LIVABILITY INITIATIVE
NEW RIVER VALLEY, VA

NRV Tomorrow Survey

Final Report Analysis
August 15, 2013

Results Compiled By:

PlaceMatters.

General Summary

Background:

The NRV Tomorrow Survey, which collected opinions via the interactive online survey tool, CrowdGauge (www.crowdgauge.org), was available for participants from April through June of 2013. It was designed to gather information about what Priorities stakeholders in the NRV felt were most important to them, and then to understand what Projects and Policies they felt were most pressing or important based on these Priorities. The input from the survey will be used to help shape the NRV Livability Initiative outcomes and recommended implementation steps.

Respondents:

The NRV Planning District Commission received 736 responses to the survey, 11 of which had no data and were removed from the analysis, 10 of which were out of state and also removed from the analysis. There were 21 respondents that noted a zip code in Virginia but outside of the New River Valley cities and counties we identified, and 22 respondents that chose not to enter a zip code or entered an invalid number. These 43 respondents were assumed to still be stakeholders and were therefore factored into the New River Valley Region average; however, they were not analyzed for the comparisons across communities.

The a summary of the demographic and geographic characteristics of respondents in comparison to the New River Valley full population is included in Appendix A.

Note: Where the survey results are analyzed by community, we used the respondent's zip code to determine his/her community. Since some zip codes may extend beyond an official town or community boundary, these communities are marked with an asterisk (Christiansburg*, for example) where the actual respondents inside the community may vary slightly from official boundaries, but are true to zip codes.

Survey:

The survey contained three sections. In the first section, respondents were given 35 stars total to allocate across a list of 17 priorities. Respondents could give a score in whole numbers between 0 and 5 for each priority, using no more than the 35 stars they were allocated.

In the second section, respondents were first given 20 coins total to allocate across different projects in 11 different categories, each costing a different amount between 1 coin and 10 coins.

In the third section, respondents were then given a list of 7 policies and could vote "thumbs up", "thumbs down", or give no response.
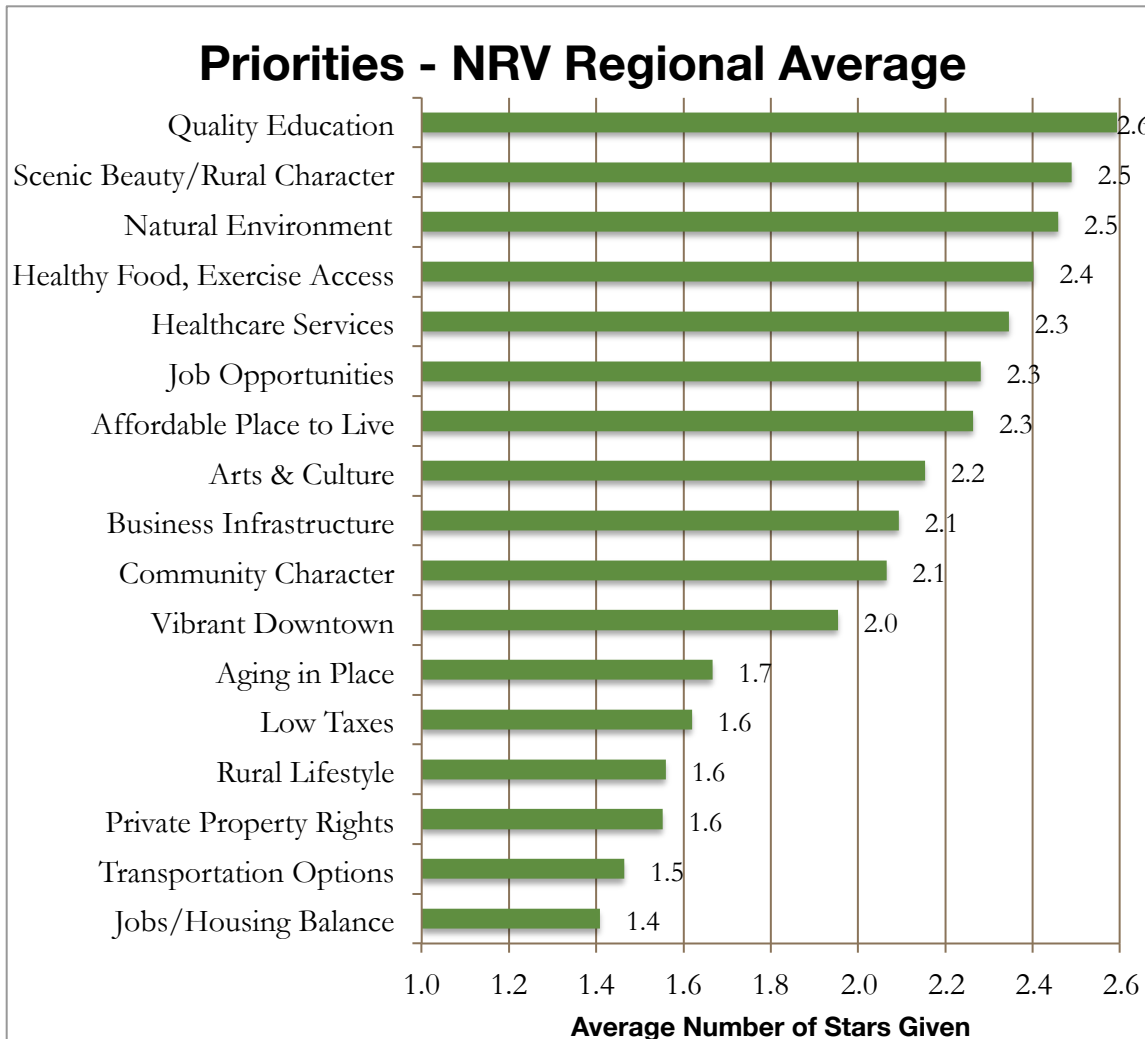
More details on the process and outcome of analysis on each of these individual sections of the survey can be found under the corresponding section's full analysis in the following pages.

Survey Part 1: Priorities

Respondents were given 35 stars to allocate across the 17 Priorities listed the chart below. Respondents could give each Priority up to 5 stars, until they had used all the stars they were allocated.

New River Valley Region Average Scores

The graph below shows the average number of stars for each priority for responses from the entire New River Valley region. The highest score is **Quality Education** with an average rating of 2.6 stars, while the lowest score is **Jobs/Housing Balance**, with an average star rating of 1.4 stars.

Priorities - NRV Regional Average

Priority	Average Number of Stars Given
Quality Education	2.6
Scenic Beauty/Rural Character	2.5
Natural Environment	2.5
Healthy Food, Exercise Access	2.4
Healthcare Services	2.3
Job Opportunities	2.3
Affordable Place to Live	2.3
Arts & Culture	2.2
Business Infrastructure	2.1
Community Character	2.1
Vibrant Downtown	2.0
Aging in Place	1.7
Low Taxes	1.6
Rural Lifestyle	1.6
Private Property Rights	1.6
Transportation Options	1.5
Jobs/Housing Balance	1.4

Highest Rated Priorities:
* Quality Education
* Scenic Beauty/Rural Character
* Natural Environment
* Health Food, Exercise Access

Lowest Rated Priorities:
* Jobs/Housing Balance
* Transportation Options
* Private Property Rights
* Rural Lifestyle

Priorities: Comparison Among NRV Communities

The table below shows the average stars for each Priority for communities in the New River Valley Region (on a scale from 0 to 5). The Priority in each community that received the highest average number of stars is colored **dark green**, the second highest, **medium green**, and the third highest Priority is colored **light green**.

While there was some consistency among communities—particularly in the importance of **Quality Education**, **Scenic Beauty/Rural Character**, and **Natural Environment**—not every community was aligned with the region's average. For instance, **Rural Lifestyle**, while one of the most important Priorities in Floyd County, is only of moderate importance in Montgomery County and Giles County, and of little to no importance in the rest of the communities. **Healthcare Services** was also consistently ranked as moderately high in importance, but never important enough to be in the top three of any community.

Rural Lifestyle had the largest variation in stars across communities, meaning there is less agreement on how important this Priority is throughout the New River Valley. **Vibrant Downtown** and **Community Character** also had larger variations in score. On the other hand, while it was ranked somewhere in the middle of the Priorities, **Business Infrastructure** had the smallest variation in stars across communities, indicating general agreement on its level of importance.

PRIORITIES	Blacksburg*	Christiansburg*	Montgomery County	Pulaski Town*	Pulaski County	Radford*	Floyd County	Giles County	NRV Average
# Respondents	223	118	24	43	44	82	77	63	717
Quality Education	3.0	2.3	2.1	2.5	2.8	2.7	2.2	2.5	2.6
Scenic Beauty/Rural Character	2.4	2.3	3.2	2.2	2.1	2.5	3.0	2.8	2.5
Natural Environment	2.7	2.1	2.7	2.6	2.0	2.4	2.5	2.2	2.5
Healthy Food, Exercise Access	2.8	2.6	2.2	2.3	2.7	1.8	2.2	1.8	2.4
Healthcare Services	2.6	2.2	2.3	2.2	2.4	2.4	1.8	2.5	2.3
Job Opportunities	2.3	2.4	2.3	2.6	2.5	2.0	1.8	2.7	2.3
Affordable Place to Live	2.1	2.5	2.2	2.0	2.0	2.2	2.8	2.4	2.3
Arts & Culture	2.4	2.1	1.9	2.4	1.9	2.3	2.0	1.3	2.2
Business Infrastructure	2.1	2.2	1.8	2.5	2.2	2.1	1.9	2.0	2.1
Community Character	2.0	2.0	2.5	1.4	1.6	2.1	2.3	2.6	2.1
Vibrant Downtown	2.4	1.9	1.0	1.8	1.5	1.9	1.7	1.7	2.0
Aging in Place	1.3	1.5	2.0	2.0	2.1	1.7	2.0	1.9	1.7
Low Taxes	1.1	2.0	1.9	1.6	1.8	1.7	1.8	2.2	1.6
Rural Lifestyle	0.9	1.4	2.3	1.6	1.9	1.7	2.7	2.1	1.6
Private Property Rights	1.1	1.7	1.6	1.6	2.2	1.6	2.0	1.8	1.6
Transportation Options	1.9	1.3	1.0	1.7	1.4	1.4	0.9	1.0	1.5
Jobs/Housing Balance	1.8	1.4	1.0	1.3	1.4	1.2	0.8	0.9	1.4

* Community determined by zip code of respondent. Zip codes extend beyond town boundaries so these summaries include some county residents.

Survey Part 2: Projects

In this section of the survey, respondents were given 20 "coins" total to allocate across 31 different Projects, with each Project "costing" between 1 coin and 10 coins. The number of coins provided for each Project was based the relative cost estimates of proposed Projects. Each coin does not represent a specific real dollar amount, but an estimate of how much that project costs relative to other projects (e.g., expanding opportunities for art instruction (1 coin) is much less expensive than providing/creating infrastructure to buy and sell local food (5 coins)).

Because of the complexity of the data in this portion of the survey, the data were analyzed from multiple different perspectives, as follows:

1. The "Coins" analysis counted the total number of coins given for each Project (so 10 votes for a 5-coin project was counted as more than 10 votes for a 1-coin project). We then ranked these from highest number of coins to the lowest for a Coins Rank.

2. The "Votes" analysis counted the total number of times a Project was selected, regardless of the number of coins it cost (so 10 votes for a 5-coin project was counted the same as 10 votes for a 1-coin project). We then sorted these from highest number of votes to the lowest for a Votes Rank.

3. Finally, we then took the average of the Coins Rank and the Votes Rank for and Overall Average Rank, which is the far right column of the table. The Projects are ordered based on the Overall Average Rank.

New River Valley Region Average Scores
In the table on the following page, the **top five** (1-5) Projects, based on Overall Average Rank, for the NRV Region are colored **dark green**, the **second five highest ranked** (6-10) are colored **medium green**, and the **third five highest ranked** (10-15) are colored **light green**. Note that some Projects' Overall Average Rank is the same.

Highest Ranked Projects:
- Expand and improve pre-school education and daycare options (the most coins were spent for this Project overall) (4 coins)
- Create more bicycling and walking options that connect residential areas to town centers (3 coins)
- Reduce pollution of drinking water and recreational waterways (received the most votes overall) (2 coins)
- Ensure availability and effective use of health services (3 coins)
- Provide the infrastructure to process and sell local food (5 coins)

Lowest Ranked Projects:
- Expand park-and-ride & van-pool options (2 coins)
- Establish a Regional Food Policy council (1 coin)
- Relieve congestion along major commuter routes (5 coins)
- Expand opportunities for art instruction (1 coin)
- Put all the money back (an option which forced the respondent to give up half of their coins) (10 coins)

It appears that the coin value is not correlated with either Votes or Overall Average Rank, since only one of the five highest ranked projects cost 2 coins or less, while three of the lowest ranked Projects cost 2 coins or less. This suggests that the expense of the Project may not have had a significant impact on how frequently it was chosen, but obviously would impact how many Projects a respondent could "afford" to choose.

PROJECTS	Coin Value	Coins		Votes		Overall Average Rank
		Total	Rank	Total	Rank	
Expand and improve pre-school education and daycare options	4	1020	1	255	3	2
Create more bicycling and walking options that connect residential areas to town centers	3	813	4	271	2	3
Reduce pollution of drinking water and recreational waterways	2	604	7	302	1	4
Ensure availability and effective use of health services	3	672	5	224	5	5
Provide the infrastructure to process and sell local food	5	970	2	194	9	6
Expand support services to help people age at home	3	624	6	208	7	7
Restore and redevelop downtown properties	5	890	3	178	13	8
Expand workforce education and training programs	3	576	9	192	10	10
Create spaces and opportunities for community events	3	543	11	181	11	11
Expand local clean energy options	2	408	14	204	8	11
Expand small business support services	1	243	22	243	4	13
Create trail systems that connect community centers to the great outdoors	3	516	12	172	15	14
Reduce substance abuse rates and expand treatment options	4	600	8	150	20	14
Promote energy efficiency in existing buildings	2	360	17	180	12	15
Improve hazardous road conditions	2	356	18	178	13	16
Promote enhanced energy efficiency in new construction	1	216	26	216	6	16
Improve water quality monitoring	3	390	15	130	21	18
Develop financing options to support home modifications for older adults	2	316	19	158	17	18
Put half the money back	5	545	10	109	26	18
Provide more public transportation routes	4	468	13	117	23	18
Increase and improve coordination of health services	2	314	20	157	18	19
Reduce rates of teen pregnancy	1	167	27	167	16	22
Increase modern commercial and industrial building space for new and expanding businesses	5	370	16	74	28	22
Establish a regional organization to market the region's assets	2	242	23	121	22	23
Expand education and training for local farmers	1	155	28	155	19	24
Increase screening for developmental progress during the first years of life	2	220	25	110	25	25
Put all the money back	10	270	21	27	31	26
Relieve congestion along major commuter routes	5	235	24	47	30	27
Expand opportunities for art instruction	1	113	30	113	24	27
Establish a Regional Food Policy Council	1	87	31	87	27	29
Expand park-and-ride & van-pool options	2	140	29	70	29	29

Projects: Comparison Among NRV Communities

The table on the following page shows the Overall Rank for each Project broken down by community. The Projects are in the order of the regional average ranking (same order as the previous table). The **top five ranked** in each community is colored **dark green**, the **second five highest ranked, medium green**, and the **third five highest ranked, light green**. The Projects are scored on a scale of 1 to 31 (for 31 projects), although because of rounding and tied scores, some communities may not show the full scale.

While there was still some consistency in communities, this section of the survey showed variation between communities. Only one community, Blacksburg, had the same top three as the New River Valley region (in a slightly different order). The highest ranked Project overall for the regional average, **Expand and improve pre-school education and daycare options**, was in the top three of every community except Floyd County and Montgomery County, while the second highest ranked Project overall for the NRV average, **Create more bicycling and walking options that connect residential areas to town centers**, **which** was in the top three ranked Projects of only three of the eight communities.

Similar to the variation across communities of the most popular Projects, there was also a large variation in the least popular Projects. Only two communities, Floyd and Pulaski Town, had the same bottom three Projects as the regional average. The lowest ranked Project overall for the region, **Expand park-n-ride and van-pool options**, only a 2-coin Project, was not in the bottom three of Blacksburg, Giles County, or Montgomery County, while the second lowest ranked Project overall for the region, **Establish a regional food policy council**, only a 1-coin Project, was not in the bottom three of Christiansburg, Montgomery County, or Radford.
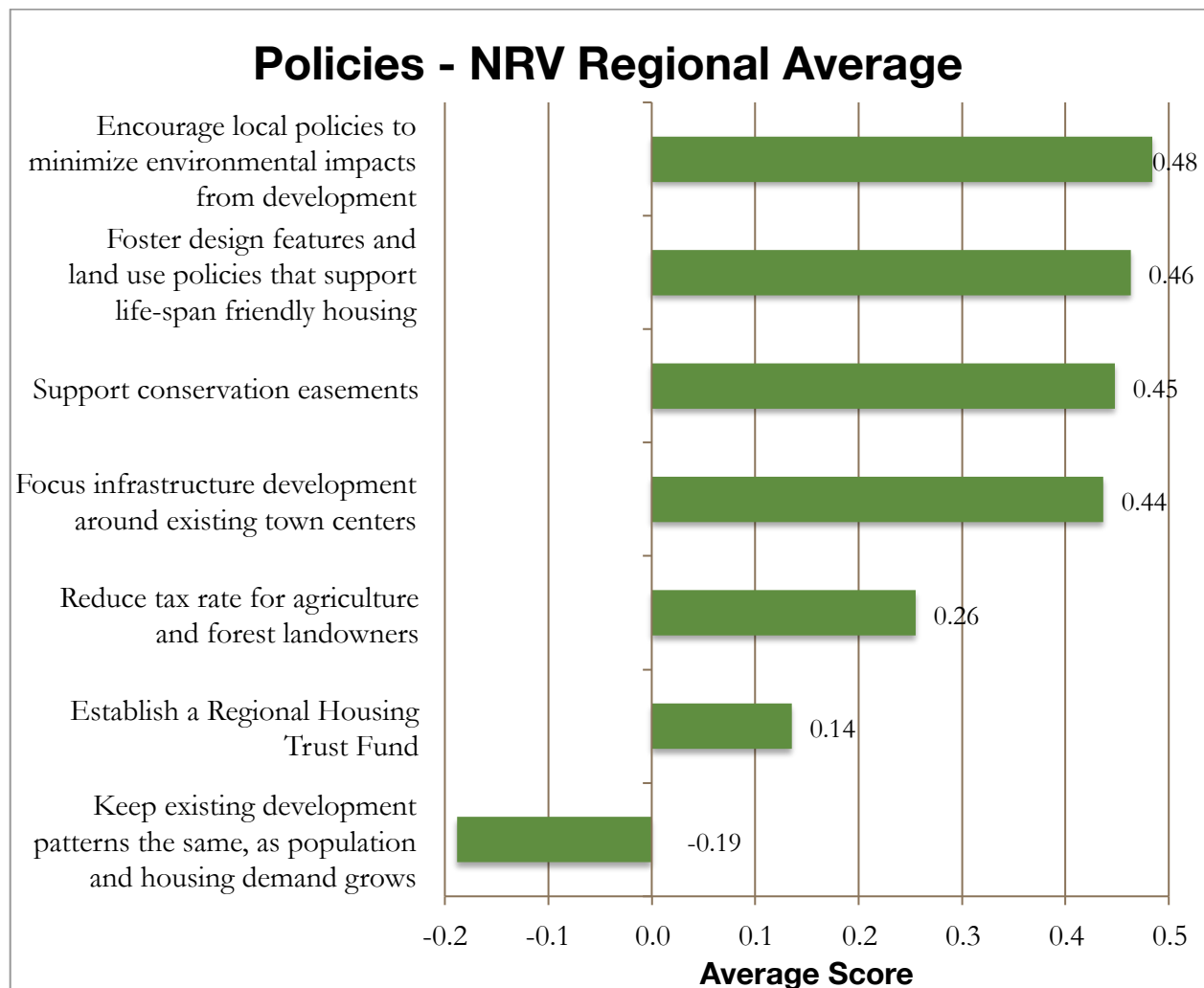
PROJECTS

Projects	Coin Value	Blacksburg*	Christiansburg*	Montgomery County	Pulaski Town*	Pulaski County	Radford*	Floyd County	Giles County	NRV Average
# Respondents:		223	118	24	43	44	82	77	63	717
Expand and improve pre-school education and daycare options	4	3	3	9	2	2	2	8	2	2
Create more bicycling and walking options that connect residential areas to town centers	3	2	2	7	12	15	3	14	15	3
Reduce pollution of drinking water and recreational waterways	2	4	5	2	8	13	6	4	3	4
Ensure availability and effective use of health services	3	5	14	12	5	6	2	17	6	5
Provide the infrastructure to process and sell local food	5	5	7	5	11	19	13	3	9	6
Expand support services to help people age at home	3	15	6	7	8	2	6	7	2	7
Restore and redevelop downtown properties	5	7	3	12	5	11	8	22	11	8
Expand workforce education and training programs	3	14	12	12	2	5	12	3	8	10
Create spaces and opportunities for community events	3	11	8	12	16	7	5	12	17	11
Expand local clean energy options	2	9	20	6	18	20	14	5	14	11
Expand small business support services	1	15	14	19	10	12	15	12	12	13
Create trail systems that connect community centers to the great outdoors	3	9	10	7	8	7	12	19	13	14
Reduce substance abuse rates and expand treatment options	4	14	16	9	6	11	22	5	9	14
Promote energy efficiency in existing buildings	2	11	18	15	23	14	23	15	10	15
Improve hazardous road conditions	2	20	16	10	11	6	12	7	14	16
Promote enhanced energy efficiency in new construction	1	11	16	16	20	20	18	19	14	16
Develop financing options to support home modifications for older adults	2	21	20	10	11	23	11	17	10	18
Put half the money back	5	23	12	23	10	15	12	17	15	18
Provide more public transportation routes	4	12	20	20	22	18	19	20	28	18
Improve water quality monitoring	3	22	14	12	26	21	12	14	19	18
Increase and improve coordination of health services	2	15	13	10	18	17	19	20	23	19
Reduce rates of teen pregnancy	1	25	17	13	18	14	22	20	18	22
Increase modern commercial and industrial building space for new and expanding businesses	5	18	22	27	18	21	23	27	25	22
Establish a regional organization to market the region's assets	2	24	28	24	11	29	17	20	17	23
Expand education and training for local farmers	1	23	25	11	22	18	29	15	18	24
Increase screening for developmental progress during the first years of life	2	26	25	27	18	20	22	23	21	25
Put all the money back	10	29	27	31	30	20	18	22	24	26
Expand opportunities for art instruction	1	26	29	29	25	21	27	18	28	27
Relieve congestion along major commuter routes	5	28	19	27	29	21	29	30	29	27
Establish a regional food policy council	1	30	25	26	29	31	27	27	29	29
Expand park-and-ride & van-pool options	2	23	29	22	30	29	29	30	27	29

Survey Part 3: Policies

In this section of the survey, respondents were given a list of seven Policies and could indicate their level of support for them by clicking "thumbs up", "thumbs down" or "no response".. In the analysis of this section, each Policy's score was averaged, assigning 1 point to "Yes", -1 points to "No", and 0 points to "No Response," giving a range in score from -1 to +1. Below you can see the overall average score for all responses.

New River Valley Region Average Scores

The graph below shows the average score for each Policy for the entire New River Valley region. The highest score is **Encourage local policies to minimize environmental impacts from development** with an average score of 0.48, while the lowest score is **Keep existing development patterns the same, as population and housing demand grows**, with an average score of -.19. While the ranking of these Policies will help to prioritize recommendations, the top four Policies do not have a large variation in average score and should all be considered important to NRV stakeholders; however, it is very clear that the bottom ranked Policy has a very negative response for most NRV stakeholders.

Policies - NRV Regional Average

Policy	Average Score
Encourage local policies to minimize environmental impacts from development	0.48
Foster design features and land use policies that support life-span friendly housing	0.46
Support conservation easements	0.45
Focus infrastructure development around existing town centers	0.44
Reduce tax rate for agriculture and forest landowners	0.26
Establish a Regional Housing Trust Fund	0.14
Keep existing development patterns the same, as population and housing demand grows	-0.19

Average Score

Policies: Comparison Among NRV Communities

The table below shows the average score of the policies for each community in the New River Valley region (on a scale -1 to +1), in the order of the NRV average (far right). The Policy with the highest score in each community is colored **dark green**, the second highest is **medium green**, and the third highest is **light green**.

The Policies **Encourage local policies to minimize environmental impacts from development**, **Foster design features and land use policies that support life-span friendly housing**, and **Support conservation easements** were consistently scored high across many NRV communities. The Policy **Keep existing development patterns the same, as population and housing demand grows** was not a popular Policy in any of the communities.

There was also variation among communities, and this variation reflects the differences in community character, type, and needs. For example, the Policy **Reduce tax rate for agriculture and forest landowners** was slightly more popular in Pulaski County than anywhere else, especially the towns and cities. The Policy **Focus infrastructure development around existing town centers** was popular with the existing cities and towns, but also with Pulaski County.

POLICIES # Respondents	Blacksburg* 223	Christiansburg* 118	Montgomery County 24	Pulaski Town* 43	Pulaski County 44	Radford* 82	Floyd County 77	Giles County 63	NRV Average 717
Encourage local policies to minimize environmental impacts from development	0.48	0.45	0.58	0.65	0.39	0.61	0.52	0.46	0.48
Foster design features and land use policies that support life-span friendly housing	0.44	0.45	0.50	0.51	0.45	0.57	0.47	0.48	0.46
Support conservation easements	0.47	0.53	0.46	0.53	0.32	0.45	0.48	0.35	0.45
Focus infrastructure development around existing town centers	0.48	0.47	0.46	0.49	0.50	0.48	0.35	0.40	0.44
Reduce tax rate for agriculture and forest landowners	0.22	0.21	0.42	0.21	0.41	0.26	0.34	0.38	0.26
Establish a Regional Housing Trust Fund	0.15	0.12	0.04	0.19	0.02	0.32	0.03	0.10	0.14
Keep existing development patterns the same, as population and housing demand grows	-0.26	-0.14	-0.25	-0.19	-0.18	-0.15	-0.19	-0.06	-0.19

* Community determined by zip code of respondent. Zip codes extend beyond town boundaries so these summaries include some county residents.
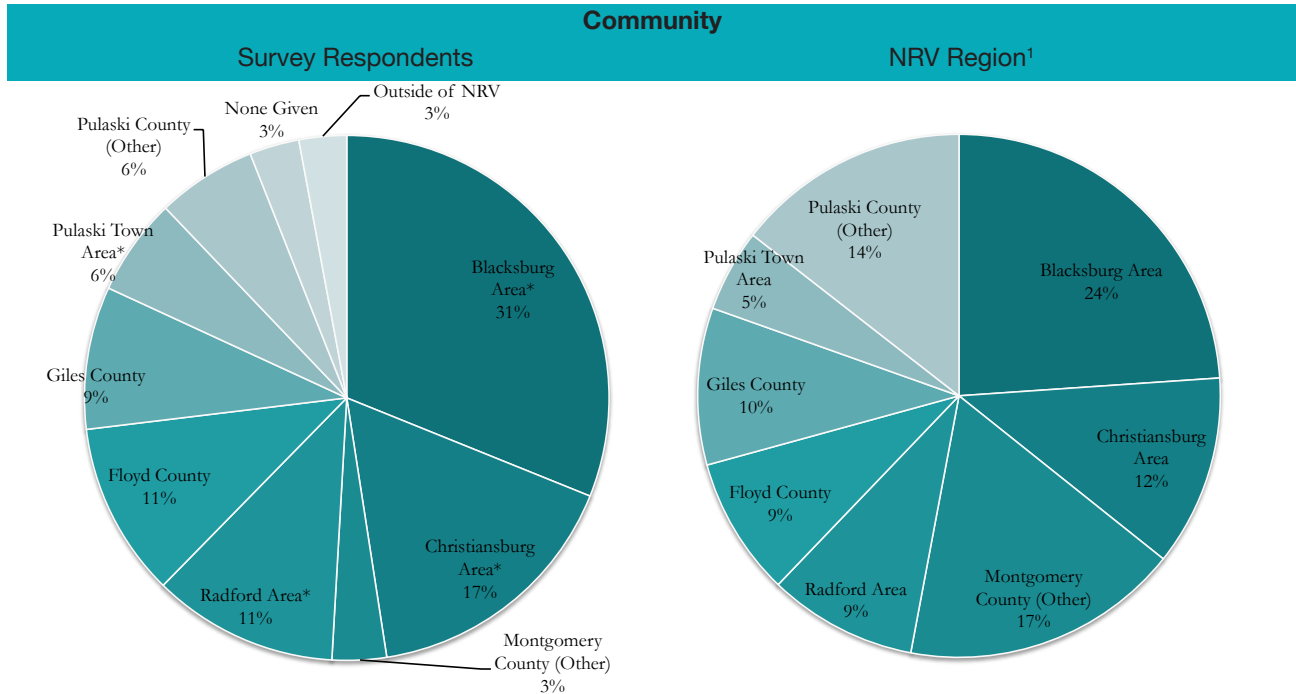
Conclusion

While there was variation across NRV communities, there were consistent themes that became clear when examining the Policies, Projects, and Policies together. The top choices for Priorities were focused on education, scenic beauty, the natural environment, and healthy food and recreation access. The Projects and Policies that scored highest across the NRV also reflected these Priorities, focusing on education, mobility, health care, conservation and pollution reduction, and development practices, both in terms of where development happens, and what type (e.g., allowing aging-in-place).

While there is some agreement across the NRV, there is also variation that helps to better understand the region's diversity. This information about how responses vary across NRV communities can also help each understand how best to consider the goals and strategies proposed by the NRV Livability Initiative in their own communities as appropriate, and where there might be opportunities to work together. For example, two communities that have similar Priorities or where survey participants chose similar top Projects or Policies may be able to combine resources to implement similar projects and policies that reflect their shared community interests.

Appendix A: Demographics

The demographic and geographic characteristics of NRV Tomorrow Survey respondents (left) is compared to actual demographics of the New River Valley region (right) below. All data for the NRV region is taken from the U.S. Census Bureau, 2007-2011 American Community Survey 5-Year Estimates.

Community

Survey Respondents

Outside of NRV 3%
None Given 3%
Pulaski County (Other) 6%
Pulaski Town Area* 6%
Giles County 9%
Floyd County 11%
Radford Area* 11%
Blacksburg Area* 31%
Christiansburg Area* 17%
Montgomery County (Other) 3%

NRV Region[1]

Pulaski County (Other) 14%
Pulaski Town Area 5%
Giles County 10%
Floyd County 9%
Radford Area 9%
Blacksburg Area 24%
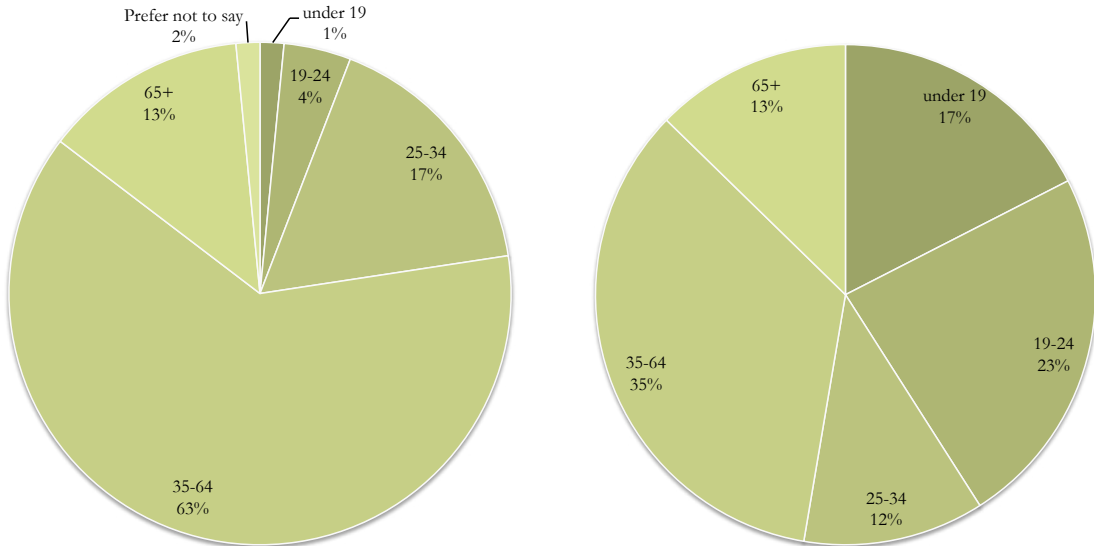Christiansburg Area 12%
Montgomery County (Other) 17%

* Note: Respondents community was determined by zip code. Since some zip codes extend beyond an official town or community border, some county residents are included in these numbers.
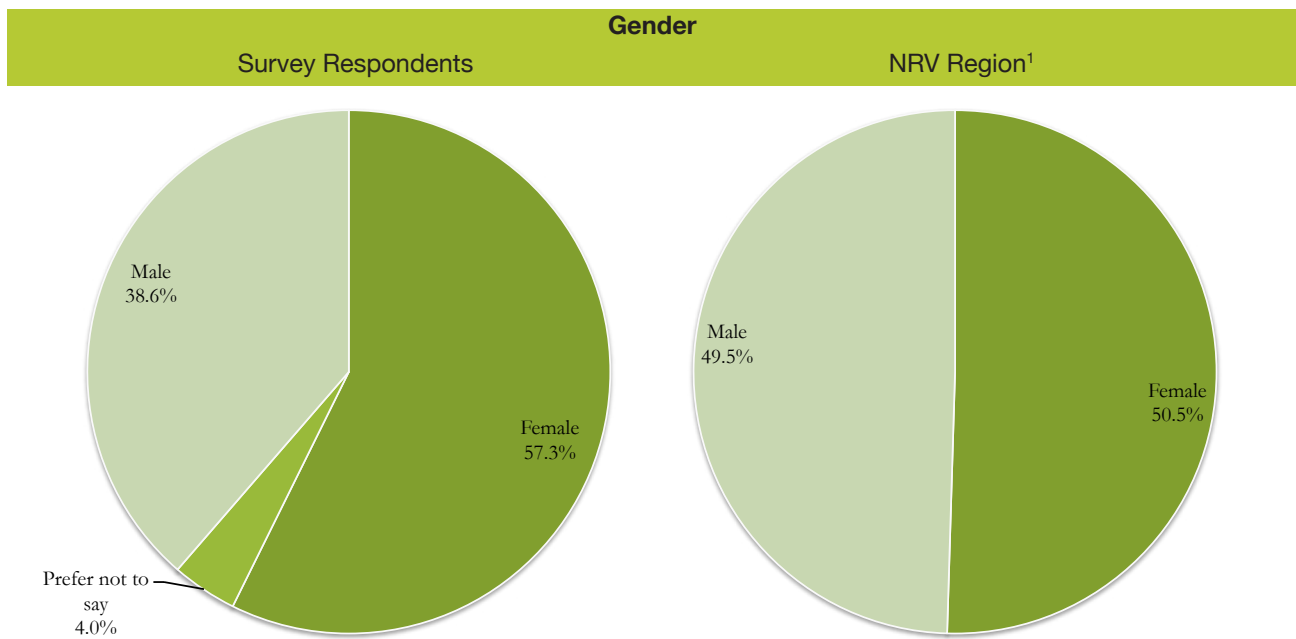
Gender

Survey Respondents

Male 38.6%
Female 57.3%
Prefer not to say 4.0%

NRV Region[1]

Male 49.5%
Female 50.5%

[1] All demographic data for the New River Valley Region (right) is taken from the U.S. Census Bureau, 2007-2011 American Community Survey 5-Year Estimates.

Age

Survey Respondents

Prefer not to say 2%
under 19 1%
19-24 4%
25-34 17%
65+ 13%
35-64 63%

NRV Region[1]

65+ 13%
under 19 17%
19-24 23%
25-34 12%
35-64 35%

Race/Ethnicity

Survey Respondents

Other 0.4%
Two or More Races 2.2%
Hispanic/Latino 1.1%
Prefer not to say 5.9%
American Indian 0.7%
Asian 1.7%
African American/ Black 3.2%
White/Caucasian 84.8%

NRV Region[1, 2]

Other 0.7%
Two or More Races 1.8%
Hispanic/Latino 2.2%
American Indian 0.2%
Asian 3.1%
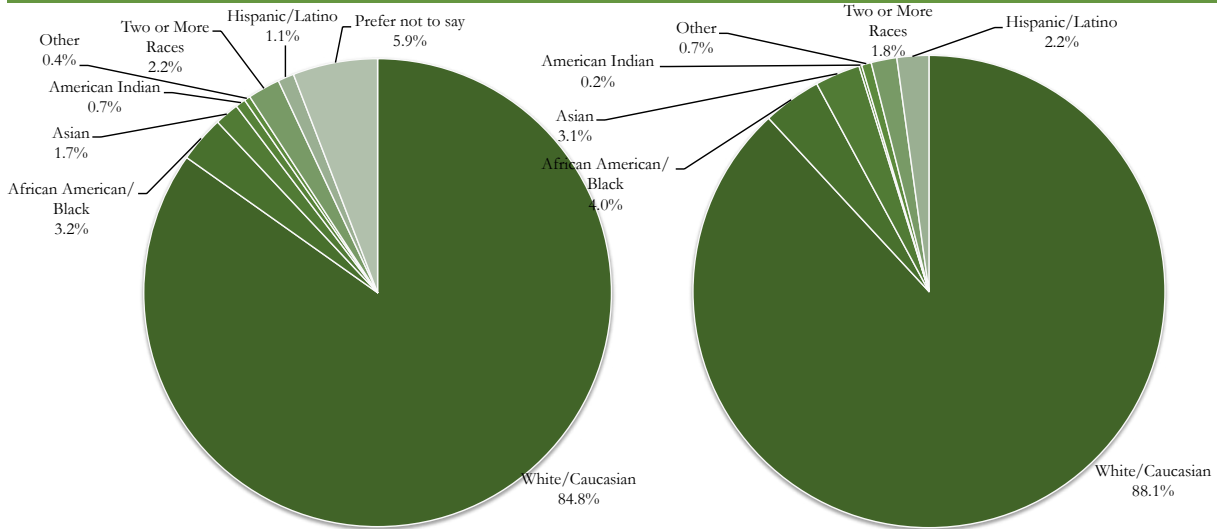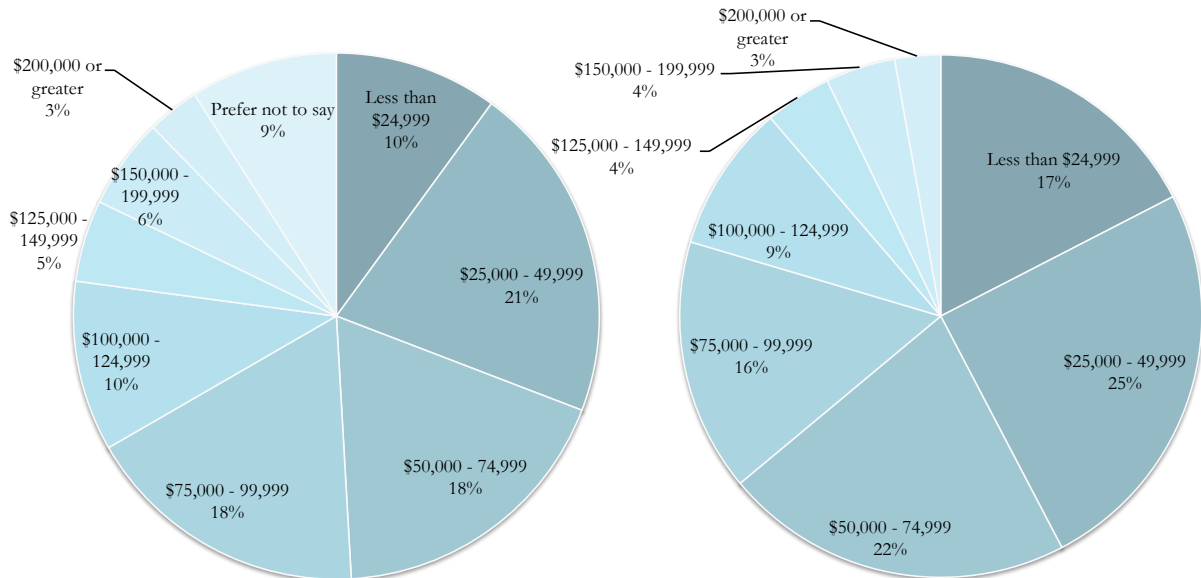African American/ Black 4.0%
White/Caucasian 88.1%

[1] All demographic data for the New River Valley Region (right) is taken from the U.S. Census Bureau, 2007-2011 American Community Survey 5-Year Estimates.

[2] The "Hispanic/Latino" option is a separate question from the other ethnicities in the Census data, but was not a separate question in the NRV Tomorrow Survey.

Household Income

Survey Respondents

NRV Region[1]

$200,000 or greater
3%

Prefer not to say
9%

Less than $24,999
10%

$150,000 - 199,999
6%

$125,000 - 149,999
5%

$100,000 - 124,999
10%

$75,000 - 99,999
18%

$50,000 - 74,999
18%

$25,000 - 49,999
21%

$200,000 or greater
3%

$150,000 - 199,999
4%

$125,000 - 149,999
4%

$100,000 - 124,999
9%

$75,000 - 99,999
16%

Less than $24,999
17%

$25,000 - 49,999
25%

$50,000 - 74,999
22%

[1] All demographic data for the New River Valley Region (right) is taken from the U.S. Census Bureau, 2007-2011 American Community Survey 5-Year Estimates.