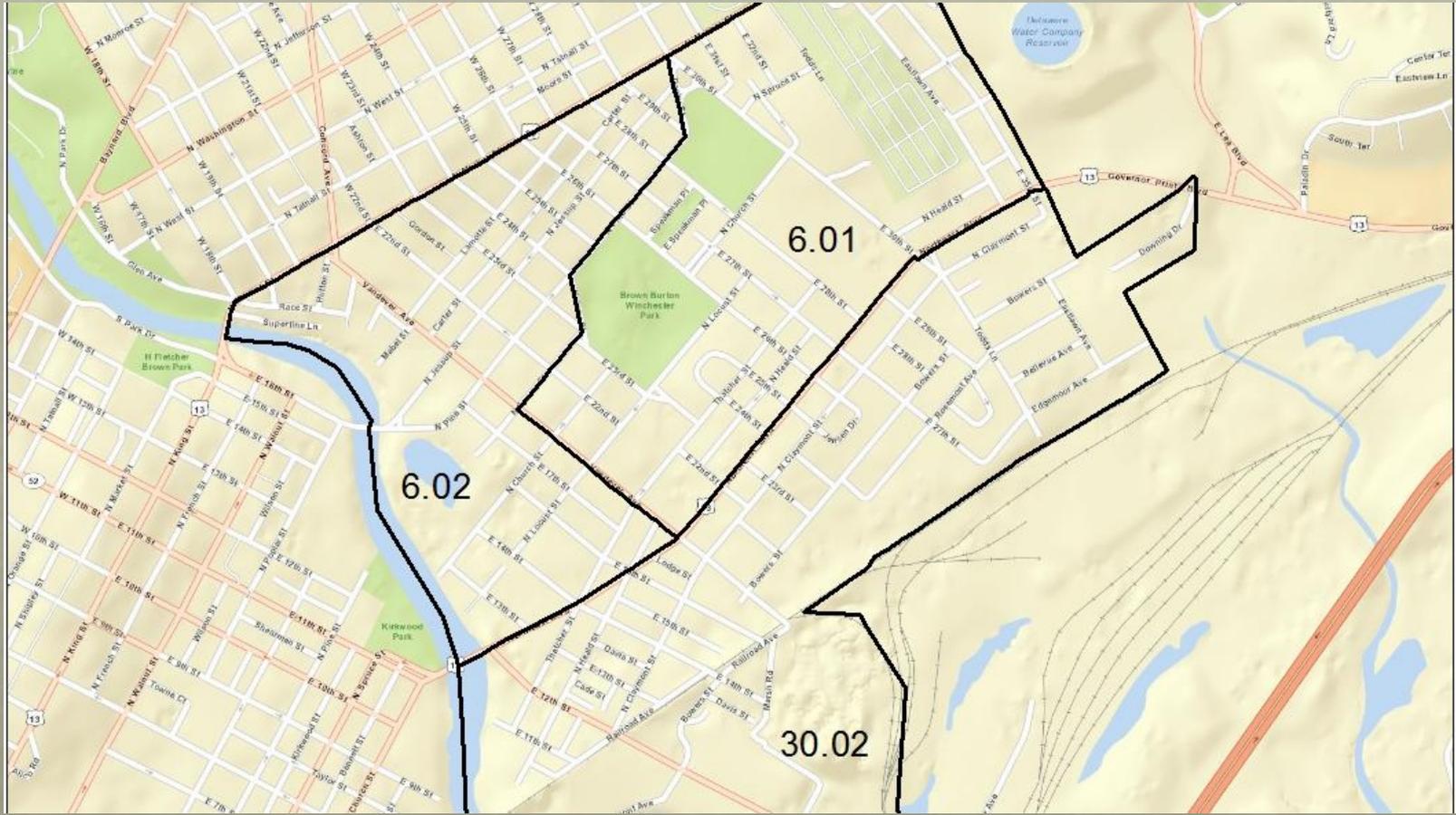
- Emerged in the 1980's in response to disproportionate environmental burdens borne by certain communities
- Environmental justice communities (EJC) are predominantly comprised of minorities or tribal members characterized by
  - high rates of poverty
  - unemployment
  - lack of access to safe and affordable healthcare, housing, food choices, etc.
- Environmental hazards due to industrial contaminants, air pollution, lead poisoning, etc.
- Federal brownfields legislation specifically requires that environmental justice issues be addressed through brownfield regeneration

# THE CURRENT STUDY

## Four Research Questions

- ◆ What methodology can measure the intangible or social impacts of the BDP in Northeast Wilmington?
- ◆ What appear to be the primary social impacts produced by the Delaware BDP initiatives in Northeast Wilmington?
- ◆ How could the Delaware BDP be enhanced to minimize negative and maximize positive intangible impacts?
- ◆ How could the methodology be adapted for use with other programs?

# NORTHEAST WILMINGTON: THE TEST KITCHEN



# NORTHEAST WILMINGTON: AN EJC

- **Predominantly minority residents**
- **> 1/3 of families (many headed by women) living below the poverty level (US Census, 2000)**
- **High rates of violent and drug-related crime**
- **Aging and distressed housing stock**
  - **more than half of the homes renter-occupied units**
  - **more than 70% of the dwellings constructed before 1960 (2000 US Census)**
- **Lack of business and employment opportunities**
- **Former industrialization has contributed to a significant degree of environmental contamination in the area**
  - **18 state-certified brownfields, representing approximately 11% of all certified brownfields throughout Delaware (DNREC, 2012)**
- **Several large and dozens of small vacant properties throughout the area (City of Wilmington, 2012)**

# **METHODOLOGY?**

**How would you measure  
the social impacts of  
brownfield regeneration in  
Northeast Wilmington?**

# **SOCIAL IMPACT ASSESSMENT (SIA)**

- **Prospective – examines potential consequences of proposed plan at inception to evaluate whether to move forward**
- **Participatory - involves all relevant stakeholders**
- **Comprehensive - considers potential impacts across all domains and over time**
- **Sensitive to impacts likely to affect most vulnerable stakeholders**
- **Ongoing – assessment and adjustments continue throughout the course of the development and after**
- **Combines quantitative and qualitative methods of investigation**

# WHAT WE DID

- **Adapt SIA framework - retrospective data collection**
- **Measure select variables across 7 domains at Time 1**
- **Measure select variables at Time 2 (2010\*)**
- **Compare changes in variables**
- **Conduct 18 key informant interviews for insight and context**
- **Identify trends thought to be associated with brownfield regeneration**

# SIA MODEL: DOMAINS AND VARIABLES

- **Demographics**
  - Population
  - Race
  - Level of education
  - Income and poverty
- **Civic engagement/empowerment and community pride**
  - Key informant perceptions re: community/civic organization and activity levels
- **Neighborhood economy**
  - Housing
  - Employment

# DOMAINS AND VARIABLES

- **Health and safety**
  - Crime
  - Select health indicators
- **Cultural/aesthetics**
  - Licensing and Inspections
- **Perceptions and awareness of community members**
  - Key informant perceptions re: community members attitudes towards BDP projects, changes relevant to initiatives
- **Physical environment**
  - Changes in infrastructure, businesses, retails/services, access, etc.

**FINDINGS RE:  
NORTHEAST  
WILMINGTON**

# KEY FINDING

**Most important finding was the addition of safe and affordable housing, which was viewed as a significant stabilizing influence on the community.**

# KEY FINDINGS: 2<sup>ND</sup> DATA

**Most positive trends observed in Census Tract 6.01- tract with most completed brownfield development**

- **7.62% population increase**
- **Enhanced levels of educational attainment**
  - **44% increase in HS diploma**
  - **40% increase in BA**
  - **69% increase in some amount of college education**
  - **31% increase in graduate or professional degrees**
- **Mixed indicators re: income –**
  - **increase in residents at lowest income levels**
  - **increases at higher income brackets, notably the \$15,000-34,999 and \$75,000-149,000**
- **improvement in quality of housing stock (205 new homes on regenerated brownfield sites), increases in home ownership rates**
- **22% increase in rate of employment**

# KEY FINDINGS: 2<sup>ND</sup> DATA

- **Mixed results re:**
  - **crime reports and arrests (CT 6.01- in complaints, decrease in arrests)**
  - **health indicators (low birth weight, infant mortality, congenital anomalies, cancer deaths age  $\geq 45$  ); samples were very small and the changes negligible.**
  - **L/I complaints increased; however, KI report illegal dumping decreased significantly, believe civic pride led to increased reporting of crime, complaints.**

# FINDINGS: KEY INFORMANTS

↑ safe and affordable housing

↓ abandoned property and absentee landlords

↑ civic engagement

↑ participation in community activities

↑ pride in properties, improved community aesthetics

↑ reports to police re: criminal activity, L/I

↓ opportunity for illegal and illicit activity

leaders ↑ Brownfield developers (many from nonprofits) as community

↑ Trust in the BDP as a positive factor in community development

And the attraction of new housing, community gardens, charter schools,  
health center

# **MOST COMMON PERCEPTION**

**Positive change is happening,  
slowly,  
but happening.**

# FINDINGS RELATED TO DELAWARE BDP

Project managers and the Program Administrator:

- highly effective and efficient
- extremely knowledgeable
- flexible
- responsive and sensitive to the needs of developers and expressed needs of community members
- “pro-development”

**Process was considered straightforward despite  
complexity.**

# FINDINGS RELATED TO DELAWARE BDP

Areas for program improvement:

- **Visibility**
- **Underutilized**
- **Responsive versus proactive in community revitalization**

# FUTURE STEPS

# RECOMMENDATIONS

- **Appoint statewide BDP coordinator to promote program opportunities, benefits**
- **Consider strategies for generating brownfield proposals for integrated holistic, communitywide planning initiatives versus stand-alone projects**
- **Identify opportunities for formally and aggressively engaging community members and organizations in establishing brownfield development priorities and providing ongoing feedback regarding development efforts.**
- **Maintain an ongoing, sustained, and visible presence at:**
  - **community-level forums (neighborhood planning council meetings, civic association meetings, community events)**
  - **all City, County, and State forums on planning, zoning, housing and development, land use and revitalization efforts, environmental issues**

# RECOMMENDATIONS

- **Expand collaborative relationships with nonprofit entities and maintain existing relationships with current nonprofit BDP developers**
- **Develop web-based and print outreach materials (e.g., brochure highlighting successes of the Delaware BDP or pamphlet that outlines the “who, what, where, when, why, and how” nuts-and-bolts of the program)**
- **Utilize social media to engage community members and communicate regarding brownfield initiatives and opportunities**
- **Sponsor public meetings for all proposed development initiatives, not only for large or potentially controversial proposals, and continue to participate in outreach efforts led by developers**
- **Utilize existing grassroots networks, notably faith-based organizations, to engage community members and communicate information**
- **Continue to inventory brownfield properties in the state to populate and expand the Brownfield Marketplace database for the benefit of prospective developers**

**BROWNFIELD  
DEVELOPMENT AS A  
CATALYST FOR  
CHANGE**

# FOOD FOR THOUGHT

*...the [New Jersey] BDA approach requires the state environmental group... to work with communities containing multiple brownfield sites in close proximity to each other to design and implement remediation and reuse plans for each property simultaneously....to provide a redevelopment framework for urban communities ....The DEP requires a heightened level of community involvement in the application process before it will accept and consider the proposal.*

*...documentation evidencing support from local community members and community or civic organizations...discussion of overall community aspirations for the brownfields redevelopment.... the application also takes into consideration the uses of non-brownfield properties, other area features, and existing infrastructure....*

*This approach achieves the goal of remediation and revitalization of entire communities and neighborhoods, instead of just the individual properties themselves....(Pippin, 2009, pp605-606)*

# LIMITATIONS

# LIMITATIONS

- **Potential for participant bias**
- **Confounding variables**
- **Retrospective versus prospective data collection**
- **Potential limitations related to secondary data sources (high margins of error in, innacurate data, etc.)**
- **Pilot test, limited in scope**

**SIA AS A STRATEGY  
FOR ENVIRONMENTAL  
JUSTICE**

**REPLICATION MODEL**

# PLANNING PHASE

1. Define Geographic Scope of Assessment
2. Prospective vs. Retrospective Study?
3. Establish Time Frame for Benchmark Measurements
4. Select Social Indicators
5. Select Primary and Secondary Data Sources

# ONGOING ANALYSIS AND IMPLEMENTATION



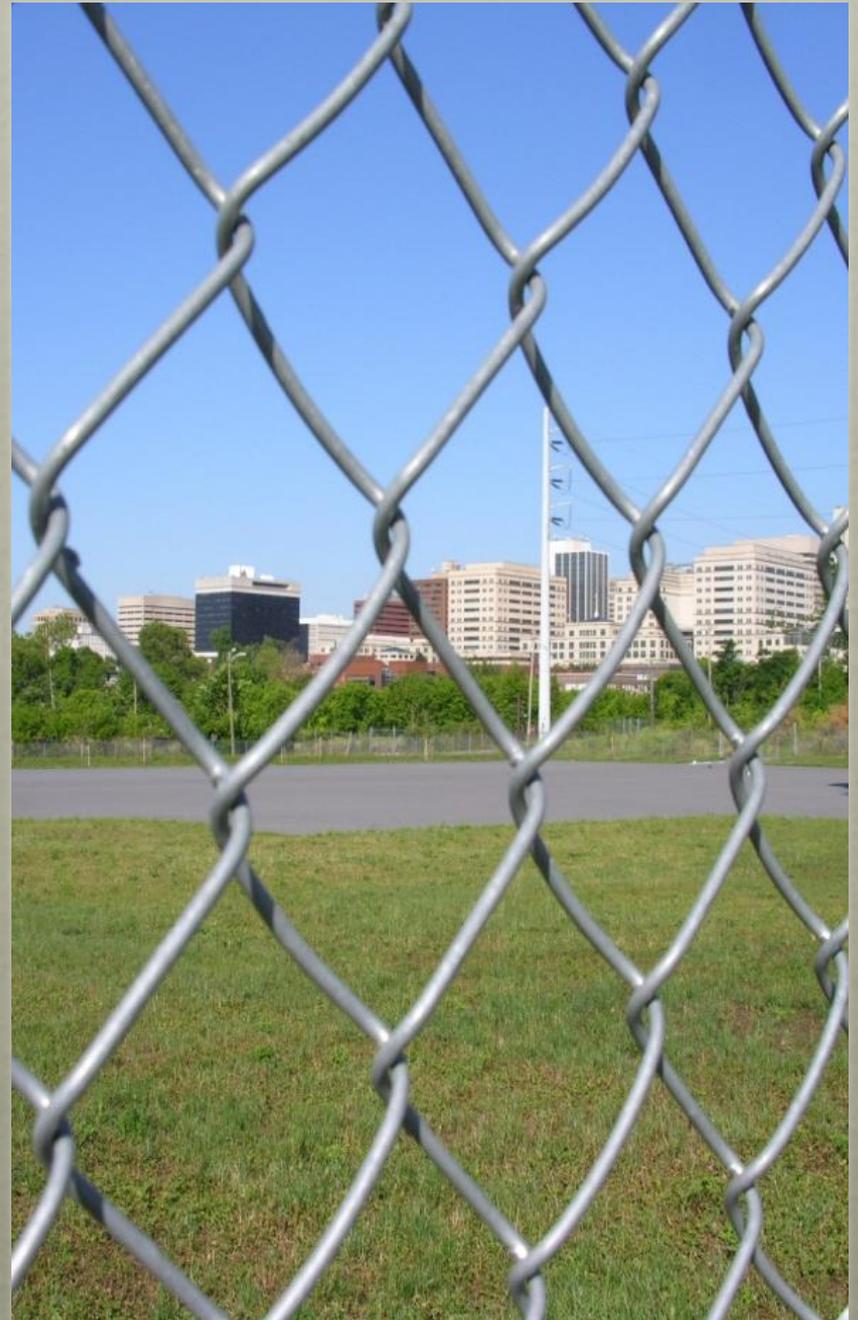
# DELSTEEL FACTORY – MCMULLIN SQUARE



# SPEAKMAN FACTORY



# WILEY CORK FACTORY



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