

Sustainability Significance:

An analysis of a Community Assessment Survey distributed
by the Bluegrass Regional Planning Council

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Abstract

A survey conducted by the Bluegrass Regional Planning Council found that sustainable development was the least important listed policy issue both locally and regionally for local representatives. However, respondents still believed 'improved sustainability' to be important on both a local and regional level. It should be noted that the survey's findings are vulnerable to error in interpretation as respondents were asked to prioritize items which were not defined, resulting in measurement errors. Although errors may have existed, the survey was valuable, as it will assist Bluegrass Regional Planning Council staff in creating an approach for implementation of a sustainable development code. The gathered information and questions generated can serve as guiding principles for a future pilot study into the policy issue of sustainable development.

TABLE OF CONTENTS

| | |
|--|-----------|
| <i>EXECUTIVE SUMMARY</i> | 5 |
| <i>BACKGROUND</i> | 7 |
| <i>RESEARCH QUESTIONS</i> | 8 |
| <i>LITERATURE REVIEW</i> | 8 |
| <i>RECOMMENDATIONS FOR DATA COLLECTION</i> | 8 |
| <i>IMPLEMENTATION OF THE DEVELOPMENT CODE</i> | 9 |
| <i>SUSTAINABILITY CLARITY</i> | 10 |
| <i>METHODOLOGY</i> | 10 |
| <i>DATA</i> | 12 |
| <i>SECTION 1: COMMUNITY ASSESSMENT</i> | 12 |
| <i>SECTION 2: SUSTAINABILITY ASSESSMENT</i> | 15 |
| <i>SECTION 3: GENERAL BACKGROUND</i> | 18 |
| <i>REGRESSION ANALYSIS</i> | 20 |
| <i>INDEPENDENT VARIABLES</i> | 20 |
| <i>DEPENDENT VARIABLES</i> | 21 |
| <i>BARRIERS TO SUCCESS</i> | 26 |
| <i>PRETESTING</i> | 26 |
| <i>SURVEY DISTRIBUTION AND COLLECTION</i> | 27 |
| <i>CONCLUSION</i> | 27 |
| <i>WORK CITED</i> | 29 |

APPENDIX **30**

APPENDIX 1 **31**

| | |
|----------------------|-----------|
| 1.1 AGE | 31 |
| 1.2 SEX | 31 |
| 1.3 RACE | 31 |
| 1.4 EDUCATION | 31 |
| 1.5 INCOME | 31 |
| 1.6 REP | 32 |
| 1.7 PLACEMENT | 32 |
| 1.8 YEARS | 32 |
| 1.9 PARTY | 32 |
| 1.10 POLITICS | 32 |

APPENDIX 2 **33**

| | |
|---|-----------|
| 2.1 COMMUNITY PRIORITIZATION OF SUSTAINABILITY | 33 |
| 2.2 REGIONAL RANKING OF SUSTAINABILITY | 34 |
| 2.3 SUSTAINABILITY IMPORTANCE ON A COMMUNITY LEVEL | 35 |
| 2.4 SUSTAINABILITY IMPORTANCE ON A REGIONAL LEVEL | 36 |
| 2.5 PERCEPTION OF COMMUNITY SUSTAINABILITY | 37 |
| 2.6 PERCEPTION OF REGIONAL SUSTAINABILITY | 38 |
| 2.7 COMMUNITY SUSTAINABILITY MEASURES | 39 |

ATTACHMENT **46**

ATTACHMENT 1 **47**

EXECUTIVE SUMMARY

PURPOSE: To analyze information gathered from community leaders and representatives to assist the Bluegrass Regional Planning Council (BRPC) in understanding how the policy issue of sustainable development is prioritized and perceived locally and regionally.

BACKGROUND: The BRPC conducted a survey as a response to growing interest in the planning community involving sustainable development and more specifically the adoption of sustainable development code. Sustainable development is being defined as “meeting the needs of the present without compromising the ability of future generations to meet their own needs.”¹ The BRPC staff received the full support of the Bluegrass Area Development District with the distribution of the survey through their newly created listserv. Surveys were distributed to judge-executives, mayors, Bluegrass Regional Planning Council members, Regional Transportation Committee members, and Natural Resource & Environmental Protection Committee members. In all, there were 50 respondents of the possible 182 eligible recipients. The major research questions of this survey were as follows:

- A. How do public officials and other community representatives prioritize sustainability among other policy issues?
- B. How do public officials rate the current sustainability of their community and the region?
- C. How are subcategories of sustainability that have been designated by Region Planning Council Staff prioritized?

A comparative analysis was used to decipher preferences for respondents’ answers. In addition, further analysis was conducted using regressions to determine variable relationships between the general background information collected about respondents and how they responded to questions about sustainability.

FINDINGS:

Sustainability as a Low Priority

Survey respondents ranked sustainability as least important among the listed community and regional policy issues. It was determined through regression analysis that if the respondent was not a representative from a city there was a 1.886 increase in the ranking of sustainability on the local level. All other variables that were tested for were shown to be insignificant. On a regional level no variables were shown to be significant at any level and thus none of the independent variables can be used to draw any conclusions.

Sustainability Importance and Current Perception

Improved sustainability was perceived as an IMPORTANT policy issue on both a local and regional scale. Age was shown to influence the perception of sustainability on both the local and regional level. As the age bracket of the respondent increased there was a decrease in the perceived importance of sustainability. In addition, respondents believed that their current community sustainability was FAIR on a rating scale from Excellent to Poor. The tenure of the respondents in their current position was shown to influence how they responded. The longer that a representative was in their current position, the more sustainable their community was

¹ Environmental Protection Agency. Sustainability: Basic Information. 2009
<http://www.epa.gov/sustainability/basicinfo.htm#sustainability>

perceived as being. For the Bluegrass Area Development District respondents thought the sustainability of this regional entity was GOOD on the same type of rating scale. Education, income, and tenure were shown to influence how respondents answered this question. Again, long tenured representatives perceived the region to be more sustainable. As education and income increase there is shown to be a decrease in positive perception of regional sustainability.

Ranking of Sustainability Measures

Respondents believed that **Housing** (affordable housing, diverse housing, accessibility) was the most important sustainability measure for their community followed by the **Environment** (air, water, and soil quality, green infrastructure). **Community Character** (aesthetics, development patterns) was deemed the third most important measure followed by **Natural Hazard** (Floodplain Management, Fires), **Transportation** (Parking, Pedestrian Systems, Transit), and **Energy** (Renewable Energy, Efficiency Conservation). For the Bluegrass Area Development District, the **Environment** was seen as being the most important sustainability measure followed by **Housing, Energy, Transportation, Natural Hazards, and Regional Character** in that order. The importance of understanding these measures is that it will assist BRPC staff in the approach taken for creating and implementing a sustainable development code.

Recommendations:

It is recommended that this research be used as pilot study for further investigation into the issue of sustainability on local and regional levels.

Background

The Director of the Bluegrass Regional Planning Council (BRPC) asked the staff to investigate possible approaches that could be used in the creation and implementation of a sustainable development zoning code for the Bluegrass Area Development District (BGADD). A sustainable development code would create incentives for implementing sustainable zoning practices within the community and/or region.

Sustainability is being defined throughout this document as: “meeting the needs of the present without compromising the ability of future generations to meet their own needs”. Currently, the BRPC is using a template provided by the Rocky Mountain Land Use Institute (RMLUI) at the University of Denver’s Sturm College of Law as the guiding principle for the creation of a code for best practices in development and redevelopment. The code looks to:

- **Remove obstacles:** Codes and ordinances can often create barriers to development. An example would be height maximums for buildings in specific zone types.
- **Create Incentives:** Incentives can be used to promote technologies that might not otherwise be implemented. An example would be providing height bonuses to allow for buildings to be higher than the maximum allowance in a particular zone if a green roof is built.
- **Enact Standards:** There must be mandatory regulations in place to enforce the removal of obstacles and the creating of incentives that will ensure that the desired actions are taking place. (RMLUI 2006)

In conjunction with the current research that is being produced for the code, a survey was created and distributed to local officials and community representatives in the BGADD. The intent of this research is to assess how local officials and community representatives prioritize the importance of sustainable development in their community and throughout the 17 county BGADD. By understanding how important local community leaders believe sustainability is to their communities, the BRPC and its staff will have a better understanding of ways to improve the implementation process for a sustainable development code. The survey results will be used to steer the direction and resource allocation for research and training efforts, as staff will better understand what areas need the greatest attention.

Research Questions

The following research questions were used as guiding principles for investigating and interpreting information derived from the survey distributed:

- How do public officials and other community representatives prioritize sustainability among other policy issues?
- How do public officials rate the current sustainability of their community and the region?
- How are subcategories of sustainability that have been designated by Bluegrass Region Planning Council Staff prioritized?

Currently, the Bluegrass Regional Planning Council staff has found little information as to where sustainability is prioritized among other policy issues locally in the BGADD. Before the BRPC and its staff invest more resources into the creation of a development code it is important to understand the current state of the perceived policy environment of the district.

Literature Review

The literature review that follows is separated into three sections: recommendations for data collection, implementation of the development code, and sustainability clarity. The literature used in recommendations for data collection provides methods of research that are applicable to the project and provide a template for the approach used. The section dealing with implementation of the development code identifies the level of government which should address local sustainability. Finally, sustainability clarity highlights the importance in clearly defining sustainability.

Recommendations for Data Collection

Information from the *Handbook of Practical Program Evaluation* (Wholey, Hatry, Newcomer 2004) and *Mail and Internet Surveys: The Tailored Method* (Dillman) assisted in the creation, distribution, and presentation of information for the survey conducted. Both of these books showed that a survey can “capture information reliably and efficiently” and it can efficiently and effectively measure the attitudes and experiences of respondents. (Wholey, Hatry, Newcomer 2004). However, both resources clearly stated that administering a survey is a very complicated procedure which requires meticulous attention to detail to insure that the information generated is of value. Since gathering responses is the main intent of a survey, it is important to have a high response rate to mitigate the likelihood of nonresponse bias. The impact of the nonresponse bias is not easy to measure because of the unknown of how potential respondents would have responded to the questions. There is no designated benchmark for a response rate to signify a quality survey but a response rate less than 50% lends itself to skepticism of research findings

(Wholely, Hatry, Newcomer 2004). Email was the selected method of survey distribution by BRPC staff. It was determined that due to time constraints it would be the most effective means of distributing the survey. These books and their methods provided the backbone for the research conducted and were a valuable resource for information.

Wholely, Joseph S., Hatry, Harry P., Newcomer, Kathryn E. Handbook of Practical Program Evaluation. Jossey-Bass. San Francisco, CA, 2004. Pg 257-291

Dillman, Don A., Mail and Internet Surveys: The Tailored Design Method. John Wiley & Son, Inc. New York. 2000

Implementation of the Development Code

Chris Duerkson's [Saving the World Through Zoning](#) is an article which is the groundwork for the creation of the sustainable development code. The article provides two definitions of sustainability. The first is provided by Thomas Jefferson: "Then I say the earth belongs to each generation during its own course, fully and in its own right, but no generation can contract debts greater than can be paid during the course of its own existence." The other definition comes from the Brundtland Commission. The Brundtland Commission, formerly known as the World Commission on the Environment and Development, was established by the United Nations in 1983 to create an agenda for addressing environmental problems (Hart). The definition created by the Brundtland Commission is the standard used by the Environmental Protection Agency: "[Sustainable Development] meets the needs of the present while ensuring that future generations have the same or better opportunities." Based on the definitions provided, Duerkson says that few communities can claim to be sustainable and suggests that current development strategies are limiting the value of choice. It is Duerkson's belief that if significant action is to take place, it must be done through the local action of mayors and local government; as they will have the authority to shape and guide how their communities grow and evolve. David Prosser's article *Global economic crisis imperils sustainability* discusses the results of a survey that was created by YouGov which came to the conclusion, "that a lack of government leadership remains the most serious threat to achieving sustainable development goals".

Prosser, David. The Independent. Global economic crisis imperils sustainability-Lack of government biggest threat, research shows. November 10, 2008. P.48

Duerkson, Chris. Saving the World Through Zoning: The sustainable development code comes to the rescue. American Planning Association. January 2008

Hart, Mareen "Sustainability Is..."
<http://www.sustainablemeasures.com/Training/Indicators/Def-Br1.html>

Sustainability Clarity

BRPC staff wanted to look at the importance of providing clarity in using ambiguous terms such as sustainability. Bill Jamieson's *Dump this vacuous rubbish in the buzzword bin* discusses the ambiguity and generality of the term "sustainability". The article explains how "sustainable" has become an adjective that has no meaning because it is not clearly defined. Jamieson makes the claim that "if a community exists, it is clearly in the process of sustaining itself; if it is not, it is not a community". He goes on to suggest that a sustainable community is one that, "may work to inhibit or impede the natural formation of other communities by voluntary action". Paul Treanor's *Why Sustainability is Wrong?* supports Jamieson's assessment that the intent of communities is to sustain themselves. To Treanor, the case for sustainability is made more complicated because, "every city administration, every developer, wants to be sustainable". It is the belief of Treanor that in order for a sustainable measure to be created it must first begin with an abstract concept that is shaped into community planning goals. These goals must then be adopted into policy. But due to individualism of each community it might be difficult to set a policy goal that is adoptable by each community. These articles highlighted the importance of creating a definition and intent for sustainability that is clear and specific rather than ambiguous and general.

Jamieson, Bill. *The Scotsman. Dump this vacuous rubbish in the buzzword bin*. December 19, 2008. P. 24.

Treanor, Paul. *Why Sustainability is Wrong?* December 1997.
<http://web.inter.nl.net/users/Paul.Treanor/sustainability.html>

Methodology

Data were collected from an original survey (see Attachment 1) that was distributed to public officials and local representatives. The survey was conducted over a five day work week ranging from Monday, March 9, 2009 at 10:00am EST through Friday, March 13, 2009 at 4:30pm EST. Prior to survey distribution, a pre-test was conducted with BRPC staff and office peers at the BGADD, it was during this time perceived problems were identified and corrected. In total 182 surveys were distributed to county judge-executives and mayors from within the 17 county BGADD, and representatives from the following three regional councils: Bluegrass Regional Planning Council (BRPC), Regional Transportation Council (RTC), and the Natural Resources & Environmental Protection Committee (NREPC).

| A Breakdown of Survey Distribution | Number of surveys distributed |
|---|--------------------------------------|
| Judge-Executives* | 16 |
| Mayors | 32 |
| Regional Planning Council Members | 13 |
| Regional Transportation Council Members | 84 |
| Natural Resource & Environmental Protection Committee Members | 32 |

*Note: The Judge-Executive from LFUCG was excluded due to urban county form of government

The surveys were distributed in person for Bluegrass Regional Planning Council members at their March 4, 2009 bi-monthly meeting. All members in attendance (13) filled out the survey the rest of the surveys were distributed through email. These emailed surveys could be filled out or returned by four methods: by mail, through an online survey, by email, or by fax. A breakdown of total respondents can be found in Table 1.1.

Table 1.1 Method Survey was Returned

| Method of Return | # of surveys received | % of Total |
|-------------------------------|------------------------------|-------------------|
| In Person | 13 | 26.0 |
| Internet Site (online survey) | 24 | 48.0 |
| Email | 6 | 12.0 |
| Fax: | 5 | 10.0 |
| Mail: | 2 | 4.0 |

In total there were 50 respondents from the total of 182 surveys that were distributed, for a 27.5% response rate. The internet site was the most effective means of gathering information, Table 1.2 shows a breakdown of how emailed surveys were returned.

Table 1.2 How Emailed Responses were Returned

| Method of Return | # of surveys received | % of Total |
|-------------------------------|------------------------------|-------------------|
| Internet Site (online survey) | 24 | 64.5 |
| Email | 6 | 16.2 |
| Fax | 5 | 13.5 |
| Mail | 2 | 5.4 |

Categories of survey recipients were selected for the following reasons:

Judge-executives and mayors were selected to participate in this survey as they are elected officials representing the executive branch of local government. In their role as elected officials, they are the lead decision makers regarding the implementation of local policies. Also, their input

would be helpful to understand what the current perception of sustainability is within their communities.

The members of the three councils/committees are representatives of their community who come together to discuss regional issues in their respective fields of interest. Each of these three organizations will be involved in any eventual oversight and adoption of the development code. A general description of each is as follows:

- The Bluegrass Regional Planning Council works to help promote planning concepts, encourage compatible development, and offer educational opportunities for planning staffs, planning commissioners and elected officials throughout the Bluegrass Area Development District. (BRPC 1990)
- The Regional Transportation Council helps to promote the development of a safe, economical, accessible, and balanced transportation system. The Committee discusses, studies, and advises the Executive Board and/or the Board of Directors of the Development District. (TRC 1995)
- The Natural Resource and Environmental Protection Committee promotes and assists in the protection, maintenance, and, where possible, the development of natural resources. It also advocates the protection and enhancement of the environment of the District. Like the TRC, the Committee discusses, studies, and advises the Executive Board and/or the Board of Directors of the Development District. (NREPC 1974)

It should be noted that there are other regional councils which could have been included in this survey. However, the three councils chosen will be the only councils directly involved in the implementation of the development code. BRPC staff hopes to obtain the endorsement of the aforementioned councils prior to bringing the code forward to elected officials for adoption. At no point in the survey were respondents asked to identify their regional council of affiliation. While that data may have been useful, it was not deemed to be of the most critical importance.

Data

The survey was divided into three sections community assessment, sustainability assessment, and general background:

Section I: Community Assessment

Quick Facts:

- *Sustainability was found to be the least important policy issue both locally and within the Bluegrass Area Development District*
- *Improved sustainability was identified as being an important policy issue, locally and for the Bluegrass Area Development District*

The community assessment section was used to assess how local officials would prioritize the importance of the policy issues of education, environment, health, land use, economy, safety, sustainability, transportation, and water/sewer in both the local community and the region. In this section, policy issues were to be ranked as community representatives deemed them to be most important to their community and region. The number one signified the highest ranking (most important) and the number nine signified the lowest ranking (least important). The policy issues for this section were selected through discussion with the Director of the Regional Planning Council and through coordination with faculty advisors from the University of Kentucky. It should be noted that the policy issues were intentionally not defined for the respondents. It was the belief of the BRPC staff that by not providing definitions for the issues, responses would be more representative of the respondent’s true prioritization of the issues.

Another item worth mentioning is the definition of “community” and “region”. Although, community was not defined in the survey, it was assumed that the respondents would identify “community” as the area they represent, either city or county. The term “region” is used interchangeably with BGADD. In the survey, respondents were asked questions about the BGADD, which was not defined due to the consistent interaction of the BGADD and survey recipients. These actions could possibly lead to measurement error in the final findings, as respondents would not be answering to the same base.

Here is an example of the first questions in Section 1 of the survey:

Please rank the issues below that you believe are the most important to your community and Bluegrass ADD:

- Rank 1=Most Important
- Rank 9=Least Important

| Exhibit 1.1 Ranking of Policy Issues | | | | |
|---|-----------------------|----------------|-----------------------|----------------|
| Policy Issues | Community | | Bluegrass ADD | |
| | Mean (Ranking) | St. Dev | Mean (Ranking) | St. Dev |
| Education | 3.16 (1) | 2.32 | 3.35 (2) | 1.95 |
| Economy | 3.46 (2) | 2.38 | 3.28 (1) | 2.34 |
| Health | 4.04 (3) | 2.3 | 4.22 (3) | 2.31 |
| Water/Sewer | 4.65 (4) | 2.3 | 4.86 (4) | 2.33 |
| Environment | 4.94 (5) | 2.63 | 5.04 (5) | 2.44 |
| Land Use | 5.24 (6) | 2.69 | 5.40 (8) | 2.36 |
| Transportation | 5.41 (7) | 2.47 | 5.16 (6) | 2.42 |
| Safety | 5.43 (8) | 2.55 | 5.24 (7) | 2.45 |
| Sustainability | 5.86 (9) | 2.53 | 5.96 (9) | 2.71 |
| Number of Responses | 49 | | 49 | |

The findings for this Section are listed in Exhibit 1.1. Survey respondents ranked sustainability as least important among the listed community policy issues. This can be deduced from looking at the average ranking of the policy issues. As shown in Exhibit 1.1, sustainability had an average ranking of 5.86, which was almost half a ranking lower than the next lowest ranked policy issue of Safety at 5.43. On a regional a level sustainability is also of the lowest importance among policy issues with an average ranking of 5.96, which was also more than half a ranking lower than the next lowest ranking policy issue at 5.4.

For the second set of questions in Section 1, representatives were asked to give the importance of eleven separate issues: economic growth, better roads and highways, improved water supply, better sewer capacity, improved schools, better health, controlling growth, better land use regulation, improved sustainability, fire and police, and public transportation. For the purpose of analysis answer choices for these questions were allotted points: Very Important (4 points), Important (3 points), Somewhat Important (2 points), and Not at all Important (1 point). An example of the format of the question is show in Exhibit 1.2, which omits all other policy issues other than improved sustainability.

Exhibit 1.2

Please rate the importance of each to your community (your constituents) and Bluegrass

ADD: (Check One (1) Box for each)

| Section 1: Questions C & D Importance Community/BGADD | Very Important (4) | Important (3) | Somewhat Important (2) | Not at all Important (1) |
|--|-------------------------------|--------------------------|---------------------------------------|---|
| Improved Sustainability | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

The analysis of the results for these questions is found in Exhibit 1.3. The numerical calculations for the importance of sustainability were a mean of 2.8, median of 3, and a mode of 3. Through this analysis it can be confirmed that sustainability is important on a local level. In comparison to other issues, improved sustainability's mean ranking positions it at 8 out of 11 policy issues.

| Exhibit 1.3 Policy Issue Importance | | | | |
|-------------------------------------|------------|------------|---------------|-------------|
| Policy Issues | Community | | Bluegrass ADD | |
| | Mean | St. Dev | Mean | St. Dev |
| Economic Growth | 3.52 | 0.58 | 3.62 | 0.55 |
| Better Roads | 3.2 | 0.67 | 3.28 | 0.55 |
| Water | 3.08 | 0.67 | 3.26 | 0.68 |
| Sewer | 3.21 | 0.85 | 3.67 | 0.49 |
| Schools | 3.42 | 0.72 | 3.46 | 0.51 |
| Health | 3 | 0.6 | 2.95 | 0.67 |
| Growth | 2.7 | 0.9 | 3 | 0.8 |
| Land Use Regulations | 2.6 | 1.1 | 2.92 | 0.91 |
| Sustainability | 2.8 | 0.9 | 2.89 | 0.91 |
| Fire and Police | 2.9 | 0.6 | 2.85 | 0.69 |
| Public Transit | 2.47 | 0.87 | 2.69 | 0.84 |
| Number of Responses: | 50 | | 50 | |

Note: Very Important (4 pts), Important (3pts), Somewhat Important (2 pts), Not at all Important (1 pt).

On a regional level, sustainability was found to have a mean of 2.89, a median of 3, and mode of 3 which confirms that sustainability is perceived as being an important issue for the BGADD. In comparison to the mean of other issues, improved sustainability would rank 9 out of 11.

Section 2: Sustainability Assessment

Quick Facts:

- *Community Sustainability was identified as FAIR by respondents*
- *The sustainability measure of housing (affordable housing, diverse housing, and accessibility) was found to be the most important community measure.*
- *Bluegrass Area Development Sustainability was identified as GOOD*
- *The sustainability measure of the environment (air, water, and soil quality/green infrastructure) was found to be the most important regional measure.*

The intent of the sustainability assessment section was to gather information from local representatives to understand how they perceived their communities and the Bluegrass Area Development District from a sustainability perspective. In the initial portion of this section, community representatives were asked to answer whether or not they believed that they have a sustainable community and then were asked to elaborate upon that answer. They were then asked the same question with regard to the BGADD. For this section sustainability was defined as the following:

“Meeting the needs of the present without compromising the ability of future generations to meet their own needs.” (E.P.A. 2009)

Respondents were given five choices:

Excellent Good Fair Poor Don't Know

These choices were given points to assist with numerical analysis: Excellent (4 points), Good (3 points), Fair (2 points), Poor (1 point), Don't Know (0 points). The response allocations can be found in Exhibit 2.1. From analysis it can be deduced that sustainability is viewed as being "Fair" locally and "Good" regionally. In hopes of better understanding why respondents selected their answer, an open-ended question was asked for respondents to explain their answer.

A. In your opinion, how would you rate the sustainability of your community?

| Exhibit 2.1 Responses for Sustainability Ranking | | |
|---|---------------------------------|-------------------------------------|
| How sustainability was rated: | Community Response Count | Bluegrass ADD Response Count |
| Excellent (4 points) | 1 | 3 |
| Good (3 points) | 20 | 24 |
| Fair (2 points) | 22 | 16 |
| Poor (1 point) | 4 | 3 |
| Mean | 2.38 | 2.59 |
| # of Responses | 47 | 46 |

Note: Excellent (4 pts), Good (3 pts), Fair (2 pts), Poor (1 pt), Don't Know (0 pts)

The open-ended questions for the community and the region can be themed into two categories:

- 1) *The community/BGADD is not doing enough.* For this category, respondents said things like:
 - a. "[Our county] has a difficult time meeting the needs of the present let alone the future"
 - b. "Farmland/rural areas shrinking; water and air quality not protected enough"
 - c. "Need to steer more projects to align with sustainable philosophies"
- 2) *The community/BGADD is presently stable.* For this category, respondents said things like:
 - a. "No negative trends in this area, but no positive trends either"
 - b. "We're not prone to start things that have no long term purpose and cannot be sustained in the future"

The open ended questions have given insight into what respondents believed to be their current sustainability status. From a review of the responses it can be assessed that there were not any that gave a glowing review for either the community or the BGADD. For the most part, responses were either very critical of the status quo or pointed out that the community has sustained itself up to this point.

In the final portion of Section 2, respondents were asked to rank sustainability indicators:

- **Environmental Health:** Air, Water, and Soil Quality, Green Infrastructure
- **Preparedness for Natural Hazards:** Floodplain Management, Fires
- **Community Character:** Authentic Development Patterns, Community Aesthetics
- **Mobility & Transportation:** Parking, Pedestrian Systems, Transit
- **Energy:** Renewable Energy (Solar, Wind, Hydro), Efficiency & Conservation
- **Housing:** Affordable Housing, Diverse Housing, Accessibility (RMLUI 2006)

These indicators are among the key areas of interest in addressing sustainability as determined by the RMLUI. The Director of the Bluegrass Regional Planning Council, in cooperation with staff, have designated the areas listed above as key measures for assessing sustainability of a community and region. The intent of this section is to identify how each of these measures is perceived on a local and regional scale to assist with developing an approach to be taken by the BRPC in researching for and implementing a sustainable development code. The results for the community and region can be found in Exhibit 2.2.

Exhibit 2.2

C. As you understand them, please rank the following issues in terms of importance to your community (your constituents). The ranking should run from 1 (most important) to 6 (least important):

| Results of the Ranking of Importance of Sustainability Measures | | | | |
|--|-----------------------|----------------|-----------------------|----------------|
| Sustainability Measure | Community | | Bluegrass ADD | |
| | Mean (Ranking) | St. Dev | Mean (Ranking) | St. Dev |
| Housing | 2.979 (1) | 1.612 | 2.875 (2) | 1.412 |
| Environment | 3.189 (2) | 1.623 | 2.688 (1) | 1.675 |
| Character | 3.192 (3) | 1.801 | 3.458 (5) | 1.897 |
| Nat. Hazard | 3.255 (4) | 1.867 | 3.458 (5) | 1.766 |
| Transportation | 3.574 (5) | 1.455 | 3.354 (4) | 1.554 |
| Energy | 3.83 (6) | 1.576 | 3.313 (3) | 1.589 |
| Number of Responses | 47 | | 48 | |

Note: Rank 1: Most Important; Rank 6: Least Important

As shown in Exhibit 2.2, community housing was the most important measure for respondents with energy and transportation found to be the least important. Examination of the measures from a regional perspective changed how items were ranked. The environment was the top ranked measure for the BGADD, followed by housing which was a swapping of the top two community measures. The current economic status of the country and the large number of home foreclosures most likely influenced how respondents ranked these measures and resulted in greater interest in housing than might have otherwise been expected. It should be noted that community character

was ranked third locally but ranked fifth regionally. Energy, which was ranked last locally, was ranked third regionally. Further analysis should be conducted to determine the potential causes in the changing of priority and importance from the community to the region level.

Section 3: General Background

Quick Facts:

- 64% of respondents were over the age of 50
- 76% of respondents were males
- 58% of respondents have earned a college degree or more
- 26.5% response rate from elected officials
- 40% of respondents had been in their current position 0-4 years

The general background section of the survey was used to gather information about the respondents to understand who exactly had filled out the questionnaire. It was found that respondents varied in age, with the most prominent being those in

| AGE | % | # |
|-------|------|----|
| 23-34 | 8.0 | 4 |
| 35-49 | 24.0 | 12 |
| 50-64 | 40.0 | 20 |
| 65+ | 24.0 | 12 |

50-64 age group at 40% of all respondents (Exhibit 3.1). Age groups were broken down into the following ranges:

- 23-34 yrs Young adults most commonly building a family or a career
- 35-49 yrs Adults who have an established career
- 50-64 yrs Adults nearing retirement age and/or have grown children
- 65+ yrs Adults of retirement age

It was found that the majority of the respondents (76%) were male. This could possibly be attributed to the fact that few women actually received the survey. As for the race of the respondents, over 90% were white. These characteristics of race and gender are both a reflection of the overall racial demographics of the BGADD. The question asking the level of education achieved by respondents was selected to determine if respondent education played any role in how sustainability would be prioritized and what measures were deemed to be the most important to the process (Exhibit 3.2). Respondent education levels varied, with 58% of respondents having at least a college degree and 78% with at least some college experience.

| Education Level | % | # |
|---------------------------|------|----|
| Advanced Degree | 26.0 | 13 |
| College Degree | 32.0 | 16 |
| High School or Equivalent | 16.0 | 8 |
| Some College | 20.0 | 10 |
| NR | 6.0 | 3 |

The BRPC is representative of both city and county planning commissions, which often deal with differing projects, as one is rural, and the other is

more urban (Exhibit 3.3). The entity or area of representation question was selected because city and the county would have likely have differences in how they assess the needs of the community. Counties would more likely focus on the rural environment, while cities would focus on more urban needs of its constituents and the services which should be provided.

| Exhibit 3.3 Area of Representation | | |
|---------------------------------------|------|----|
| Representative of: | % | # |
| City | 44.0 | 22 |
| County | 36.0 | 18 |
| City/County | 10.0 | 5 |
| Region | 2.0 | 1 |
| State | 2.0 | 1 |
| NR | 6.0 | 3 |

More respondents were from the cities (44%) than the counties of the BGADD.

| Exhibit 3.4 How respondents got current position | | |
|---|------|----|
| Position | % | # |
| Appointed | 36.0 | 18 |
| Elected | 28.0 | 13 |
| Other | 28.0 | 13 |
| NR | 8.0 | 4 |

Staff thought it would be important to determine how respondents earned their current position, whether they were elected, appointed, or hired (Exhibit 3.4). It should be noted that 13 of the 50 respondents were elected officials. That translates to

a 26.5% response rate among elected executive branch officials within the Bluegrass Area

Development District, as 33 mayors and 16 judge-executives received this survey.

Another item of interest for staff was the tenure of the respondents in their current position and whether that would influence how respondents answered the questions of the survey (Exhibit 3.5).

| Exhibit 3.5 Tenure in Current Position | | |
|---|------|----|
| Years in Current Position | % | # |
| 0-4 | 40.0 | 20 |
| 5-8 | 14.0 | 7 |
| 9-12 | 10.0 | 5 |
| 13+ | 26.0 | 13 |
| NR | 8.0 | 4 |

Nearly 40% of respondents were new to their position within the last four years. The tenure of the respondents seemed to have influenced whether or not they responded, as the majority of

| Exhibit 3.6 Personal Political Views | | |
|---|------|----|
| Political Ideas | % | # |
| Very Liberal | 4.0 | 2 |
| Liberal | 14.0 | 7 |
| Moderate | 44.0 | 22 |
| Conservative | 28.0 | 14 |
| Very Conservative | 4.0 | 2 |

respondents were found in the outliers 0-4 years and 13+ years.

The survey then examined the political party of the respondents to see if there would be a relationship in types of answers and the political party, which the respondents were affiliated. It was found that 25 of the 50 respondents were Democrat. The survey then went on to ask about the political

views of the respondents and whether or not the respondent was liberal, conservative, or moderate. For this question, the choice of moderate was most popular at 22 of the 50 respondents (Exhibit 3.6). Staff found it interesting that moderate was most commonly selected because political party affiliation often leads to stereotyping of liberal or conservative and the survey showed that a significant portion of the Democrat respondents were more moderate in their political beliefs than was to be expected.

By gathering this background information from respondents, not only is BRPC staff able to understand who responded but also able to analyze the information in comparison to other responses gathered and determine if there are relationships are based on the background information.

Regression Analysis

Quick Facts:

- *No correlation among general background information (independent variables)*
- *A respondent's age influenced how important they believed sustainability to be locally and regionally. As the age of the respondent increased, the importance of sustainability decreased.*
- *Tenure of respondent in their current position influenced how they perceived the sustainability of their community and the BGADD. As tenure of the respondent increased the perception of the quality of sustainability increased (i.e. Good → Excellent)*

The following section is an overview of the results that were generated after 18 separate regression analyses were performed to identify relationships between respondents' answers in regards to sustainability and the general background information they provided.

Independent Variables

The independent variables used in the regression analysis performed are the general background information provided by the respondents in Section 3 of the survey. The ten variables are as follows: age, gender, race, level of education, income, jurisdiction of representation, placement, tenure in current position, political party, and personal political views.

The independent variables for the analysis are being defined as:

Age is the age of respondent

Sex is the gender of the respondent

Race is the dummy variable denoting if the respondent was African American

Education is level of education achieved by the respondent

Income is the level of income of the respondent

Rep is a dummy variable denoting if the respondent represented a city

Placement is the dummy variable denoting if the respondent was elected to their position

Years is the number of years respondent has been in their current position

Party is the dummy variable denoting if the respondent is a Democrat

Politics measures how liberal or conservative a respondent the respondent was.

For information on how the data for each independent variable was numerically input into the regression see Appendix 1.

The same sets of variables were used for each regression run throughout the analysis. Due to the large number of independent variables, an attempt was made to consolidate variable types based on correlation. Table 2.1 contains a correlation matrix, which can be used to identify correlations in variables. From the correlation matrix, it can be deduced that there are not any strong relationships among independent variables found in this study. It was believed that variables such as income and education would be closely correlated; however, this was found to not be the case. A possible reason for this might be due to the income breakdown used in the survey. The income ranges were general and only broken down into three ranges: (1) under \$25,000, (2) \$25,000 to \$40,000, and (3) over \$40,000. The lack of additional breakdowns for respondents of higher income brackets may have limited the information gathered for this variable.

| Table 2.1 Correlation Matrix of Independent Variables | | | | | | | | | | |
|--|-------------|-------------|-------------|-------------|---------------|-------------|------------------|-------------|--------------|-----------------|
| Independent Variables | AGE | Sex | Race | EDU | Income | REP | Placement | Yrs | Party | Politics |
| AGE | 1.00 | | | | | | | | | |
| Sex | 0.29 | 1.00 | | | | | | | | |
| Race | 0.04 | -0.11 | 1.00 | | | | | | | |
| EDU | -0.11 | -0.05 | -0.01 | 1.00 | | | | | | |
| Income | -0.05 | -0.12 | 0.11 | -0.20 | 1.00 | | | | | |
| REP | -0.38 | -0.45 | -0.06 | 0.08 | 0.07 | 1.00 | | | | |
| Placement | -0.31 | -0.25 | 0.10 | 0.21 | 0.08 | 0.28 | 1.00 | | | |
| Yrs | 0.35 | -0.08 | -0.05 | -0.24 | -0.03 | -0.06 | 0.25 | 1.00 | | |
| Party | 0.09 | 0.06 | 0.21 | 0.19 | 0.22 | -0.29 | 0.09 | 0.06 | 1.00 | |
| Politics | 0.13 | 0.21 | -0.05 | -0.04 | -0.23 | -0.27 | -0.26 | -0.01 | 0.38 | 1.00 |

Dependent Variables

The dependent variables and the results of the regression analyses for this study will be explained and shown in the following section.

Community Ranking of Sustainability (Appendix 2.1)

This regression analysis investigated the relationship between the independent variables and the ranking of sustainability in the community. The dependent variable used in this regression model is the ranking that was given to sustainability by respondents.

Results of Analysis (Table 2.2):

Where Sustainability Ranking_{community} is how sustainability is ranked locally

$$\text{Sustainability Ranking}_{\text{community}} = \beta_0 + \beta_1 \text{age} + \beta_2 \text{sex} + \beta_3 \text{race} + \beta_4 \text{education} + \beta_5 \text{income} - \beta_6 \text{rep} + \beta_7 \text{placement} + \beta_8 \text{years} + \beta_9 \text{party} + \beta_{10} \text{politics}$$

Table 2.2 Community Ranking of Sustainability

| ID | Coefficients | Standard Error | t Stat | P-value |
|------------------------------|--------------|----------------|-----------|---------|
| Intercept | 0.521 | 4.718 | 0.110 | 0.913 |
| AGE | 0.167 | 0.648 | 0.257 | 0.799 |
| Sex | 0.641 | 1.323 | 0.484 | 0.633 |
| Race | 0.443 | 2.819 | 0.157 | 0.877 |
| EDU | -0.087 | 0.500 | -0.175 | 0.863 |
| Income | 2.106 | 1.415 | 1.488 | 0.150 |
| REP | -1.886* | 1.081 | -1.746 | 0.094 |
| Placement | -0.233 | 1.221 | -0.190 | 0.851 |
| Yrs | -0.350 | 0.429 | -0.814 | 0.424 |
| Party | -1.327 | 1.258 | -1.055 | 0.302 |
| Politics | 1.008 | 0.727 | 1.386 | 0.179 |
| <i>Regression Statistics</i> | | | ***p< .01 | |
| Multiple R | 0.54 | | **p<.05 | |
| R Square | 0.30 | | *p<.1 | |
| Adjusted R Square | -0.01 | | | |
| Standard Error | 2.62 | | | |
| Observations | 34 | | | |

Table 2.2 shows that only one variable is significant: REP at the 0.1 level. REP is a variable that looks at the jurisdiction of representation by the respondent. The results of the model show that if the respondent is not a representative from a city there will be a 1.886 improvement in the ranking of sustainability. Based on logical reasoning it does not seem that the results gathered should be considered significant because the analysis did not look at each individual representative type. The way the analysis was constructed it merely compared city representatives to everyone else (county, region, state). Further analysis should be done to specify exactly which representatives were more inclined to give sustainability a higher ranking rather than comparing city representatives against all other representatives. All other variables tested were found not to be significant at any level and thus have no effect on how a respondent ranked sustainability in their community.

For the remainder of dependent variables the tables used for interpretation can be found in the Appendix:

Regional Ranking of Sustainability (Appendix 2.2)

The dependent variable that was used in this regression model analyzing the prioritization of sustainability of the BGADD was the ranking given to sustainability by respondents (i.e. Most

Important=1; Least Important=9). The regression identified no variable coefficients significant at any level. This indicates that the independent variables have no impact on how respondents ranked sustainability amongst other policy issues for the BGADD.

Sustainability Importance on a community level (Appendix 2.3)

The dependent variable that was used in the regression model analyzing the community rating of sustainability importance is the rating that was given to sustainability by respondents. When observing the importance of this section, it should be remembered that the higher the ranking the more important the policy issue is to the respondents (i.e. Very Important=4; Not at all Important=1). This model showed that there are two variables that are significant, AGE and REP, at the 0.05 level. It was found that as the age bracket of respondent increases the importance of sustainability decreases by 0.34 points. It was also found that if the respondent is not a representative of a city that there will be an increase in the ranking of 0.6251 points. Once again, distinguishing between representing a city and all other jurisdictions without further analysis of each independent area of representation does not supply any significant information. All other variables are not significant at any level, thus having no effect on the importance of improved sustainability to respondents.

Sustainability Importance on a Regional Level (Appendix 2.4)

The dependent variable used in the regression model analyzing the regional rating of sustainability importance by respondents. According to the model, the coefficient for the AGE variable is the only significant variable at the 0.1 level. As the respondents' age bracket increases, their view of the importance of improving sustainability decreased by 0.494 points, the same result as was found on the local level. It intuitively makes sense that older respondents see sustainability as less important because the 64% of respondents over the age of 50 are nearing retirement and are at an age where their children should be full grown. It might be possible that the benchmark from which older respondents answered the question would be of one of experience and the belief that region has sustained them to this point in their lives. Whereas, younger respondents will not have the life experience to benchmark the sustainability of the region and are looking to the future. It should be noted that this is just an assumption and could be a possible area of future research. It should be mentioned that the race variable did not compute due to lack of variance in races as all respondents were non-African American.

Perception of Community Sustainability (Appendix 2.5)

The dependent variable used in the regression model analyzing the rating given to the community for sustainability by the respondents. For this question the higher the number the better the

perception of sustainability in community (i.e. Excellent=4; Poor=1). It was found that the variable coefficient for Yrs was significant at the 0.1 level. Yrs refers to the tenure of respondent in their current position and as the tenure bracket increases there is an increase in 0.204 points closer to an Excellent status. Thus, respondents who were longer tenured believed that their community was more sustainable. A possible reason for this outcome is that longer tenured respondents are basing their answer on past experience. Whereas respondents with shorter tenures do not have the experience and are less complacent with the status quo and are looking more towards the future. This is an area that should be further investigated.

Perception of Regional Sustainability (Appendix 2.6)

The dependent variable used in the regression model analyzing the rating given to the region for sustainability by the respondents. Three variable coefficients were found to be significant in this model. Education and Income were both significant at the 0.1 level and the variable coefficient Yrs was significant at the .05 level. As education and income increase, the perception of sustainability locally decreases 0.195 points for education and 0.593 points for income. Respondents with more education may take a more critical view of the status quo and are more inclined to see the need for improvement as they might be more aware of critical issues facing the region. However, this is just an assumption; more research will need to be conducted. As tenure increases in the position there is a .246 increase in sustainability. Again, tenure may have a complacency effect on respondents and thus they deem that the region is sustainable because it has been in the past.

Sustainability Measures (Appendix 2.7 & 2.8)

The dependent variable(s) used in the regression model analyzing the prioritization of sustainability measures for the community is the ranking that were given to each individual measure by respondents.

Sustainability Measures:

- **Environmental Health:** Air, Water, and Soil Quality, Green Infrastructure
- **Preparedness for Natural Hazards:** Floodplain Management, Fires
- **Community Character:** Authentic Development Patterns, Community Aesthetics
- **Mobility & Transportation:** Parking, Pedestrian Systems, Transit
- **Housing:** Affordable Housing, Diverse Housing, Accessibility
- **Energy:** Renewable Energy (Solar, Wind, Hydro) Efficiency & Conservation

Note: Measures were ranked one through six. Most Important=1; Least Important=6

After conducting a regression analysis for each sustainability measure for both the BGADD (the “region”) and the community, only three measures were shown to have significant coefficients:

- 1) The *Region Mobility & Transportation* model shows that two variables, AGE and REP, are significant (Appendix 2.84). AGE is significant at the 0.05 level and REP is

significant at the 0.1 level. According to the AGE coefficient, as the age of the respondent increases, the ranking of the mobility and transportation decreases by 0.803, signifying that mobility and transportation became less important in comparison to other measures as the age bracket of the respondent increases. This result may be a result from noise in the data, the small number of respondents and the large number of variables. It was found that if a respondent was not a representative of a city, the ranking of mobility and transportation decreased by 1.237. Therefore, city respondents were more inclined to rank mobility and transportation more importantly among other sustainability measures. For representatives not from a city there was a decrease of 1.237 in ranking. This result may have occurred due to the defining of mobility and transportation which focused on the issues of parking, pedestrian systems, and transit which are typically thought of as more city issues. Again, this result may be an area that can be investigated in more in depth.

- 2) The model for *Community Energy* found that only one variable coefficient is significant and that is REP at the 0.1 level (Appendix 2.75). Therefore, if a respondent was not a representative of city there was a decrease in the ranking of energy among all other measures by 1.423. Noise in the data may have caused this result, as there is a large number of independent variables being tested for and the small size of the sample. Thus, the findings generated by the model should be ignored because there does not seem to be logical reason as to why non-city respondents would prioritize energy lower than city respondents.
- 3) The model found that non-elected respondents would rank *Regional Housing* 1.205 higher (more important) than elected respondents (Appendix 2.86). The variable for Placement is significant at the 0.1 level. The ranking of housing may have been influenced by current economic situation that has resulted in a large number of home foreclosures. Elected officials from the city and county may perceive the housing crisis as a local problem that is being dealt with on a federal level and that they do not have the authority to address this problem. Whereas, the other measures can be directly influenced by local elected officials. More research will need to be done in this area to confirm this assumption.

For the three measures listed above, more in-depth analysis should be conducted to determine possible causality for each result. All other sustainability measures both for the community and

the BGADD were found to have no significant coefficients. The small sample size and the large number of independent variables may have influenced the low number of significant variable coefficients found in analysis.

Barriers to Success

Elements of the research process may have been jeopardized due to time constraints, specifically, the pretesting of questions and survey distribution and collection.

Pretesting

In consideration of time constraints, the pretest was performed internally through BRPC staff to provide feedback on the clarity and quality of the survey questions. With prior knowledge of the issues involved, the BRPC staff would not have participated in the pretest with the objectivity of an actual respondent. Therefore, pretesting results would be more representative of the views of survey respondents if done externally. A major flaw in the design of the survey was a failure to define policy issues, particularly with ranking the issues and determining their importance.

Definitions were intentionally omitted from the survey in an attempt to get responses based on a general understanding of each category. Some recipients' provided feedback indicating that definitions would have been helpful, for example:

“This survey makes no sense. To say for example, that "health" is more or less important than "education" is not possible. They are all different and important aspects of our community. One should not be advanced at the expense of the others. Furthermore, the phrases are too vague. For example what is meant by "environment" or "sustainability"? These are very broad terms and mean different things to different people. I do not see how these can be ranked - one against the other....”-Respondent

Again, with BRPC staff having prior knowledge of the issues, the pretest did not reveal this to be a flaw in the design of the survey.

Having respondents define sustainability in their own terms was omitted from the questionnaire after the internal pretest. However, after gathering responses, BRPC staff felt it was the wrong decision to omit said question as it would have given staff an understanding of what the respondents believed sustainability to mean to them. The value in this question lies in the ambiguous understanding of sustainability as a word and its usage in describing a process or field of work. Thus, portions of the survey are vulnerable to measurement error, “the result of poor question wording or questions being presented in such a way that inaccurate or uninterpretable answers are obtained”(Dillman 2000). Pretesting and validating questions are important when administering a survey in order to ensure that the survey will yield valid results. Thus, improving

this process would have improved the formatting of the questions, ultimately generating more quality data and a more efficient and effective method of data collection. In summation, a better pretest would have been beneficial because it would have helped BRPC to create a survey that would have yielded more valid and thus valuable responses.

Survey Distribution and Collection

Time was a significant determinant in selecting the method of survey distribution and therefore email was used. However, if BRPC staff had the luxury of time, surveys could have distributed in person at the bi-monthly TRC and NREPC meetings to yield a higher return rate. The survey could also have been distributed to a substantial number of local elected officials who are on the Board of Directors of the BGADD at their quarterly meetings. Another timing issue was the one week window for survey responses. Perhaps if there was a larger window for response time survey, recipients would have filled out and returned surveys.

The Directors of the BRPC, TRC, and NREPC all work for the BGADD and better internal communication among committee staffs would have allowed for greater response rates, as the Directors of each of these committees might have been able to provide notification to the recipients that a survey would be coming shortly and give reasoning behind the survey which might have resulted in greater response rates. This undoubtedly would have been a better course of action for notifying potential respondents rather than using email.

For this particular study, further analysis could have been conducted focusing on statistically significant bivariate relationships and possibly running a stepwise regression to determine the strength of relationships in dependent and independent variables. The strict confines of time did not allow for further investigation into these areas.

Conclusion

Upon completing data collection and analysis, it is apparent that the research conducted should serve as a pilot study for future inquiry into the policy issue of sustainability. Although there may be flaws in the research design, the finding that sustainability is the least important policy issue both locally and regionally is relevant. This shows that sustainability regardless of how people understand it is not among the top priorities for local officials. BRPC staff should use this information to develop research materials to demonstrate that sustainable development is a policy issue that needs to be addressed and provide methods of improvement and guidelines for implementation.

It was also valuable to find that ‘improved sustainability’ was IMPORTANT to respondents, as it suggests that a sustainable development code can be aligned with this finding in its application. When given a specific definition of sustainability, respondents believed community and regional sustainability to be considered as FAIR and GOOD by respondents with very few outliers. This shows that there is room for improvement and that is something that might be remedied by the sustainable development code, which could progress the perception and understanding of sustainability. The ranking of sustainable measures will be beneficial to BRPC staff, as it will focus our approach in researching and promoting sustainability issues locally and regionally. Thus, the findings of the survey will be useful in both the creation and implementation processes of a sustainable development code. To reiterate, the research conducted can also serve as a pilot study for future research into gauging interest and perception of sustainable development in the BGADD.

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Appendix

Appendix 1

1.1 Age is the age of respondent

| Ages | # Assigned |
|-------------|-------------------|
| 25-34 | 0 |
| 35-49 | 1 |
| 50-64 | 2 |
| 65+ | 3 |

1.2 Sex is the gender of the respondent

| Gender | # Assigned |
|---------------|-------------------|
| Female | 0 |
| Male | 1 |

1.3 Race is the dummy variable denoting if the respondent was African American

| Race | # Assigned |
|------------------|-------------------|
| African American | 0 |
| Hispanic | 1 |
| White | 1 |

1.4 Education is level of education achieved by the respondent

| Level of Education | # Assigned |
|---------------------------|-------------------|
| High School | 0 |
| Some college | 1 |
| College | 2 |
| Advanced | 3 |

1.5 Income is the level of income of the respondent

| Income | # Assigned |
|---------------|-------------------|
| <25,000 | 0 |
| 25,000-40,000 | 1 |
| 40,000+ | 2 |

1.6 Rep is a dummy variable denoting if the respondent represented a city

| Rep | # Assigned |
|-------------|-------------------|
| City | 0 |
| County | 1 |
| City/County | 1 |
| Region | 1 |
| State | 1 |

1.7 Placement is the dummy variable denoting if the respondent was elected to their position

| Placement | # Assigned |
|------------------|-------------------|
| Elected | 0 |
| Appointed | 1 |
| Other | 1 |

1.8 Years is the number of years respondent has been in their current position

| Years at Position | # Assigned |
|--------------------------|-------------------|
| 0-4 | 0 |
| 5-8 | 1 |
| 9-12 | 2 |
| 13+ | 3 |

1.9 Party is the dummy variable denoting if the respondent is a Democrat

| Party | # Assigned |
|--------------|-------------------|
| Democrat | 0 |
| Republican | 1 |
| Other | 1 |

1.10 Politics measures how liberal or conservative a respondent the respondent was.

| Politics | # Assigned |
|-------------------|-------------------|
| Very Liberal | 0 |
| Liberal | 1 |
| Moderate | 2 |
| Conservative | 3 |
| Very Conservative | 4 |

Appendix 2

Regression Analysis

2.1 Community Prioritization of Sustainability

Dependent Variable

The dependent variable used in this regression model analyzing the prioritization of sustainability of the community is the ranking that was given to sustainability by respondents.

Where Sustainability Ranking_{community} is how sustainability is ranked locally

$$\text{Sustainability Ranking}_{\text{community}} = \beta_0 + \beta_1 \text{age} + \beta_2 \text{sex} + \beta_3 \text{race} + \beta_4 \text{education} + \beta_5 \text{income} - \beta_6 \text{rep} + \beta_7 \text{placement} + \beta_8 \text{years} + \beta_9 \text{party} + \beta_{10} \text{politics}$$

The Results of Analysis:

Community Ranking of Sustainability

| ID | Coefficients | Standard Error | t Stat | P-value |
|------------------------------|--------------|----------------|-----------|---------|
| Intercept | 0.521 | 4.718 | 0.110 | 0.913 |
| AGE | 0.167 | 0.648 | 0.257 | 0.799 |
| Sex | 0.641 | 1.323 | 0.484 | 0.633 |
| Race | 0.443 | 2.819 | 0.157 | 0.877 |
| EDU | -0.087 | 0.500 | -0.175 | 0.863 |
| Income | 2.106 | 1.415 | 1.488 | 0.150 |
| REP | -1.886* | 1.081 | -1.746 | 0.094 |
| Placement | -0.233 | 1.221 | -0.190 | 0.851 |
| Yrs | -0.350 | 0.429 | -0.814 | 0.424 |
| Party | -1.327 | 1.258 | -1.055 | 0.302 |
| Politics | 1.008 | 0.727 | 1.386 | 0.179 |
| <i>Regression Statistics</i> | | | | |
| Multiple R | 0.54 | | ***p< .01 | |
| R Square | 0.30 | | **p<.05 | |
| Adjusted R Square | -0.01 | | *p<.1 | |
| Standard Error | 2.62 | | | |
| Observations | 34 | | | |

2.2 Regional Ranking of Sustainability

Dependent Variable:

The dependent variable that was used in the regression model analyzing the prioritization of sustainability of the region is the ranking that was given to sustainability by respondents.

$$\text{Sustainability Ranking}_{\text{Region}} = \beta_0 + \beta_1 \text{age} + \beta_2 \text{sex} + \beta_3 \text{race} - \beta_4 \text{education} + \beta_5 \text{income} - \beta_6 \text{rep} + \beta_7 \text{placement} - \beta_8 \text{years} - \beta_9 \text{party} + \beta_{10} \text{politics}$$

Age is the age of respondent

Sex is the gender of the respondent

Race is the dummy variable denoting if the respondent was African American

Education is level of education achieved by the respondent

Income is the level of income of the respondent

Rep is a dummy variable denoting if the respondent represented a city

Placement is the dummy variable denoting if the respondent was elected to their position

Years is the number of years respondent has been in their current position

Party is the dummy variable denoting if the respondent is a Democrat

Politics measures how liberal or conservative a respondent the respondent was.

When observing the ranking for this section it is important to remember that the lower ranking the more important the policy is to the respondents (i.e. Most Important=1; Least Important=9)

Regional Ranking of Sustainability

| | <i>Coefficients</i> | <i>Standard Error</i> | <i>t Stat</i> | <i>P-value</i> |
|------------------------------|---------------------|-----------------------|---------------|----------------|
| Intercept | 2.409 | 5.013 | 0.481 | 0.635 |
| AGE | 0.862 | 0.689 | 1.252 | 0.223 |
| Sex | -0.979 | 1.406 | -0.696 | 0.493 |
| Race | -0.193 | 2.996 | -0.064 | 0.949 |
| EDU | -0.225 | 0.531 | -0.424 | 0.676 |
| Income | 1.989 | 1.504 | 1.323 | 0.199 |
| REP | -1.497 | 1.148 | -1.304 | 0.205 |
| Placement | -0.792 | 1.298 | -0.610 | 0.548 |
| Yrs | 0.064 | 0.456 | 0.140 | 0.890 |
| Party | -1.558 | 1.336 | -1.166 | 0.255 |
| Politics | 0.590 | 0.773 | 0.763 | 0.453 |
| <i>Regression Statistics</i> | | | ***p< .01 | |
| Multiple R | 0.533 | | **p<.05 | |
| R Square | 0.284 | | *p<.1 | |
| Adjusted R Square | -0.027 | | | |
| Standard Error | 2.786 | | | |
| Observations | 34 | | | |

2.3 Sustainability Importance on a community level

Dependent Variable

The dependent variable that was used in the regression model analyzing the community rating of sustainability importance is the rating that was given to sustainability by respondents.

$$\text{Sustainability Importance}_{\text{community}} = \beta_0 + \beta_1 \text{age} + \beta_2 \text{sex} + \beta_3 \text{race} + \beta_4 \text{education} + \beta_5 \text{income} + \beta_6 \text{rep} + \beta_7 \text{placement} + \beta_8 \text{years} + \beta_9 \text{party} + \beta_{10} \text{politics}$$

Age is the age of respondent

Sex is the gender of the respondent

Race is the dummy variable denoting if the respondent was African American

Education is level of education achieved by the respondent

Income is the level of income of the respondent

Rep is a dummy variable denoting if the respondent represented a city

Placement is the dummy variable denoting if the respondent was elected to their position

Years is the number of years respondent has been in their current position

Party is the dummy variable denoting if the respondent is a Democrat

Politics measures how liberal or conservative a respondent the respondent was.

Sustainability Importance on a Community Level

| | <i>Coefficients</i> | <i>Standard Error</i> | <i>t Stat</i> | <i>P-value</i> |
|------------------------------|---------------------|-----------------------|---------------|----------------|
| Intercept | 2.2975 | 1.1706 | 1.9626 | 0.0619 |
| AGE | -0.3481** | 0.1608 | -2.1648 | 0.0410 |
| Sex | -0.3344 | 0.3283 | -1.0186 | 0.3190 |
| Race | 0.6106 | 0.6996 | 0.8729 | 0.3918 |
| EDU | -0.2081 | 0.1241 | -1.6773 | 0.1070 |
| Income | 0.1620 | 0.3511 | 0.4612 | 0.6490 |
| REP | 0.6251** | 0.2681 | 2.3312 | 0.0289 |
| Placement | 0.0968 | 0.3031 | 0.3193 | 0.7524 |
| Yrs | 0.0211 | 0.1066 | 0.1979 | 0.8448 |
| Party | -0.2705 | 0.3121 | -0.8669 | 0.3950 |
| Politics | 0.2632 | 0.1804 | 1.4586 | 0.1582 |
| <i>Regression Statistics</i> | | | ***p< .01 | |
| Multiple R | 0.740 | | **p<.05 | |
| R Square | 0.548 | | *p<.1 | |
| Adjusted R Square | 0.351 | | | |
| Standard Error | 0.651 | | | |
| Observations | 34 | | | |

2.4 Sustainability Importance on a regional level

Dependent Variable

The dependent variable used in the regression model analyzing the regional rating of sustainability importance by respondents.

$$\text{Sustainability Importance}_{\text{Region}} = \beta_0 + \beta_1 \text{age} + \beta_2 \text{sex} + \beta_3 \text{race} + \beta_4 \text{education} + \beta_5 \text{income} + \beta_6 \text{rep} + \beta_7 \text{placement} + \beta_8 \text{years} + \beta_9 \text{party} + \beta_{10} \text{politics}$$

Age is the age of respondent

Sex is the gender of the respondent

Race is the dummy variable denoting if the respondent was African American

Education is level of education achieved by the respondent

Income is the level of income of the respondent

Rep is a dummy variable denoting if the respondent represented a city

Placement is the dummy variable denoting if the respondent was elected to their position

Years is the number of years respondent has been in their current position

Party is the dummy variable denoting if the respondent is a Democrat

Politics measures how liberal or conservative a respondent the respondent was.

Sustainability Importance on a Regional Level

| ID | Coefficients | Standard Error | t Stat | P-value |
|-----------|---------------------|-----------------------|---------------|----------------|
| Intercept | 1.7972 | 1.3207 | 1.3608 | 0.1951 |
| AGE | -0.4935* | 0.2549 | -1.9359 | 0.0733 |
| Sex | 0.8261 | 0.6765 | 1.2210 | 0.2422 |
| Race | N/A | N/A | N/A | N/A |
| EDU | 0.0565 | 0.1914 | 0.2951 | 0.7723 |
| Income | 0.4289 | 0.5641 | 0.7604 | 0.4596 |
| REP | 0.5656 | 0.3968 | 1.4254 | 0.1760 |
| Placement | -0.0353 | 0.4421 | -0.0798 | 0.9375 |
| Yrs | 0.1570 | 0.1462 | 1.0736 | 0.3012 |
| Party | -0.2657 | 0.4803 | -0.5532 | 0.5889 |
| Politics | 0.0712 | 0.3158 | 0.2254 | 0.8249 |

Regression Statistics

| | | |
|-------------------|-------|-----------|
| Multiple R | 0.663 | ***p< .01 |
| R Square | 0.440 | **p<.05 |
| Adjusted R Square | 0.008 | *p<.1 |
| Standard Error | 0.815 | |
| Observations | 24 | |

2.5 Perception of Community Sustainability

Dependent Variable

The dependent variable used in the regression model analyzing the rating given to the community for sustainability by the respondents.

$$\text{Sustainability Rating}_{\text{community}} = \beta_0 + \beta_1 \text{age} + \beta_2 \text{sex} + \beta_3 \text{race} + \beta_4 \text{education} + \beta_5 \text{income} + \beta_6 \text{rep} + \beta_7 \text{placement} + \beta_8 \text{years} + \beta_9 \text{party} + \beta_{10} \text{politics}$$

Age is the age of respondent

Sex is the gender of the respondent

Race is the dummy variable denoting if the respondent was African American

Education is level of education achieved by the respondent

Income is the level of income of the respondent

Rep is a dummy variable denoting if the respondent represented a city

Placement is the dummy variable denoting if the respondent was elected to their position

Years is the number of years respondent has been in their current position

Party is the dummy variable denoting if the respondent is a Democrat

Politics measures how liberal or conservative a respondent the respondent was.

Perception of Community Sustainability

| | <i>Coefficients</i> | <i>Standard Error</i> | <i>t Stat</i> | <i>P-value</i> |
|------------------------------|---------------------|-----------------------|---------------|----------------|
| Intercept | 2.656 | 1.257 | 2.113 | 0.046 |
| AGE | -0.018 | 0.166 | -0.109 | 0.914 |
| Sex | -0.456 | 0.339 | -1.344 | 0.193 |
| Race | -0.022 | 0.733 | -0.031 | 0.976 |
| EDU | -0.078 | 0.129 | -0.608 | 0.550 |
| Income | -0.080 | 0.368 | -0.217 | 0.830 |
| REP | 0.097 | 0.276 | 0.351 | 0.729 |
| Placement | -0.478 | 0.320 | -1.493 | 0.150 |
| Yrs | 0.204* | 0.113 | 1.799 | 0.086 |
| Party | 0.302 | 0.338 | 0.892 | 0.382 |
| Politics | 0.116 | 0.200 | 0.580 | 0.568 |
| <i>Regression Statistics</i> | | | ***p< .01 | |
| Multiple R | 0.610 | | **p<.05 | |
| R Square | 0.372 | | *p<.1 | |
| Adjusted R Square | 0.087 | | | |
| Standard Error | 0.668 | | | |
| Observations | 33 | | | |

2.6 Perception of Regional Sustainability

Dependent Variable

The dependent variable used in the regression model analyzing the rating given to the region for sustainability by the respondents.

$$\text{Sustainability Rating}_{\text{Region}} = \beta_0 + \beta_1 \text{age} + \beta_2 \text{sex} + \beta_3 \text{race} + \beta_4 \text{education} + \beta_5 \text{income} + \beta_6 \text{rep} + \beta_7 \text{placement} + \beta_8 \text{years} + \beta_9 \text{party} + \beta_{10} \text{politics}$$

Age is the age of respondent

Sex is the gender of the respondent

Race is the dummy variable denoting if the respondent was African American

Education is level of education achieved by the respondent

Income is the level of income of the respondent

Rep is a dummy variable denoting if the respondent represented a city

Placement is the dummy variable denoting if the respondent was elected to their position

Years is the number of years respondent has been in their current position

Party is the dummy variable denoting if the respondent is a Democrat

Politics measures how liberal or conservative a respondent the respondent was.

Perception of Regional Sustainability

| | <i>Coefficients</i> | <i>Standard Error</i> | <i>t Stat</i> | <i>P-value</i> |
|------------------------------|---------------------|-----------------------|---------------|----------------|
| Intercept | 3.693 | 1.067 | 3.460 | 0.002 |
| AGE | 0.103 | 0.141 | 0.732 | 0.472 |
| Sex | -0.026 | 0.288 | -0.091 | 0.928 |
| Race | 0.169 | 0.623 | 0.271 | 0.789 |
| EDU | -0.195* | 0.109 | -1.782 | 0.089 |
| Income | -0.593* | 0.312 | -1.899 | 0.071 |
| REP | -0.072 | 0.235 | -0.308 | 0.761 |
| Placement | -0.443 | 0.272 | -1.630 | 0.117 |
| Yrs | 0.246** | 0.096 | 2.552 | 0.018 |
| Party | 0.409 | 0.287 | 1.424 | 0.169 |
| Politics | -0.060 | 0.170 | -0.354 | 0.727 |
| <i>Regression Statistics</i> | | | ***p< .01 | |
| Multiple R | 0.774 | | **p<.05 | |
| R Square | 0.599 | | *p<.1 | |
| Adjusted R Square | 0.416 | | | |
| Standard Error | 0.567 | | | |
| Observations | 33 | | | |

2.7 Community Sustainability Measures:

- **Environmental Health:** Air, Water, and Soil Quality, Green Infrastructure
- **Preparedness for Natural Hazards:** Floodplain Management, Fires
- **Community Character:** Authentic Development Patterns, Community Aesthetics
- **Mobility & Transportation:** Parking, Pedestrian Systems, Transit
- **Energy:** Renewable Energy (Solar, Wind, Hydro) Efficiency & Conservation
- **Housing:** Affordable Housing, Diverse Housing, Accessibility

Dependent Variable

The dependent variable(s) used in the regression model analyzing the prioritization of sustainability measures for the community is the ranking that was given to each individual measure by respondents.

Importance Ranking_{measure} = $\beta_0 + \beta_1 \text{age} + \beta_2 \text{sex} + \beta_3 \text{race} + \beta_4 \text{education} + \beta_5 \text{income} + \beta_6 \text{rep} + \beta_7 \text{placement} + \beta_8 \text{years} + \beta_9 \text{party} + \beta_{10} \text{politics}$

Age is the age of respondent

Sex is the gender of the respondent

Race is the dummy variable denoting if the respondent was African American

Education is level of education achieved by the respondent

Income is the level of income of the respondent

Rep is a dummy variable denoting if the respondent represented a city

Placement is the dummy variable denoting if the respondent was elected to their position

Years is the number of years respondent has been in their current position

Party is the dummy variable denoting if the respondent is a Democrat

Politics measures how liberal or conservative a respondent the respondent was.

In the ranking of the sustainability measures it should be noted that the smaller the number the greater the importance. (i.e. Most Important=1; Least Important=6)

- **2.71 Environmental Health: Air, Water, and Soil Quality, Green Infrastructure**

| | <i>Coefficients</i> | <i>Standard Error</i> | <i>t Stat</i> | <i>P-value</i> |
|------------------------------|---------------------|-----------------------|---------------|----------------|
| Intercept | -2.145 | 3.038 | -0.706 | 0.491 |
| AGE | 0.615 | 0.415 | 1.482 | 0.159 |
| Sex | 0.285 | 0.835 | 0.341 | 0.738 |
| Race | 2.200 | 1.736 | 1.267 | 0.224 |
| EDU | 0.229 | 0.425 | 0.538 | 0.599 |
| Income | 0.523 | 0.741 | 0.706 | 0.491 |
| REP | 1.011 | 0.706 | 1.431 | 0.173 |
| Placement | 0.398 | 0.879 | 0.453 | 0.657 |
| Yrs | -0.266 | 0.372 | -0.716 | 0.485 |
| Party | 0.029 | 0.860 | 0.034 | 0.973 |
| Politics | -0.086 | 0.423 | -0.203 | 0.842 |
| <i>Regression Statistics</i> | | | ***p<.01 | |
| Multiple R | 0.608 | | **p<.5 | |
| R Square | 0.369 | | *p<.1 | |
| Adjusted R Square | -0.051 | | | |
| Standard Error | 1.543 | | | |
| Observations | 26 | | | |

- **2.72 Preparedness for Natural Hazards:** Floodplain Management, Fires

| | <i>Coefficients</i> | <i>Standard Error</i> | <i>t Stat</i> | <i>P-value</i> |
|------------------------------|---------------------|-----------------------|---------------|----------------|
| Intercept | 9.551 | 3.037 | 3.144 | 0.005 |
| AGE | -0.512 | 0.416 | -1.232 | 0.230 |
| Sex | -0.274 | 0.879 | -0.312 | 0.758 |
| Race | -2.499 | 1.910 | -1.308 | 0.204 |
| EDU | -0.063 | 0.336 | -0.188 | 0.853 |
| Income | -0.994 | 0.812 | -1.224 | 0.233 |
| REP | 0.996 | 0.722 | 1.380 | 0.181 |
| Placement | -0.576 | 0.825 | -0.698 | 0.492 |
| Yrs | -0.248 | 0.293 | -0.847 | 0.406 |
| Party | 1.005 | 0.849 | 1.184 | 0.249 |
| Politics | -0.443 | 0.425 | -1.041 | 0.309 |
| <i>Regression Statistics</i> | | | ***p<.01 | |
| Multiple R | 0.592 | | **p<.05 | |
| R Square | 0.351 | | *p<.1 | |
| Adjusted R Square | 0.068 | | | |
| Standard Error | 1.744 | | | |
| Observations | 34 | | | |

- **2.73 Community Character:** Authentic Development Patterns, Community Aesthetics

| | <i>Coefficients</i> | <i>Standard Error</i> | <i>t Stat</i> | <i>P-value</i> |
|------------------------------|---------------------|-----------------------|---------------|----------------|
| Intercept | 4.808 | 3.312 | 1.452 | 0.160 |
| AGE | -0.658 | 0.453 | -1.451 | 0.160 |
| Sex | 0.834 | 0.958 | 0.870 | 0.393 |
| Race | 1.747 | 2.083 | 0.839 | 0.410 |
| EDU | -0.435 | 0.366 | -1.188 | 0.247 |
| Income | -0.757 | 0.885 | -0.855 | 0.401 |
| REP | 0.168 | 0.787 | 0.214 | 0.832 |
| Placement | -0.421 | 0.899 | -0.469 | 0.644 |
| Yrs | 0.170 | 0.320 | 0.532 | 0.600 |
| Party | 0.545 | 0.926 | 0.589 | 0.562 |
| Politics | -0.476 | 0.464 | -1.026 | 0.316 |
| <i>Regression Statistics</i> | | | ***p<.01 | |
| Multiple R | 0.450 | | **p<.05 | |
| R Square | 0.202 | | *p<.1 | |
| Adjusted R Square | -0.145 | | | |
| Standard Error | 1.902 | | | |
| Observations | 34 | | | |

- **2.74 Mobility & Transportation:** Parking, Pedestrian Systems, Transit

| | <i>Coefficients</i> | <i>Standard Error</i> | <i>t Stat</i> | <i>P-value</i> |
|------------------------------|---------------------|-----------------------|---------------|----------------|
| Intercept | 3.774 | 2.374 | 1.590 | 0.126 |
| AGE | 0.077 | 0.325 | 0.238 | 0.814 |
| Sex | -0.994 | 0.687 | -1.448 | 0.161 |
| Race | -1.195 | 1.493 | -0.801 | 0.432 |
| EDU | 0.052 | 0.262 | 0.198 | 0.844 |
| Income | 0.668 | 0.634 | 1.053 | 0.303 |
| REP | -0.560 | 0.564 | -0.994 | 0.331 |
| Placement | 0.963 | 0.645 | 1.494 | 0.149 |
| Yrs | -0.279 | 0.229 | -1.218 | 0.236 |
| Party | -0.940 | 0.664 | -1.416 | 0.170 |
| Politics | 0.316 | 0.332 | 0.951 | 0.351 |
| <i>Regression Statistics</i> | | | ***p<.01 | |
| Multiple R | 0.562 | | **p<.05 | |
| R Square | 0.316 | | *p<.1 | |
| Adjusted R Square | 0.019 | | | |
| Standard Error | 1.363 | | | |
| Observations | 34 | | | |

- **2.75 Energy:** Renewable Energy (Solar, Wind, Hydro) Efficiency & Conservation

| | <i>Coefficients</i> | <i>Standard Error</i> | <i>t Stat</i> | <i>P-value</i> |
|------------------------------|---------------------|-----------------------|---------------|----------------|
| Intercept | 5.420 | 3.090 | 1.754 | 0.093 |
| AGE | -0.212 | 0.423 | -0.501 | 0.621 |
| Sex | -0.981 | 0.894 | -1.097 | 0.284 |
| Race | -0.608 | 1.943 | -0.313 | 0.757 |
| EDU | -0.123 | 0.342 | -0.360 | 0.722 |
| Income | 0.799 | 0.826 | 0.967 | 0.344 |
| REP | -1.423* | 0.734 | -1.938 | 0.065 |
| Placement | -0.339 | 0.839 | -0.405 | 0.690 |
| Yrs | 0.299 | 0.298 | 1.003 | 0.326 |
| Party | -0.809 | 0.864 | -0.936 | 0.359 |
| Politics | -0.119 | 0.433 | -0.276 | 0.785 |
| <i>Regression Statistics</i> | | | ***p<.01 | |
| Multiple R | 0.512 | | **p<.05 | |
| R Square | 0.262 | | *p<.1 | |
| Adjusted R Square | -0.059 | | | |
| Standard Error | 1.774 | | | |
| Observations | 34 | | | |

- **2.76 Housing:** Affordable Housing, Diverse Housing, Accessibility

| | <i>Coefficients</i> | <i>Standard Error</i> | <i>t Stat</i> | <i>P-value</i> |
|------------------------------|---------------------|-----------------------|---------------|----------------|
| Intercept | 2.314 | 3.182 | 0.727 | 0.474 |
| AGE | 0.168 | 0.435 | 0.385 | 0.704 |
| Sex | 0.379 | 0.920 | 0.411 | 0.685 |
| Race | 0.042 | 2.001 | 0.021 | 0.984 |
| EDU | -0.052 | 0.352 | -0.148 | 0.884 |
| Income | -0.596 | 0.850 | -0.701 | 0.491 |
| REP | 0.032 | 0.756 | 0.042 | 0.967 |
| Placement | 1.380 | 0.864 | 1.597 | 0.124 |
| Yrs | -0.007 | 0.307 | -0.021 | 0.983 |
| Party | 0.440 | 0.889 | 0.494 | 0.626 |
| Politics | -0.011 | 0.445 | -0.024 | 0.981 |
| <i>Regression Statistics</i> | | | ***p<.01 | |
| Multiple R | 0.377 | | **p<.05 | |
| R Square | 0.142 | | *p<.1 | |
| Adjusted R Square | -0.230 | | | |
| Standard Error | 1.827 | | | |
| Observations | 34 | | | |

2.8 Regional Sustainability Measures:

- **Environmental Health:** Air, Water, and Soil Quality, Green Infrastructure
- **Preparedness for Natural Hazards:** Floodplain Management, Fires
- **Community Character:** Authentic Development Patterns, Community Aesthetics
- **Mobility & Transportation:** Parking, Pedestrian Systems, Transit
- **Energy:** Renewable Energy (Solar, Wind, Hydro) Efficiency & Conservation
- **Housing:** Affordable Housing, Diverse Housing, Accessibility

Dependent Variable

The dependent variable(s) used in the regression model analyzing the prioritization of sustainability measures for the community is the ranking that was given to each individual measure by respondents.

$$\text{Importance Ranking}_{\text{measure}} = \beta_0 + \beta_1 \text{age} + \beta_2 \text{sex} + \beta_3 \text{race} + \beta_4 \text{education} + \beta_5 \text{income} + \beta_6 \text{rep} + \beta_7 \text{placement} + \beta_8 \text{years} + \beta_9 \text{party} + \beta_{10} \text{politics}$$

- **2.81 Environmental Health: Air, Water, and Soil Quality, Green Infrastructure**

| | <i>Coefficients</i> | <i>Standard Error</i> | <i>t Stat</i> | <i>P-value</i> |
|------------------------------|---------------------|-----------------------|---------------|----------------|
| Intercept | 0.059 | 3.030 | 0.020 | 0.985 |
| AGE | 0.354 | 0.426 | 0.831 | 0.414 |
| Sex | -1.188 | 0.890 | -1.334 | 0.195 |
| Race | 1.140 | 1.922 | 0.593 | 0.559 |
| EDU | 0.166 | 0.340 | 0.488 | 0.630 |
| Income | 0.657 | 0.829 | 0.792 | 0.436 |
| REP | 0.350 | 0.737 | 0.475 | 0.639 |
| Placement | -0.088 | 0.813 | -0.108 | 0.915 |
| Yrs | 0.059 | 0.292 | 0.203 | 0.841 |
| Party | 0.085 | 0.837 | 0.101 | 0.920 |
| Politics | -0.013 | 0.413 | -0.031 | 0.975 |
| <i>Regression Statistics</i> | | | ***p<.01 | |
| Multiple R | 0.435 | | **p<.05 | |
| R Square | 0.189 | | *p<.1 | |
| Adjusted R Square | -0.149 | | | |
| Standard Error | 1.788 | | | |
| Observations | 35 | | | |

- **2.82 Preparedness for Natural Hazards: Floodplain Management, Fires**

| | <i>Coefficients</i> | <i>Standard Error</i> | <i>t Stat</i> | <i>P-value</i> |
|------------------------------|---------------------|-----------------------|---------------|----------------|
| Intercept | 7.096 | 2.931 | 2.421 | 0.023 |
| AGE | -0.384 | 0.412 | -0.933 | 0.360 |
| Sex | 0.286 | 0.861 | 0.333 | 0.742 |
| Race | -1.867 | 1.860 | -1.004 | 0.325 |
| EDU | 0.067 | 0.329 | 0.203 | 0.841 |
| Income | -0.426 | 0.802 | -0.532 | 0.600 |
| REP | 0.604 | 0.713 | 0.847 | 0.406 |
| Placement | 0.273 | 0.786 | 0.347 | 0.732 |
| Yrs | -0.278 | 0.282 | -0.986 | 0.334 |
| Party | 0.471 | 0.810 | 0.581 | 0.566 |
| Politics | -0.405 | 0.400 | -1.014 | 0.321 |
| <i>Regression Statistics</i> | | | ***p<.01 | |
| Multiple R | 0.518 | | **p<.05 | |
| R Square | 0.269 | | *p<.1 | |
| Adjusted R Square | -0.036 | | | |
| Standard Error | 1.730 | | | |
| Observations | 35 | | | |

- **2.83 Regional Character:** Authentic Development Patterns, Regional Aesthetics

| | <i>Coefficients</i> | <i>Standard Error</i> | <i>t Stat</i> | <i>P-value</i> |
|------------------------------|---------------------|-----------------------|---------------|----------------|
| Intercept | 2.454 | 3.550 | 0.691 | 0.496 |
| AGE | 0.431 | 0.499 | 0.865 | 0.396 |
| Sex | 0.016 | 1.043 | 0.015 | 0.988 |
| Race | 1.428 | 2.252 | 0.634 | 0.532 |
| EDU | -0.433 | 0.399 | -1.085 | 0.289 |
| Income | -0.313 | 0.971 | -0.322 | 0.750 |
| REP | 0.668 | 0.863 | 0.774 | 0.447 |
| Placement | 0.264 | 0.952 | 0.277 | 0.784 |
| Yrs | -0.041 | 0.342 | -0.119 | 0.907 |
| Party | 0.836 | 0.981 | 0.853 | 0.402 |
| Politics | -0.367 | 0.484 | -0.758 | 0.456 |
| <i>Regression Statistics</i> | | | ***p<.01 | |
| Multiple R | 0.357 | | **p<.05 | |
| R Square | 0.127 | | *p<.1 | |
| Adjusted R Square | -0.236 | | | |
| Standard Error | 2.095 | | | |
| Observations | 35 | | | |

- **2.84 Mobility & Transportation:** Parking, Pedestrian Systems, Transit

| | <i>Coefficients</i> | <i>Standard Error</i> | <i>t Stat</i> | <i>P-value</i> |
|------------------------------|---------------------|-----------------------|---------------|----------------|
| Intercept | 7.060 | 2.549 | 2.769 | 0.011 |
| AGE | -0.803** | 0.358 | -2.241 | 0.035 |
| Sex | -0.226 | 0.749 | -0.301 | 0.766 |
| Race | -0.939 | 1.617 | -0.581 | 0.567 |
| EDU | -0.321 | 0.286 | -1.120 | 0.274 |
| Income | 0.009 | 0.697 | 0.013 | 0.990 |
| REP | -1.237* | 0.620 | -1.995 | 0.058 |
| Placement | 0.353 | 0.684 | 0.516 | 0.611 |
| Yrs | -0.079 | 0.246 | -0.324 | 0.749 |
| Party | -0.827 | 0.704 | -1.174 | 0.252 |
| Politics | 0.117 | 0.348 | 0.337 | 0.739 |
| <i>Regression Statistics</i> | | | ***p<.01 | |
| Multiple R | 0.608 | | **p<.05 | |
| R Square | 0.370 | | *p<.1 | |
| Adjusted R Square | 0.107 | | | |
| Standard Error | 1.504 | | | |
| Observations | 35 | | | |

- **2.85 Energy:** Renewable Energy (Solar, Wind, Hydro) Efficiency & Conservation

| | <i>Coefficients</i> | <i>Standard Error</i> | <i>t Stat</i> | <i>P-value</i> |
|------------------------------|---------------------|-----------------------|---------------|----------------|
| Intercept | 4.946 | 2.960 | 1.671 | 0.108 |
| AGE | -0.354 | 0.416 | -0.850 | 0.403 |
| Sex | 0.034 | 0.870 | 0.039 | 0.969 |
| Race | -0.281 | 1.878 | -0.150 | 0.882 |
| EDU | -0.016 | 0.332 | -0.049 | 0.961 |
| Income | 0.013 | 0.810 | 0.016 | 0.988 |
| REP | -0.708 | 0.720 | -0.983 | 0.335 |
| Placement | 0.306 | 0.794 | 0.386 | 0.703 |
| Yrs | 0.247 | 0.285 | 0.866 | 0.395 |
| Party | -0.728 | 0.818 | -0.890 | 0.382 |
| Politics | -0.240 | 0.404 | -0.595 | 0.557 |
| <i>Regression Statistics</i> | | | ***p<.01 | |
| Multiple R | 0.433 | | **p<.05 | |
| R Square | 0.188 | | *p<.1 | |
| Adjusted R Square | -0.151 | | | |
| Standard Error | 1.747 | | | |
| Observations | 35 | | | |

- **2.86 Housing:** Affordable Housing, Diverse Housing, Accessibility

| | <i>Coefficients</i> | <i>Standard Error</i> | <i>t Stat</i> | <i>P-value</i> |
|------------------------------|---------------------|-----------------------|---------------|----------------|
| Intercept | 1.775 | 2.629 | 0.675 | 0.506 |
| AGE | 0.355 | 0.369 | 0.962 | 0.345 |
| Sex | -0.035 | 0.772 | -0.046 | 0.964 |
| Race | -0.045 | 1.668 | -0.027 | 0.979 |
| EDU | 0.032 | 0.295 | 0.107 | 0.916 |
| Income | -0.172 | 0.719 | -0.239 | 0.813 |
| REP | -0.157 | 0.639 | -0.245 | 0.808 |
| Placement | 1.205* | 0.705 | 1.709 | 0.100 |
| Yrs | -0.375 | 0.253 | -1.480 | 0.152 |
| Party | 0.363 | 0.726 | 0.499 | 0.622 |
| Politics | 0.272 | 0.359 | 0.759 | 0.455 |
| <i>Regression Statistics</i> | | | ***p<.01 | |
| Multiple R | 0.467 | | **p<.05 | |
| R Square | 0.218 | | *p<.1 | |
| Adjusted R Square | -0.108 | | | |
| Standard Error | 1.552 | | | |
| Observations | 35 | | | |

ATTACHMENT

ATTACHMENT 1

Community Assessment Survey

INSTRUCTIONS:

1. Fill out survey electronically
2. Save the survey electronically
3. Email completed survey to kscott@bgadd.org
4. In the subject of the email: "COMMUNITY SURVEY"
-or-
5. Print your responses and fax your completed survey to (859) 269-7917
with the subject line: "COMMUNITY SURVEY: Kyle Scott"

Please answer the following questions to the best of your ability:

SECTION 1: Community Assessment

A. Please rank the issues below that you believe are the most important to your community:

- Rank 1=Most Important
- Rank 9=Less Important

| Rank | Community Issues |
|------|------------------|
| | Education |
| | Environment |
| | Health |
| | Land Use |
| | Local Economy |
| | Safety |
| | Sustainability |
| | Transportation |
| | Water/Sewer |

B. Please rank the issues below that you believe should be the most important to the Area Development District:

- Rank 1=Most Important
- Rank 9=Less Important

| Rank | Regional Issues |
|------|-----------------|
| | Education |
| | Environment |
| | Health |
| | Land Use |
| | Economy |
| | Safety |
| | Sustainability |
| | Transportation |
| | Water/Sewer |

C. Please rate the importance of each to your community (your constituents):

(Check One (1) Box for each)

| | Very Important | Important | Somewhat Important | Not at all Important |
|--------------------------------------|--------------------------|--------------------------|---------------------------|-----------------------------|
| 1. Economic Growth | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Better Roads and Highways | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Improved water supply | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Better sewer capacity | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Improved schools | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Better health | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Controlling growth | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. Better land use regulation | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 9. Improved sustainability | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 10. Fire and Police | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 11. Public Transportation | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

D. Please rate the importance of each to the Area Development District (your constituents and neighboring communities):

(Check One (1) Box for each)

| | Very Important | Important | Somewhat Important | Not at all Important |
|-------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 1. Economic Growth | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Better Roads and Highways | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Improved water supply | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Better sewer capacity | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Improved schools | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Better health | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Controlling growth | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. Better land use regulation | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 9. Improved sustainability | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 10. Fire and Police | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 11. Public Transportation | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

SECTION 2: Sustainability Assessment

For the following questions sustainability will be defined as:

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

A. In your opinion, how would you rate the sustainability of your community?

Excellent Good Fair Poor Don't Know

A1: Please explain your selection:

B. In your opinion how would you rate the sustainability of the Bluegrass ADD?

(Check the Appropriate Box)

Excellent Good Fair Poor Don't Know

B1: Please explain your selection:

C. As you understand them, please rank the following issues in terms of importance to your community (your constituents). The ranking should run from 1 (most important) to 6 (least important):

| Rank | Sustainability Indicators: |
|-------------|---|
| | Environmental Health: Air, Water, and Soil Quality, Green Infrastructure |
| | Preparedness for Natural Hazards: Floodplain Management, Fires, |
| | Community Character: Authentic Development Patterns, Community Character Aesthetics |
| | Mobility & Transportation: Parking, Pedestrian Systems, Transit Oriented Development |
| | Energy: Renewable Energy (Solar, Wind, Hydro), Efficiency & Conservation: |
| | Housing: Affordable Housing, Diverse Housing, Accessibility |

D. As you understand them, please rank the following issues in terms of importance to the Area Development District (your community and neighboring communities). The ranking should run from 1 (most important) to 6 (least important):

| Rank | Sustainability Indicators: |
|-------------|---|
| | Environmental Health: Air, Water, and Soil Quality, Green Infrastructure |
| | Preparedness for Natural Hazards: Floodplain Management, Fires, |
| | Community Character: Authentic Development Patterns, Community Character Aesthetics |
| | Mobility & Transportation: Parking, Pedestrian Systems, Transit Oriented Development |
| | Energy: Renewable Energy (Solar, Wind, Hydro), Efficiency & Conservation: |
| | Housing: Affordable Housing, Diverse Housing, Accessibility |

SECTION 3: General Background

A. Age: (Check the Appropriate Box)

18-24 25-34 35-49 50-64 65 or older Decline to Comment

B. Gender: (Check the Appropriate Box)

Male Female

C. Do you describe yourself as a(n): (Check the Appropriate Box)

African American White Hispanic Decline to Comment
 Asian Other

D. Level of Education: (Check the Appropriate Box)

Some High School High School or Equivalent Some College College Degree Advanced Degree

E. Which of the following categories best describes your total annual household income? (Check the Appropriate Box)

<\$25,000 \$25,000-\$40,000 Over \$40,000 Decline to Comment

F. Are you a representative of: (Check the Appropriate Box)

County City Other:

G. Were you: (Check the Appropriate Box)

Elected Appointed Other:

H. Number of years in your current position: (Check the Appropriate Box)

0-4 5-8 9-12 13+

I. Party Affiliation: (Check the Appropriate Box)

Democrat Republican Other: Decline to Comment

J. In general, would you describe your political views as very conservative, conservative, moderate, liberal or very liberal? (Check the Appropriate Box)

Very Liberal Liberal Moderate Conservative Very Conservative