



Community Visioning, Socio-Economic Forces and the Creation of a Local Pollution Haven

Journal:	<i>Community Development: Journal of the Community Development Society</i>
Manuscript ID:	Draft
Manuscript Type:	Journal Articles
Keywords:	Community visioning, Environmental Justice, Nuclear power, Pollution haven

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Community Visioning, Socio-Economic Forces and the Creation of a Local Pollution Haven

For Peer Review Only

Abstract

The Pollution Havens Hypothesis (PHH) argues that developed countries will locate polluting industries in developing countries to avoid costs associated with environmental regulations. This study explores the role of community visioning and public opinion in creating a pollution haven in a rural area in Appalachian Ohio. Data from a community-based participatory process that included a regional public opinion survey (N=1000) and an online voting activity (N=1,141) are examined in the context of public acceptability of long term environmental consequences for short term economic gain. The outcome of the community visioning process demonstrates the role of weak economy and public acceptability in creating a local pollution haven. Local pollution havens are likely to continue to emerge as long as the economy remains weak, and communities are willing to house facilities because they promise jobs.

Key Words: Community visioning, environmental justice, nuclear power

Introduction

In January 2012, a small town in rural Spain was identified as the site for storage of nuclear waste from some of the country's power plants. This town was not targeted by the nuclear industry; rather, the residents and elected officials had lobbied for years to become home to the site. Unemployment is high in the town, and during a radio interview, one of the residents said, "There are no jobs here anymore. There's hardly fear of contamination. The bigger fear is of unemployment" (NPR 1/16/2012).

This statement from an unemployed Spanish worker contextualizes the current debate between the environment and the economy; a debate that has heated up in recent years due to the global economic crisis. Evidence of the current state of public perception related to environmental protection and economic growth is found in the plans to move Canadian oil across the United States, in the rush to extract natural

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3 gas from underground, and in many rural communities that are desperate for any jobs. Politicians from
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5 local mayors to world leaders are facing tough decisions that set environmental protection as an opponent
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7 to economic growth. This struggle between the environment and the economy is especially pertinent to
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9 local areas and could mean the emergence of communities as homes to activities that create immediate,
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11 temporary jobs in construction at the expense of future environmental health impacts. Ultimately the
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13 focus on the economy and the severity of unemployment could lead to local pollution havens as
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15 communities are willing to accept environmental degradation as a necessary by-product of good jobs.
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20 The Pollution Haven Hypothesis (PHH) has focused on trade between developed and developing
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22 countries; however, the emergent concept of a local pollution and its possible environmental health
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24 consequences is explored in this paper. In particular, the relationship between pollution havens and
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26 environmental justice is still ripe for research and this could be due to the fact that pollution havens
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28 research has largely been conducted in the field of economics, while environmental justice occupies
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30 researchers in the social sciences. One of the major themes in environmental justice research has been
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32 attempting to answer the question about why there are documented differences in exposures to
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34 environmental harms based on demographics. That is, has there been an intentional targeting of poor and
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36 minority communities in facility siting decisions? In the case discussed below, one possible explanation
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38 emerges, that being the role of local public opinion and support for activities that could provide short term
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40 benefits to the local community. The causes of local pollution havens are discussed in the context of a
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42 community visioning project in one community which documents the potential role of public
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44 acceptability in understanding how local pollution havens are created.
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48 **Pollution Havens Hypothesis and Environmental Justice**

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52 The pollution havens hypothesis (PHH) argues that as rich countries move manufacturing
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54 facilities to developing countries, they create harbors of pollution. This hypothesis has been mainly
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56 examined in the context of international trade and is grounded on the belief that a major impetus for
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3 locating polluting industries in developing countries has to do with the lack of environmental regulations
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5 (MacDermott 2009). To put this in a different perspective, the PHH suggests that industries in developed
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7 countries with strong environmental regulations, will seek to maximize profits by eliminating
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9 environmental compliance from their bottom line.
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12 The role of environmental regulations in siting decisions has been the subject of much research.
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14 Brunnermeier and Levinson (2004) examined numerous studies that attempt to quantify the impact of
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16 environmental regulations on industry location decisions. They explain that, while earlier studies suggest
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18 environmental regulations are not related to industrial location, more recent studies do show a
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20 relationship. However, there is wide variability in the methods used for these studies including the choice
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22 of variables and models. Brunnermeier and Levinson conclude that there is evidence of a relationship
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24 between weaker environmental regulations and location decisions, but this relationship is economic only
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26 and it is not possible to draw “policy conclusions” based on the current state of the research. These policy
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28 conclusions include the prospect that there is deliberate manipulation of environmental regulations in
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30 order to encourage industrial growth. This type of manipulation would contribute to the “race to the
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32 bottom” phenomenon in which localities would essentially weaken environmental regulations in order to
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34 secure economic development (Woods 2006).
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40 Much of the research related to the PHH is found in the realm of economics and uses models to
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42 examine relationships between Foreign Direct Investment (FDI) and environmental regulations. Some
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44 studies have found evidence to support the PHH (Spatareanu, 2007), but others have not (Cole, 2003).
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46 While FDI is a relatively straightforward indicator, quantifying environmental regulations has been
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48 challenge for those who study the PHH. There are complexities involved in identifying a variable that is
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50 able to quantify differences in environmental regulations and enforcement across countries that limits the
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52 findings of PHH research. In addition, some research suggests that in terms of pollution which crosses
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54 international boundaries, such as greenhouse gases, some countries might actually strengthen their
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56 environmental regulations leading to what a “race-to-the top” (Dong, Gong, and Zhao 2011).
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Some of the research related to the role of environmental regulations in pollution havens has focused on the Environmental Kuznet's Curve (EKC), which theorizes that pollution rises as countries develop, but then begins falling at a certain economic tipping point. Pollution is a by-product of economic development, but once a country has a secure economy, it will seek ways to minimize pollution, including exporting manufacturing that creates pollution. Kearsly and Riddel (2009) explain economists' take on the EKC as consisting of three characteristics:

- 1) When incomes are low, countries work on job creation and environmental protection is not a priority, however as incomes grow, people become more concerned with pollution and take action;
- 2) Developed countries, with service-based rather than manufacturing economies will export emissions by importing products from developing countries (pollution haven hypothesis); and
- 3) Emissions are reduced as countries grow because of growth in technology and cleaner production.

Thus, one reason for the EKC is "lax enforcement or the absence of environmental regulations in developing countries { which } encourages them to specialize in pollution-intensive industries" (p. 906). Kearsly and Riddel argue that if the PHH is accurate, then the EKC will not apply to developing countries, because as developed countries continue to export emissions, the developing countries will not see environmental improvements as incomes rise. They run a variety of models in an attempt to verify the EKC and the PHH and find no support for the PHH, contributing to the debate about the existence of pollution havens.

Additional debate is emerging related to expanding the factors that might contribute to pollution havens to include societal characteristics rather than just economics (Clapp 2002). Strohm (2002)

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3 explores whether the “dynamic transfer of environmental risk is guided by democratic choice and market
4 signals, or by coercion, corruption and constraint” (p. 30). She calls for more discussion about the role of
5 the democratic process in facility siting decisions that could lead to pollution havens. Citizen engagement
6 includes a “lack of conscious defense” (p. 31) by those who might be most affected by decisions to locate
7 a facility in their communities, even when these decisions could result in environmental injustice. The
8 economic models that either support or refute the PHH do not take environmental justice into
9 consideration because this is a value without a dollar amount. According to Strohm, we need to “measure
10 democratic participation in decision-making” (p.35) and she cautions that we shouldn’t “confuse
11 unethical transfers of environmental risk for democratic choice or market signals” (p.36).
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24 In contrast to the “lack of conscious defense” suggested by Strohm, Hall (2002) takes a look at
25 the role of environmental protest in facility siting decisions and argues that there is some evidence that
26 industries may avoid an area if it is ripe for environmental protest. This avoidance can then create
27 pollution havens in areas that do not have similar protest potential. He highlights the importance of
28 examining the politics involved in siting decisions rather than just the economics of such decisions.
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35 The existence of pollution havens has been the subject of research for several decades, and even
36 with this history of research, there is still some dispute about what contributes to the existence of
37 pollution havens. It is clear that there are some areas in the world that have poorer environmental quality
38 than others, but the hypothesis that richer countries seek a place to move manufacturing based on
39 environmental regulations is still being examined. In the meantime, new discussion is emerging about
40 local pollution havens as areas within a country or region that are targets of polluting facilities.
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Decades of environmental justice research indicates that race and socioeconomic status are
related to inequitable exposures to adverse environmental conditions (Bullard 1994; Bryant and Mohai

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3 1994; United Church of Christ 1987). In addition, new research is demonstrating the relationship
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5 between living in poverty and adverse health outcomes in specific neighborhoods (Ludwig et al. 2011).
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7 These environmental and health disparities are global as well as local. At the global level, environmental
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9 conditions in developing countries include lack of access to basic sanitation which leads diarrhea to be a
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11 leading cause of death. In developed countries, poor people are more likely to live in areas with high
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13 levels of air pollution which leads to adverse health outcomes related to respiratory diseases such as
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15 asthma. Even though there are specific documented cases of the relationship between environmental
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17 conditions and health outcomes, public health researchers are still cautious about stating that poor
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19 environments cause poor health. This caution is related to the numerous factors that contribute to health
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21 status, including behavior, heredity, and access to health care services. Nevertheless, there is little debate
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23 that poverty is related to vulnerability, in that poor people are more vulnerable to diseases that are a
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25 function of environmental conditions.
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30 In the realm of public health, vulnerability means the “degree to which individuals and systems
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32 are susceptible or unable to cope with adverse effects” (Kovats, Ebi, and Menne 2003). It is a function of
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34 sensitivity, exposure, and adaptation capacity. In terms of sensitivity, regardless of whether it is a
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36 developed or developing country, people living in poverty may be more sensitive to environmental
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38 conditions because of their overall health status. Health conditions related to malnutrition or poor
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40 nutrition is one of the underlying causes of this sensitivity. Combine this sensitivity with environmental
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42 exposures and the inability of poor people to access health care or make major lifestyle changes, and it is
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44 clear that vulnerability to health outcomes associated with environmental conditions is a factor in overall
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46 health status. In this context, there is a cycle that includes the relationship among poor people, poor
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48 environments, and poor health and the purpose of this research is to examine these relationships.
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53 Pollution havens have generally been discussed and studied in the context of international trade.
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55 However, Matthews (2010) suggests that we need to examine pollution havens within countries not just
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57 between countries. He compares counties in the United States on the basis of six indicators that he posits
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3 identify pollution havens. He argues that in order for a county to be a pollution haven it must exhibit high
4 levels of pollution and low levels of economic rewards related to this pollution. He presents indicators of
5 a local pollution haven as the ratios between toxic releases and the numbers of manufacturing jobs and the
6 amount of manufacturing wage. By using such ratios, counties that have high levels of pollution and high
7 economic rewards from manufacturing would not be considered a local pollution haven, suggesting that
8 when the county benefits economically from the pollution, the existence of social injustice is in question.
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17 In addition to the “pollution-per-economic reward” indicator, Matthews includes measures of
18 governmental control in defining a local pollution haven. For these indicators, he uses the number of
19 enforcement actions from the Environmental Protection Agency (EPA) as well as categories of the
20 strength of state enforcement. Matthews applies his model to 3,111 counties in the US and identifies 140
21 that meet his definition of local pollution havens because of their high levels of pollution, low economic
22 reward, and weak environmental regulations. Most of the counties that he identifies as local pollution
23 havens are located in the southern U.S., specifically Alabama, Tennessee, and Mississippi.
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33 **Creating a Local Pollution Haven through Community Visioning**

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36 While Matthews is one of the first to take the pollution havens debate from global to local, one
37 thing missing from his examination of the pollution havens is the impact of public perception and support.
38 Public support for facilities that might cause long-term environmental consequences is related to the jobs
39 versus the environment debate and raises the question of whether an area should be identified as a local
40 pollution haven when the community residents welcome environmental risks if they fix imminent
41 economic problems.
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50 Pike County which is in the heart of Appalachia Ohio is used offers a compelling case for
51 exploring the role of public opinion in facility siting in the context of environmental justice. According to
52 the Ohio Department of Job and Family Services, in January 2012, the county had the dubious distinction
53 of posting the highest unemployment rate in the state of 16.6 percent. Once a hub of patriotic activity
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3 related to national defense, Pike County is now experiencing plant closings, family exodus, and economic
4 despair. During the 1950s, a culture of patriotism emerged in Pike County when the U.S. Department of
5 Defense identified three sites to enrich uranium for use in nuclear weapons; weapons that were needed in
6 response to the Cold War and to maintain the global status of the country. Two of these sites were located
7 in the region of the U.S. now known as Appalachia, one in Tennessee and one in Pike County, Ohio. The
8 other site in Paducah, Kentucky, is not part of the officially designated Appalachian region, even though
9 much of Kentucky is.

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12 The facility built in Pike County is known as the Portsmouth Gaseous Diffusion Plant or PORTS
13 and construction brought jobs to more than 22,000 people. To put this employment impact into
14 perspective, in 1950 the total population of Pike County was 14,607, so the construction phase had a
15 significant impact not only in Pike County but in the surrounding region as well. The construction and
16 operation of PORTS was a major source of employment for residents of counties surrounding the location
17 of the site and powered the economic engine in this rural area for many years.

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20 While PORTS was operating in the 1950s through the 1970s, it provided employment for
21 thousands of people in the region. This employment bubble burst in the 1980s as demand for enriched
22 uranium decreased, even though by that time PORTS was supplying fuel for nuclear power plants rather
23 than national defense. The customer base for enriched uranium was “deserting it” leaving DOE’s uranium
24 enrichment plans on the “brink of disaster” (Norman 1984). In 2001, uranium enrichment at the facility
25 ceased and by 2005 activities at PORTS shifted to cleanup. Evidence of the impact of the cessation of
26 uranium enrichment can be seen in the decline of private, nonfarm employment in Pike County of 37.6%
27 between 2000 and 2009, during this time period the state of Ohio only experienced at 10.8% decline. Not
28 only did the plant provide direct employment, it also supported the local economy including its service
29 and retail components. Currently the site employs about 2,000 people through various contracts, and
30 much of this employment does not promise to be long term since it is funded largely through government

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3 sources, including the American Reinvestment and Recovery Act and grants and contracts from the U.S.
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5 Department of Energy (DOE).
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9 Eventually the site will be cleaned up according to an agreement between the DOE and the Ohio
10 Environmental Protection Agency, and this will create a large area of land that is equipped with
11 infrastructure for redevelopment. As part of determining what the future holds for the site, DOE sought to
12 involve the public, specifically stakeholders, in the decision-making process. Under the Federal Advisory
13 Committee Act (FACA) first passed in 1972 and amended several times since then, DOE was authorized
14 to create advisory boards to assist with public participation activities. In 2003, DOE issued policy
15 directive 141.2 entitled "Public Participation and Community Relations" which stressed the importance of
16 an active, credible, and transparent public engagement process, but did not specify required approaches
17 for this engagement. The approach that DOE took for this public engagement included establishing Site
18 Specific Advisory Boards (SSAB) consisting of a cross-section of local stakeholders. Currently PORTS
19 has an SSAB which operates under FACA and to enhance the capacity of the SSAB, DOE supported the
20 research presented here through a grant.
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35 From early 2010 through 2011, a public outreach project, known as PORTSfuture, was
36 implemented. This was community-based participatory approach to engaging stakeholders in Pike County
37 and the three adjacent counties that are most directly affected by activities at the site. The overall purpose
38 of the project was to quantify public perception and document a community vision for the future use of
39 the federal reservation, including the former uranium enrichment facility site and surrounding federal
40 land. The community visioning approach was multi-faceted and included key informant interviews, focus
41 groups, a telephone survey, numerous public meetings and presentations, attendance at key community
42 events, an on-line voting activity, and community visioning techniques.
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53 Community visioning in rural areas gained strength in the 1990s, largely supported by the U.S.
54 Department of Agriculture in response to economic conditions related to agriculture and manufacturing
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3 (Walzer and Deller 1996). Community visioning was seen as a way to address “unique and complex
4 problems” in rural areas and a tool for local leaders to use to “revive their local economies or direct
5 growth and change in ways as envisioned by residents” (p. 9). Visioning projects have taken place in
6 New Hampshire (French and Gagne 2010), Ohio (Moss and Grunkemeyer 2010), Montana (Lachapelle,
7 Emery, and Hays 2010), and Massachusettes (Mandell 2010). While the approaches and outcomes of
8 these efforts vary, the visioning process itself is valuable and can provide useful information about a
9 shared future for the community (Lachapelle, Emery, and Hays 2010).

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Community visioning often begins with survey research to help “frame” visioning discussions (Solop 2011). Early in the PORTSfuture project, a telephone survey was conducted. Questions for the survey were developed from key informant interviews, focus groups, and historical records of the site. The survey was designed to measure opinions about the community in general and the site in specific. The sample was stratified using gender and age quotas from the U.S. Census in attempt to represent demographic characteristics of four counties.

The survey data, as well as the qualitative data from interviews and focus groups, provided some baseline public opinion data for small groups of stakeholders to use in community visioning and discussions about future use scenarios. The qualitative and quantitative public opinion data was combined with a wealth of environmental and historical data about the site in order to paint as comprehensive a picture as possible for those involved in visioning. The visioning process began with two large community meetings, followed by smaller meetings in each of the four counties. These meeting provided additional qualitative data about community values and concerns. Most notably, in response to the question about the role that PORTS plays in the future of the community, the dominant themes that emerged during the large visioning meetings included jobs and economic growth, industrial reuse, and education.

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Following the large community meetings, smaller groups met within each county to draft alternatives for the future of the site. These groups were provided with all of the qualitative and quantitative data to use in their deliberations and ultimately more than 70 possible scenarios emerged from the county teams. The final step in visioning was one meeting of an advisory group with representatives from each of the four counties. The entire visioning process took several months, and when it was completed nine possible future use scenarios emerged. The nine scenarios included several that focused on energy production including alternative energy, and only one of the scenarios was identified as a single use nuclear power plant.

For each scenario, the advisory group developed specific descriptions and rationale for why the scenario could work at the site. The rationale included the use of existing infrastructure, the educational co-benefits of the scenario, and the potential for future growth related to the scenario. In addition, the advisory group qualitatively rated the nine scenarios using factors such as environmental conditions, overall feasibility, job potential, and public health/environmental impact. The ranked list of scenarios from the most preferred to the least preferred by the advisory group is as follows:

1. Industrial Park
2. Green Energy Production
3. Multi-Use Southern Ohio Education Center
4. National Research and Development
5. Training and Education
6. Greenbelt
7. Warehousing and Transportation Hub
8. Nuclear Power Plant
9. Metals Recovery

The scenarios were summarized as a series of graphics and fact sheets which included estimates of the economic impact of each. The economic estimates were based on models and included the long-

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3 term employment impact of each scenario and the potential for each scenario to contribute to the local
4 economy. The graphics and fact sheets were used in a public outreach exercise that involved inviting
5 people to vote on the scenarios by choosing up to three that they prefer for the site. An extensive
6 recruitment campaign took place to encourage community members to vote. This campaign included
7 newspaper advertisements, postings in bulletins and newsletters, direct email contact, speaking
8 engagements, attendance at all county fairs, and even a billboard with the web address for voting. The
9 voting occurred both by in-person ballots and through an on-line balloting process.
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18 19 **A Local Pollution Haven Emerges**

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22 In the case of Pike County in Appalachian Ohio and PORTS, evidence emerges about the role
23 that community perception may have in creating local environmental conditions. The first source of data
24 serving as evidence comes from the telephone survey of a representative sample of 1,000 residents in the
25 four counties surrounding PORTS. One of the main purposes of the survey was to gather data related to
26 overall community concerns and perceptions about the PORTS facility. When it comes to concerns about
27 their community, the overwhelming concern raised by survey respondents is jobs and the economy
28 (Figure 1). Concerns about jobs mirrors the content of local media (Morrone, Basta, and Somerville,
29 2012), as well as the major issues raised in the focus groups and interviews.
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40 <Figure 1: Important Community Concerns>

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43 During the focus groups, PORTS was identified as a symbol of job creation. Since PORTS has
44 been the largest employer in the region for the past 50 years, it was associated with economic stability and
45 the promise of future job creation and sustainability. As one former employee mentioned, “Money was
46 good. The work wasn’t hard...they didn’t harass you too much.” This sentiment was mentioned by
47 former and current employees who had worked at the plant who discussed the great pay and benefits
48 associated with their jobs.
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3 Another other purpose of the survey was to get a sense of public acceptability of possible future
4 scenarios for the site prior to the community visioning work. As such, survey respondents were asked to
5 rank four possible future uses of the site as the most favorable and the least favorable. Data from the
6 survey served as baseline information for those involved in the visioning process and the creation of the
7 nine scenarios that were presented for public voting. Figure 3 summarizes the community preferences for
8 possible future uses of the PORTS site. It is clear from the public opinion poll that there is broad support
9 for some sort of energy production facility in the community. On the other hand, there is little support for
10 developing recreational activities on the site.
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22 < Figure 2. Most and Least Preferred Future Use of Site >
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27 As noted above, the community visioning process involved compiling public perception in
28 multiple forums with the goal of crafting a finite number of alternative uses for PORTS. Ultimately nine
29 scenarios were put forward by the advisory group for public vote. The results of public voting are
30 summarized in Figure 3. A total of 1,141 people voted on their preferences for the nine scenarios and
31 about 37 % (422) of the votes took place in person by paper ballot and 63% (719) people voted on-line.
32 The scenario that emerged as the most preferred among those who voted is the single use nuclear power
33 plant scenario.
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42 <Figure 3: Number of Public Votes for Each Scenario>
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52 **Socio-Economic Forces, Pollution Havens, and Justice**

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55 While there is still debate about what causes pollution havens and whether they even exist, this
56 debate is occurring in relation to developed countries versus developing countries. Furthermore, there is
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3 evidence that there are some areas that are more prone to pollution than others regardless of how this
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5 disparity was created. While this debate has been occupying the global landscape, it is important to
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7 examine environmental exposure disparities within countries. This is the essence of environmental justice
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9 research and to date there are still a wealth of unanswered questions in this realm.
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13 The most important question has to do with the causes of injustice, and whether disproportionate
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15 environmental exposures are intentional or an artifact of poor planning and lack of public involvement.
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17 Identifying cause and effect relationships is an area that will continue to occupy researchers as long as
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19 environmental and health disparities exist. As these cause and effect relationships are explored, it must be
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21 done in the context of local social and economic forces. In particular, in the case of Pike County the weak
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23 economy may be the key reason for public support of facilities that could create long-term environmental
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25 impacts. This case demonstrates that those who are likely to be most affected by siting decisions, are
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27 open, and even supportive, of building a nuclear power plant in the region. This result is especially
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29 compelling considering that during the course of this project, the Fukushima nuclear power plant in Japan
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31 was the subject of conversations related to the viability and safety of these plants. Participants in the
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33 project even talked about Fukushima during the visioning meetings, nevertheless, the public balloting
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35 results clearly show support for the single use scenario.
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40 To further confound the support for nuclear power in the community, the economic estimates
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42 available to the public when voting on scenario options did not identify the nuclear power plant scenario
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44 as having the most long-term positive economic impact on the region. In addition, past research suggests
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46 that large nuclear facilities can stigmatize local economic development efforts and create conditions in
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48 which local officials relinquish some control of economic growth (Greenberg 2009). One reason for this
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50 lack of local control is that rural areas that house large nuclear sites are “vulnerable to changes in DOE
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52 budgets” (Greenberg et al. 2002). So, we are left with the question of why this scenario received so much
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54 support.
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There are several possible answers to this question. First, previous research related to environmental decision-making regarding nuclear power indicates that perceptions of risks and benefits, as well as procedural fairness, may be more important than overall perceptions of nuclear power. In examining a request to expand a nuclear power plant in South Carolina, Besley (2010) concluded that those most affected by the potential expansion were more likely to support it if they believed they would personally benefit from the expansion. The other important factor in their support of the expansion was whether the public believed that the means for citizen engagement was fair. So, the perception that a nuclear power plant could bring construction jobs to the region is likely a motivating factor for support of this scenario.

Second, the public balloting process used in this research was relatively uncontrolled; this is especially the case with the online voting. It is possible that there was a concerted effort to stuff the ballot box, so to speak. Regardless of whether this is the case here, in a region that is so concerned about jobs, why would the nuclear power plant emerge as the most preferred future use of the site? The public opinion poll, which was a random poll of 1,000 residents indicate support for some type of energy facility at the site. The difference in the nuclear power plant ranking between the advisory group and the public opinion polling could also be explained by research that suggests that level of engagement affects knowledge exchange (Phillipson et al. 2012). Specifically, those who participated in the advisory group were not only more knowledgeable about the PORTS site, information-sharing through group discussion was a factor in their ranking nuclear power plant so much lower than the public.

Perhaps a more salient answer to this question has to do with the temporal nature of employment. There is the perception that the site is a “nuclear” site already, so a nuclear power plant may be viewed as a “shovel ready” project. This means that some might see potential for short term construction jobs. In other words, those who voted are less interested in the future use of the site, and more interested in any activity that can create good jobs today. However, the preference for a single use nuclear power plant is perplexing considering the fact that it is likely to take many years for a nuclear power plant to receive a

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3 license to be built, and the application for the license will not be without controversy. So the belief that a
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5 nuclear power plant will create an immediate short term economic boost to the community is likely
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7 misguided since construction cannot begin until the design phase is completed including safety,
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9 environmental, and antitrust reviews by the Nuclear Regulatory Commission. The entire licensing process
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11 is conducted in public and there will be opportunities for public input and, in this case, the input for a
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13 Pike County plant will likely include those from outside the region. Furthermore, no new nuclear power
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15 plants have been constructed in the United States since 1977 and one implication of this time lapse on
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17 future construction proposals could be enhanced scrutiny.
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21 Regardless of the designated future use of the site, this case clearly depicts the influence that a
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23 weak economy, in particular high unemployment rates, can have on public acceptability of community
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25 development alternatives. The results also suggest that support for, rather than protest against, facilities
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27 with potential adverse environmental consequences can be an important factor in the creation of local
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29 pollution havens. This is especially compelling considering that the location of the site is in a rural region
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31 that already experiences environmental, health, and economic disparities.
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3 Acknowledgment: "This material is based upon work supported by the Department of Energy
4 Portsmouth/Paducah Project Office (PPPO) under Award Number DE-EM0000357."
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3 **Figures**
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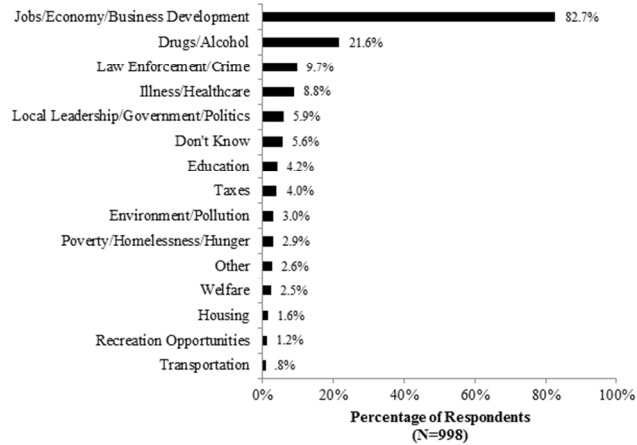
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6 Figure 1. Important Community Concerns in Four Counties in Ohio Rural Appalachian Region
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8 Figure 2. Most and Least Preferred Future Use of Site
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10 Figure 3. Number of Public Votes for Future Use Scenarios for the Uranium Enrichment
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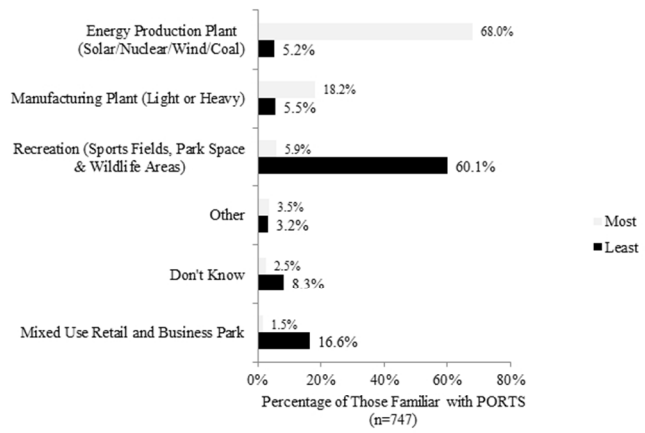
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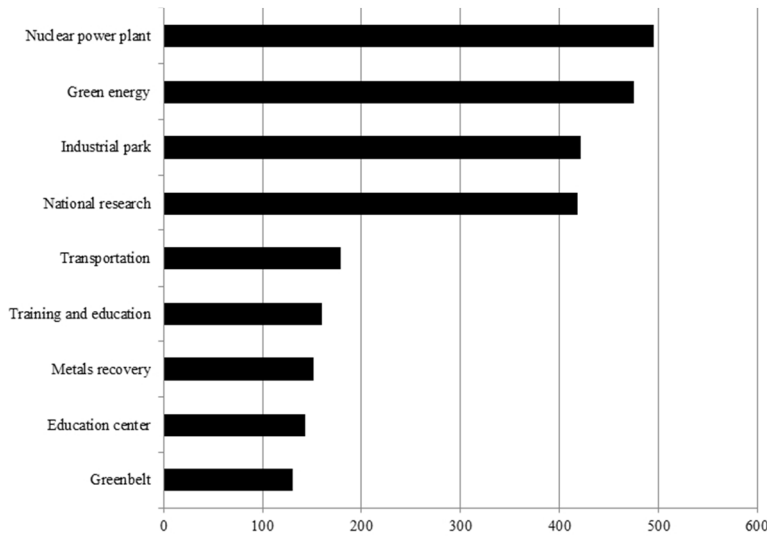
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