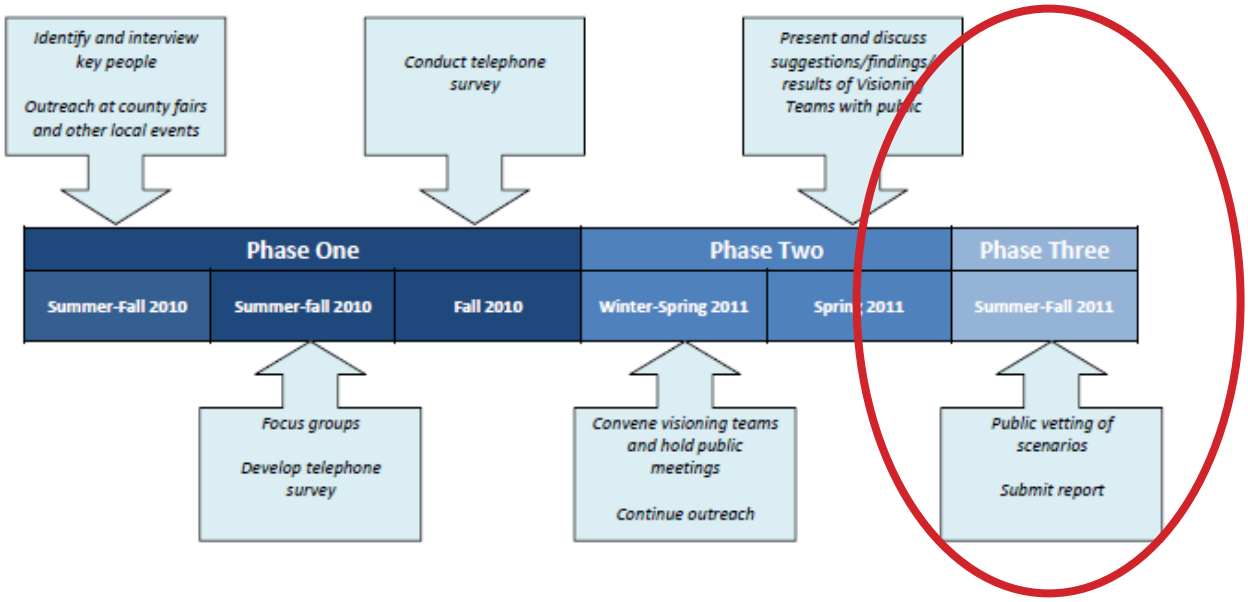
CHAPTER 5

PHASE 3



The goal of Phase Three was to gather public preference related to the draft scenarios that were developed during the visioning phase of the project. Both in the telephone survey of 2010 and at subsequent public outreach meetings job-growth in Jackson, Pike, Ross, and Scioto counties appeared to lead the list of community members' pressing concerns. It thus became readily apparent that providing scientific estimates of the jobs, labor income, and value-added likely to be generated under each draft scenario would provide the public with some meaningful basis for comparing alternative draft scenarios. These economic impact estimates were calculated under a separate task funded by the U.S. Department of Energy and are described below.[8]

ECONOMIC ANALYSIS

To conduct the economic impact analysis the research team first quantified the scenarios by translating the broad descriptions of each scenario into sets of concrete numbers. This was accomplished via extensive research examining data from various publically available sources such as the U.S. Department of Energy, the U.S. Census Bureau, and others. In addition, relevant information from various research institutions, trade publications, and private

[8] Details of the economic analysis conducted for all scenarios can be found in Appendices 14.1 and 14.2.

companies was folded into the analysis as deemed necessary. This multi-pronged approach provided a better understanding of industry trends and standards as well as common industry practices, requirements, and regulations.

The economic impact analysis was conducted via an economic assessment model called IMPLAN[9]. IMPLAN is widely used by many of government agencies, colleges and universities, non-profit organizations, private companies, and business development and community planning organizations to model any economic impact. IMPLAN is a highly customizable tool, which can be used to examine impact at local, regional and state level. For our analysis, we constructed a regional economic model, which consisted of four counties: Jackson, Pike, Ross and Scioto.

Generally, economic impact analysis is based on a ripple effect, which refers to the idea that a change in one industry/activity will lead to a change in the overall economy. For example: An automotive design company in Pike County spends $1 million to open its offices. This money does not disappear; instead it becomes wages to employees, revenue to suppliers etc. As a result the workers will have higher disposable income. They will purchase clothes for their families at the local clothing store, generating income for the clothing store's owner. The owner saves some of this money and spends the rest, thereby providing income for another local resident. This local resident saves part of this income and spends the rest, which becomes income for a fourth person, and so forth. The sum of these effects is the total income generated in the local economy by the automotive design company. Employment functions in much the same manner, and hence employment in one industry results in additional employment in the remainder of the local economy.

To estimate the total impact of each alternative, the previously quantified scenario inputs were entered in the model and analyzed. The model estimated indirect and induced effects, which were added to initial direct inputs to get the cumulative or total impact. The total impact of a scenario thus consists of (a) direct, (b) indirect, and (c) induced effects. Direct effects refer to initial and therefore direct changes. As mentioned before, the direct effects represent initial scenarios inputs, which were based on the research conducted by the research team. Indirect

[9] IMPLAN is a self-contained modeling package that includes data needed for modeling economic impacts. IMPLAN creates a model of the existing local economy and thereafter computes economic impacts stemming from a specific change in the economy. The modeling software is developed by MIG, Inc. (www.implan.com).

effects refer to the impact stemming from local industries buying goods and services from other local industries. Finally, induced effects represent economic benefits when workers use their newfound income to purchase further goods and services.

Scenarios depicted in this report are not meant to be mutually exclusive; all or some components of one or more scenarios may coexist. It also is important to realize that the results of the economic impact analysis should not be used as the sole basis to evaluate the desirability of a given scenario. It should be remembered that the purpose of this report is an attempt to quantify each scenario and demonstrate how they produce larger ripple impacts on the local economy through the indirect and the induced effects. Two important constraints of the modeling include:

- IMPLAN analysis does not consider costs, efficiency, probability, or feasibility of the proposed activities. In order to include these variables, a complete cost-benefit analysis would need to be undertaken, which is beyond the scope of this project.

- Further, the IMPLAN modeling team used their best judgment and available information when quantifying each scenario. However, reasonable individuals could disagree about the allocation of each specific activity that contributes towards building a particular scenario. As the scale of activities varies, so will the total impacts. This limitation is rather typical of IMPLAN modeling and something readers should bear in mind when reviewing the estimates reported below (see Table 5.1).

Table 5.1 summarizes the results of the economic modeling and suggests that there is a range of possible employment and economic impacts with the scenarios.

The preceding economic information was combined with descriptions of the scenarios and prepared for public voting which took place at county fairs and other events. Email blasts and media marketing were completed to invite people to vote online. The summaries that were prepared for public voting are located in Appendix 15.

Table 5.1. Summary Results of Economic Analysis

Scenario	Annual Estimates for total employment effect (# jobs)	Annual Estimates for labor income ($)	Annual Estimates for value-added ($)
National research and development	2,055	89,669,280	118,608,985
Green energy production	1,438	71,143,413	148,916,427
Industrial park	1,275	65,711,809	142,147,020
Greenbelt	1,195	50,747,899	68,694,663
Metals recovery	1,023	45,201,431	60,015,660
Nuclear power plant (single use)	840	51,580,766	145,560,592
Warehousing, distribution and transportation hub	771	33,298,446	49,609,691
Multi-use southern Ohio education center	362	13,323,153	18,587,448
Training and education	245	5,117,584	6,778,666

It is important to re-emphasize that the economic impacts discussed above were calculated strictly under the assumption that each scenario would operate as envisioned by the community. All construction costs were excluded from these calculations. As this public outreach report was being prepared for submission, stakeholders expressed an interest in seeing the economic impacts likely to flow from the construction of each scenario. These estimates were derived via IMPLAN and are detailed in Appendix 14.2.

MEDIA COVERAGE

The overall goal of Phase Three was to gather public opinion from residents in the four counties about preferred scenarios for the future use of the site. As such, it was essential to promote the availability of public voting in as many ways as possible. To that end, a comprehensive media strategy was employed in an attempt to gather as many opinions as possible. The strategy included a billboard (Figure 5.1) which was located at a heavily traveled place on Route 32 in Pike County.

Figure 5.1. Billboard to Promote Public Voting

Multiple media channels were targeted to publicize the voting and the complete summary of the use of media, including speaking engagements is found in Table 5.2

The media impressions reported in Table 5.2 are estimates of the number of individuals who had the opportunity to see a story, poster, presentation, or other type of media used to promote the project. These estimates are based on subscription rates, attendance, and circulation figures. They could be either over- or under-estimates and may represent individuals obtaining information from multiple sources.

Table 5.2. Summary Media Impressions

	Phases 1 and 2		Phase 3	
Medium	Number	Impressions	Number	Impressions
Advertising (paid coverage)	8	1,032,600	46	1,605,000
TV Interviews	1	25,000	0	
TV Interviews (on web)	1	20,000	0	
Radio Interviews	3	47,000	0	
Radio Interviews (on wed)	5	62,100	0	
Newspaper articles	14	793900	1	13,000
Press Releases Outlets	37		37	49,500
Stakeholder Newsletters	9	78,515	8	3,655
E-Mail Blasts	4	338	13	41,015
Direct Mail		356		302
Community Calendar Postings	11		0	
Leave Behind Literature	9	12,335		1,000
Direct Phone Calls	136			13,102
Posters/Displays	26		0	
Speaking Engagements (including fairs)	51	219,235	10	48,561
Online Media		44,000	0	
Facebook Posts	31	2,491	TBD	
TOTALS		2,337,870		1,775,135

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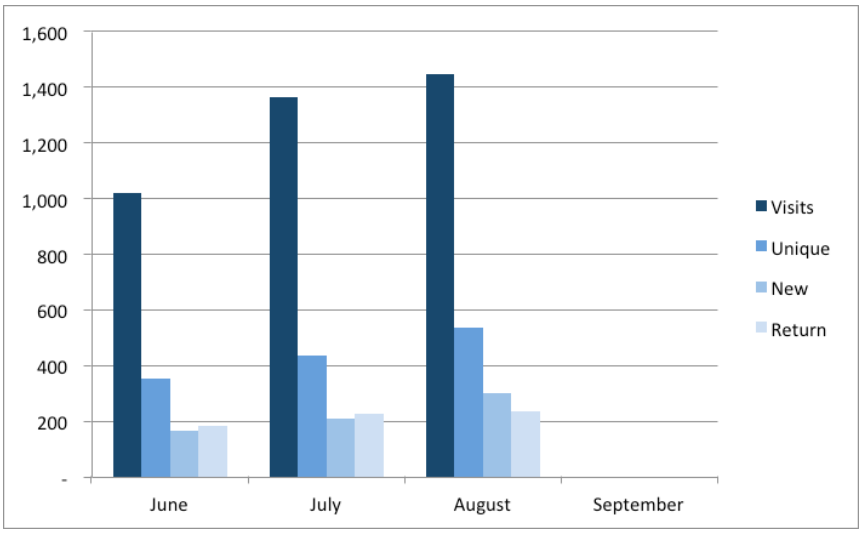
THE PORTSFUTURE.COM WEBSITE

The website became a very important public outreach tool during Phase Three because of the availability of online voting. Figure 5.2 depicts the total number of website visits during the months of June through September (still need this data). As this figure shows, the monthly visits have been increasing as have new visitors to the website.

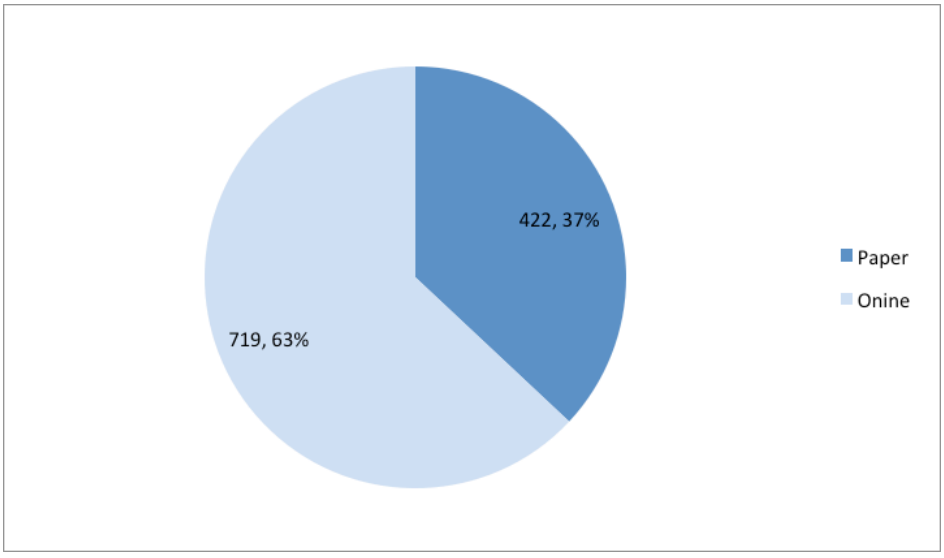
Figure 5.2. Website Hits during Phase Three, 2011



PUBLIC VOTING

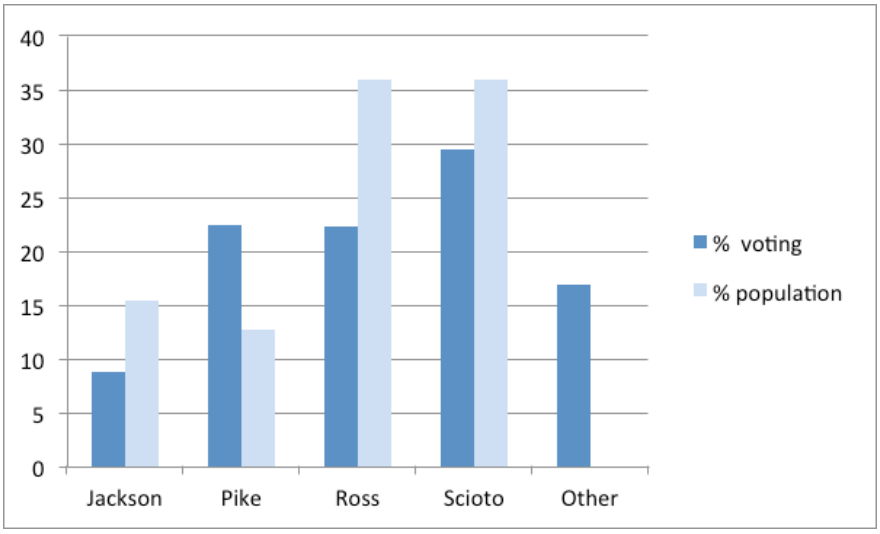
The economic analysis and media strategy laid the foundation for gathering public preference about the nine future use scenarios that were developed during Phase Two. The goal of public voting was to gather preferences from as many residents in the four counties as possible. As such, a two-pronged approach was taken: 1) in-person voting with ballots (see Appendix 16) and 2) online voting via the website. A total of 1,141 people voted on the scenarios and Figure 5.3 depicts the breakdown between paper ballots and online voting. Voting opened on July 15, 2011 and closed on September 30, 2011.

Figure 5.3. Format for Public Voting on Scenarios



While attempts were made to be as inclusive as possible in the public voting, there are limitations with the data that is presented below. Figure 5.4 shows the percent of votes in each of the counties, compared to the percent of the total population that the counties make up in the region. As this figure shows, residents of Pike County are over-represented in this sample, while residents of the other counties are under-represented.

Figure 5.4. Voting by County Compared to Population



Ballot Voting

Project representatives attended all four county fairs during the summer of 2011 to obtain preferences from members of the general public. The display at the fairs included a viewbook that depicted each scenario with an explanation of all activities each scenario encompassed, and the accompanying scenario-specific economic analysis. A simple paper ballot (Appendix 16) was created and people were asked to review the viewbook and select up to 3 scenarios they preferred for future use of the site. Respondents were not asked to rank-order their preferences.

Paper ballots were also distributed at 5 stakeholder venues:

1. Jackson County Economic Development Council meeting
2. USEC Retirees
3. Pike County Chamber of Commerce Lunch
4. Southern Ohio Diversification Initiative Meeting
5. OVRDC Quarterly Meeting

Online Voting

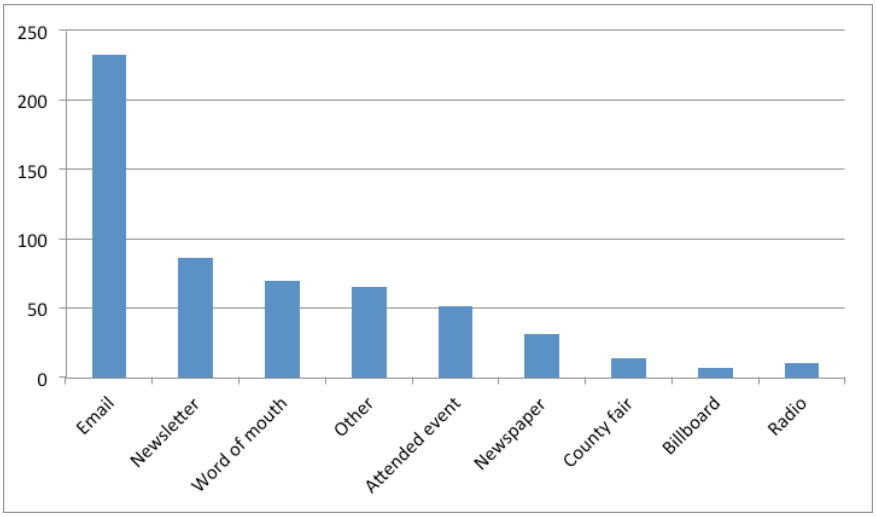
The second approach to gathering public preferences about the future use scenarios was online voting. A survey was designed that enabled individuals to access the scenario descriptions and detailed economic data, and the survey was linked prominently to the home page of the project website (PORTSfuture.com). The online survey, which is found in Appendix 17, included a couple of additional questions that were not asked on the paper ballots; these questions asked respondents to indicate the importance of PORTS to the future of their community, and how they had learned about the PORTSfuture project.[10]

A total of 719 people voted online and 422 submitted paper ballots. However, it is important to note some of the limitations with the online voting. In order to ensure widespread participation but maintain anonymity we kept track of internet protocol (IP) addresses. In doing so we noted multiple responses originating from a single IP address. These multiple responses may not represent a single individual voting multiple times since it is quite possible that network security protocols employed by organizations lead to all outgoing internet traffic reflecting a single IP address. We cannot determine whether this is the case or not but regardless it does indicate that multiple votes are tied to one computer. In one instance, 207 votes came from one IP address and all of these votes are included in the final tally. Eliminating multiple responses originating from a single IP address does not alter the order in which the scenarios were preferred; there is no systematic bias in the responses.

As mentioned earlier, one of the questions asked in the online survey was how the person heard about PORTSfuture. Figure 5.5 breaks down the responses to this question and shows that the majority of people who voted online heard about the voting through an email.

[10] Ballot size limitations led us to exclude both questions from the paper ballots.

Figure 5.5. How Online Voters Heard about Project



SCENARIO PREFERENCES

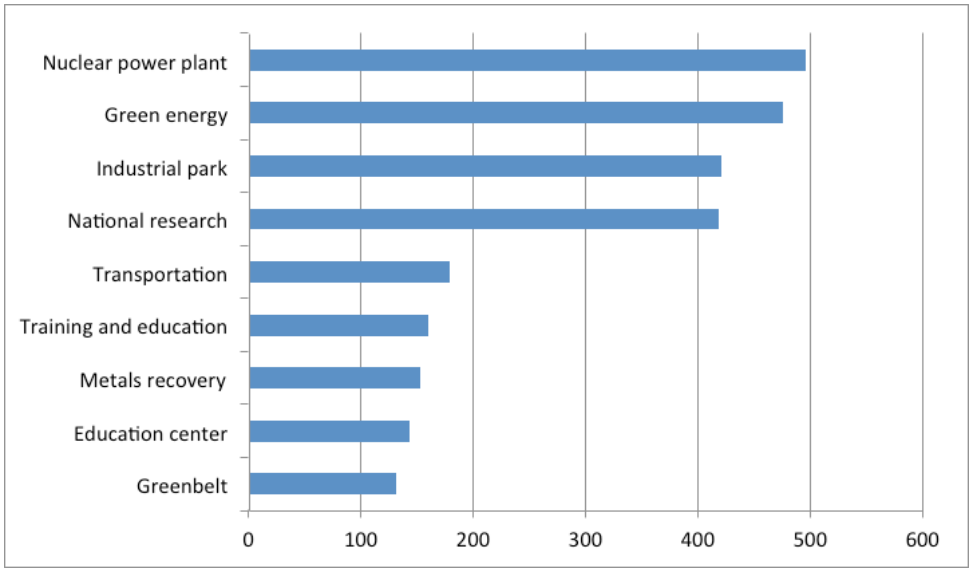
Prior to public voting, the advisory group that created the scenarios ranked the scenarios using several criteria (i.e. economic, environmental, feasibility, etc.), and Table 5.3 compares this ranking with the votes cast by the public (summarized in Figure 5.6). Again, it is important to bear in mind that while the advisory group ranked the nine future-use scenarios, the public was merely asked to indicate up to three preferred scenarios rather than rank-order the scenarios. This distinction notwithstanding, there are differences between the advisory group's ranking and the preferences expressed by the public in the voting process. In particular, the single use nuclear power plant scenario was ranked 8th by the group, but appeared to be the most preferred scenario amongst the voting public.

Table 5.3 Comparison of Public Voting to Advisory Group Ranking

Scenario	Public Preferences	Advisory Group Rank
Nuclear Power Plant	1	8
Green Energy Production	2	2
Industrial Park	3	1
National Research & Development	4	4
Warehousing, Distribution, and Transportation	5	7
Metals Recovery	6	9
Training and Education	7	5
Multi-Use Southern Ohio Education Center	8	3
Greenbelt	9	6

Figure 5.6 depicts the number of votes cast for each of the scenarios from both the paper and online ballots. Votes were recorded from 1,141 individuals and voters were asked to choose up to three of their most preferred scenarios. As Figure 5.6 shows, the single use nuclear power plant scenario received the most overall votes.

Figure 5.6. Outcome of Public Voting (n= 1,141)



Preferences varied by county as well as those who live outside of the region. In terms of how voters in specific counties voted on the scenarios, Figures 5.7 through 5.10 break down the votes from residents in the 4 counties and residents outside of the region.

Figure 5.7. Preferences in Jackson County Voters

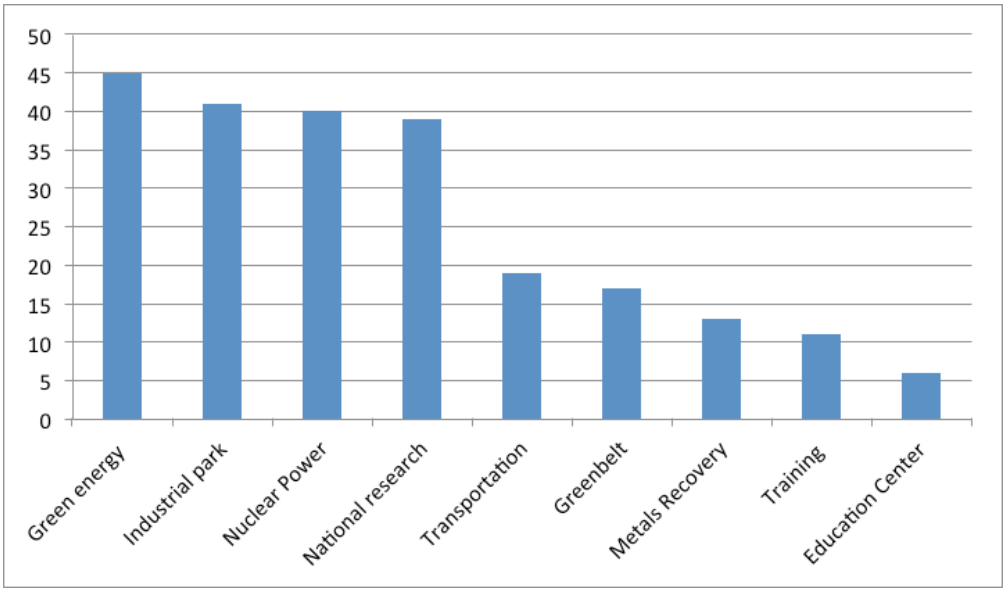


Figure 5.8. Preferences in Pike County Voters

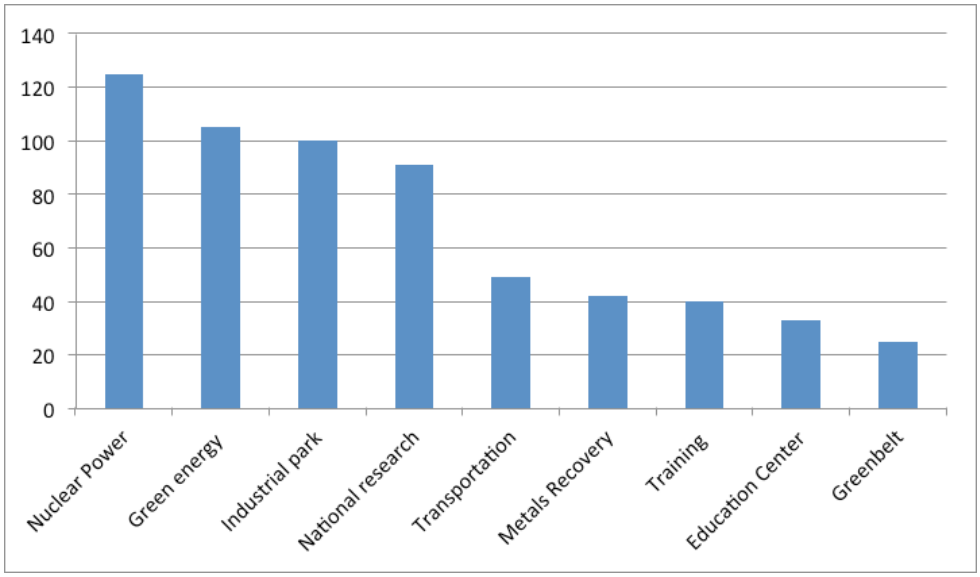


Figure 5.9. Preferences in Ross County Voters

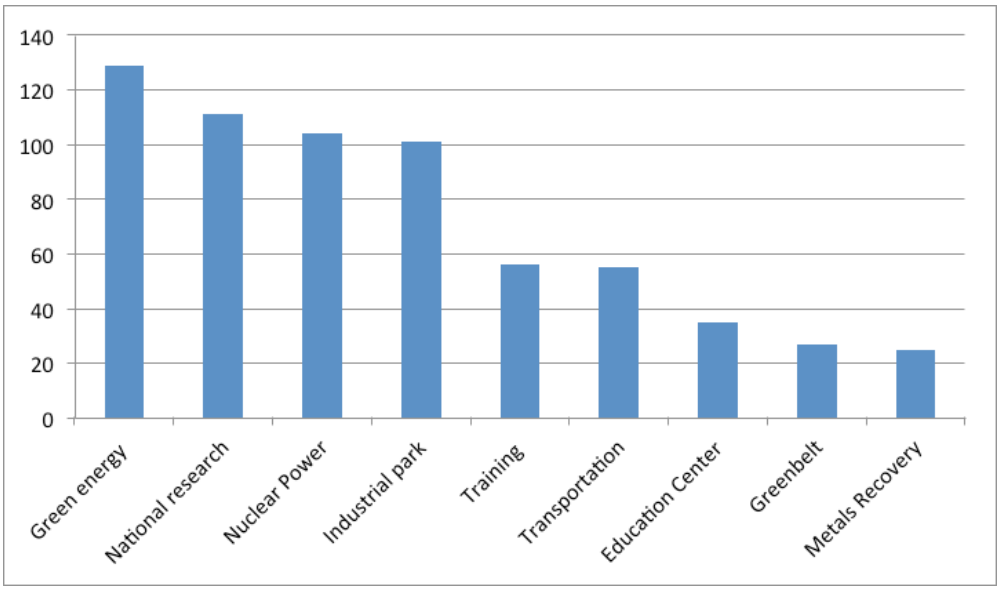


Figure 5.10. Preferences in Scioto County Voters

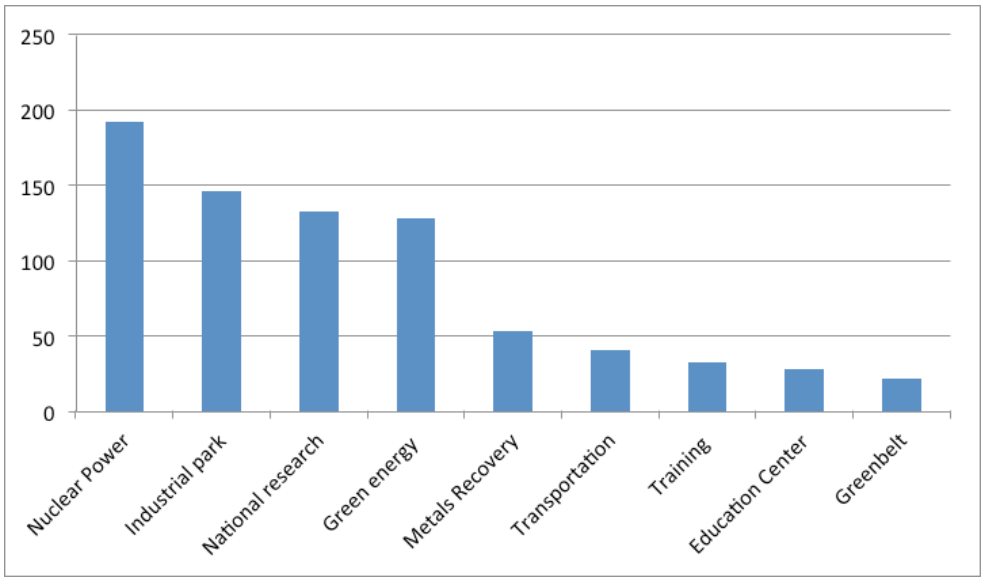
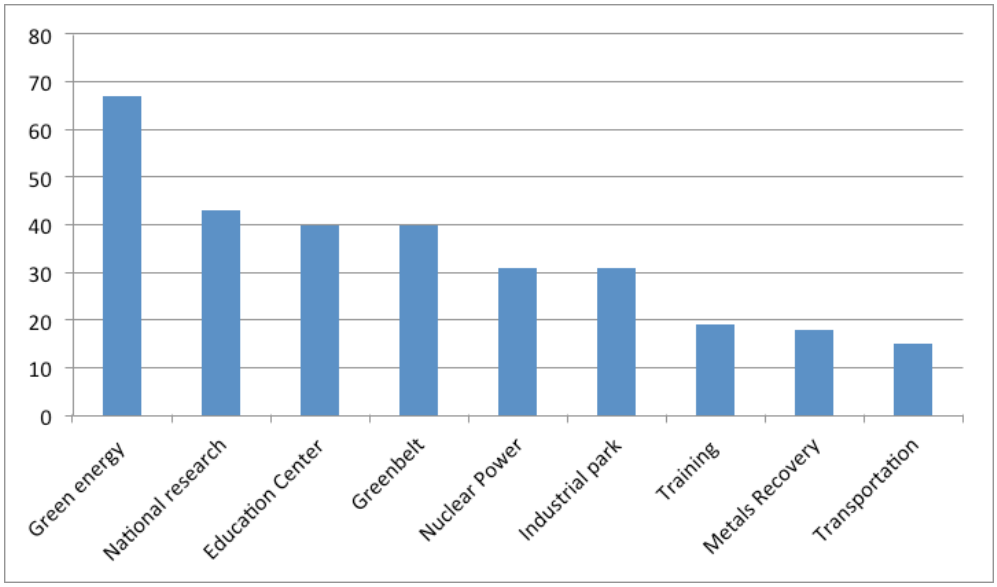


Figure 5.11. Preferences in Voters Outside of the Region



Even though there is some variation in the overall votes by county, the nuclear power and industrial park scenarios are represented in the top three in 3 out of 4 counties and in the votes

from those outside of the region. The green energy scenario and the national research and develop scenario are also supported by the votes from the public.

Developing the site for future uses as an educational or training center is not well supported by the votes, nor is using the site for metals recovery. The greenbelt scenario was also not as well supported as some of the other scenarios.

Referring back to Table 5.3 that compares the advisory group ranking with public preferences, the future use scenarios of the site that are most supported by those who live in the region are: 1) Industrial Park; 2) Nuclear Power; and 3) Green Energy.

One part of the online survey allowed respondents to provide comments related to the future of the site. The open-ended comments offered by the ballot/survey participants echo the theme heard throughout the course of the PORTSfuture project: Creating jobs for the region. The majority of the participants emphasized PORTS' historical contribution of providing well-paying jobs for the region and expressed a desire to see the site used in ways that promote lucrative employment opportunities for residents.

> *"Because the area has been basically in a economic depression since the 70's it is paramount to bring good jobs to the area. By bringing viable jobs to the area it allows for the locals an economic independence so they can determine [their] futures without [waiting] for some one else to do so. That is what the area needs jobs as a means for economic independence for self-determination."*

Many comments addressed PORTS' nuclear history and the resulting presence of a workforce skilled and trained to work in the nuclear industry as shovel-ready assets that should be leveraged.

> *The Nuclear Safety culture is well established in this region. Generations of employees at the PORTS site have worked safely and successfully to provide themselves, their families and local businesses with incomes that would not have otherwise been possib[l]e were it not for this site. Nuclear Safety is in our DNA, and the vast majority of our neighbors are aware of this and comfortable with our presence. Any scenario that takes advantage of the established culture in this area will be successful.*

Several respondents were, however, opposed to the site being repurposed for nuclear activity. These individuals expressed concerns about PORTS becoming a toxic waste site, accidents such as the recent Fukushima crisis, and about the need to move beyond nuclear energy. Nuclear power can't be a major segment of our energy in the future until we solve the WASTE problem. Creating more nuclear WASTE, without having a SAFE way to dispose of it or a way to recycle it into something without environmental damage, is not WISE. Using this area for some other type of project to create jobs is the best solution.

A few also expressed concerns about the viability of several scenarios. For example, some were skeptical about the industrial park scenario, wondering why employers would move to PORTS when there are competing industrial parks around the country. For another, several respondents liked the "green energy" option but a few wondered if and how this would be a commercially viable option.

> *In addition to selecting preferences on the basis of how much value a scenario [could] potentially add to the community, it is important to consider the probability of success associated with each. While the "green" alternatives are attractive, many of [the] associated efforts have not yet reached economic viability. This necessitates government subsidy of efforts which introduces uncertainty, especially given the current financial-related problems of the U.S. Government. The selected re-use option should [have] economic viability and sustainability without significant government involvement.*