

LIVABILITY

IN THE NEW RIVER VALLEY

From Vision To Action



LIVABILITY

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From Vision To Action

New River Valley, Virginia

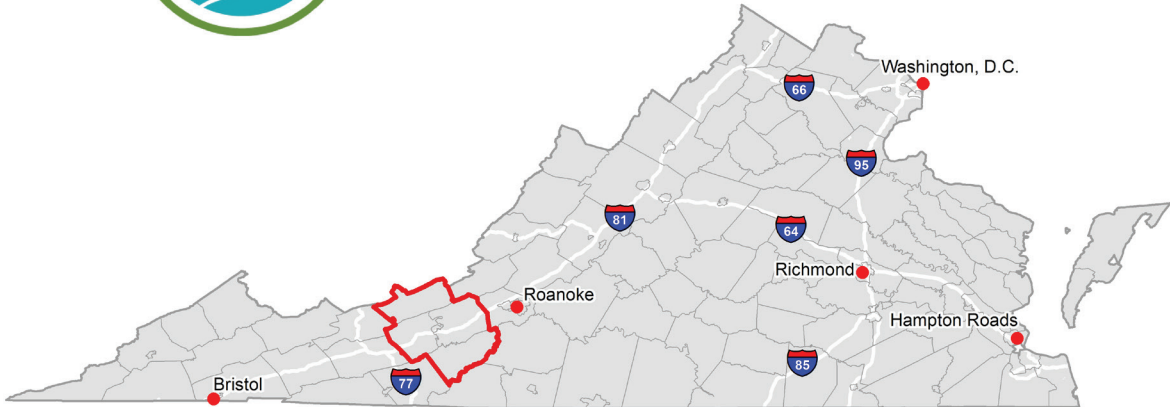
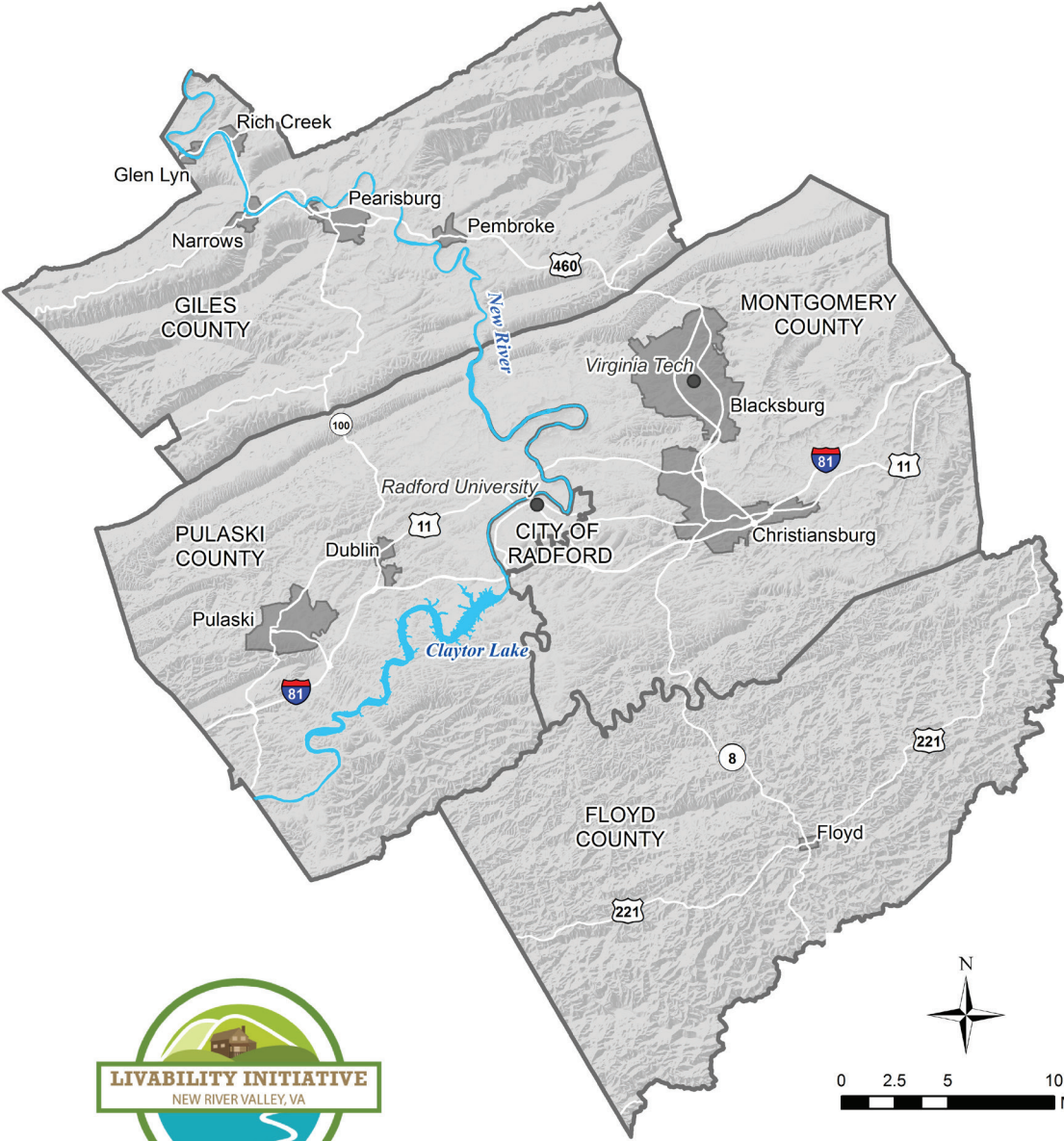


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INTRODUCTION AND OVERVIEW

The Livability Initiative was a three year regional planning process which provided an opportunity for the New River Valley's residents to develop a vision for the future and develop strategies that businesses, community organizations, local governments, and individuals can use to make this future vision a reality.

This final plan identifies ways to increase regional self-reliance and prosperity, save tax dollars, increase support for local businesses, support and revitalize existing communities, offer more choices in housing and transportation, improve community health and protect the region's rural character, natural environment and scenic beauty.



WHAT IS THE LIVABILITY INITIATIVE?

The **Livability Initiative** was a three-year regional planning process which provided an opportunity for the New River Valley's residents to *develop a vision* for the future and *develop strategies* that businesses, community organizations, local governments, and individuals can use to make this future vision a reality.



This plan identifies ways to:

- » Increase regional self-reliance and prosperity.
- » Save tax dollars.
- » Increase support for local businesses.
- » Support and revitalize existing communities.
- » Offer more choices in housing and transportation.
- » Improve community health.
- » Protect the region's rural character, natural environment and scenic beauty.



3 Years / Hundreds of Citizens.....

This regional initiative began in the summer of 2011 and involved hundreds of citizens over a three-year period, concluding in the early months of 2014. Along the way, residents had many opportunities to share their ideas about what they would like to stay the same as well as what they would like to be different in their communities in the future. The Initiative focused on the New River Valley region, but recognized that what works for one community may not work for another. The concerns and priorities expressed by each community and county influenced the development and prioritization of goals and action items presented in this final plan.

Why was this Initiative so important?

The New River Valley faces a number of challenges, but it also has enormous assets and resources. Planning helps communities choose their own future. Planning processes like the Livability Initiative help to define a future vision, see the big picture, and generate new information that can help with informed community decision-making. Planning also helps build community partnerships and can inspire people to take proactive steps, ensuring the New River Valley is a great place to live, work, and play today and tomorrow.



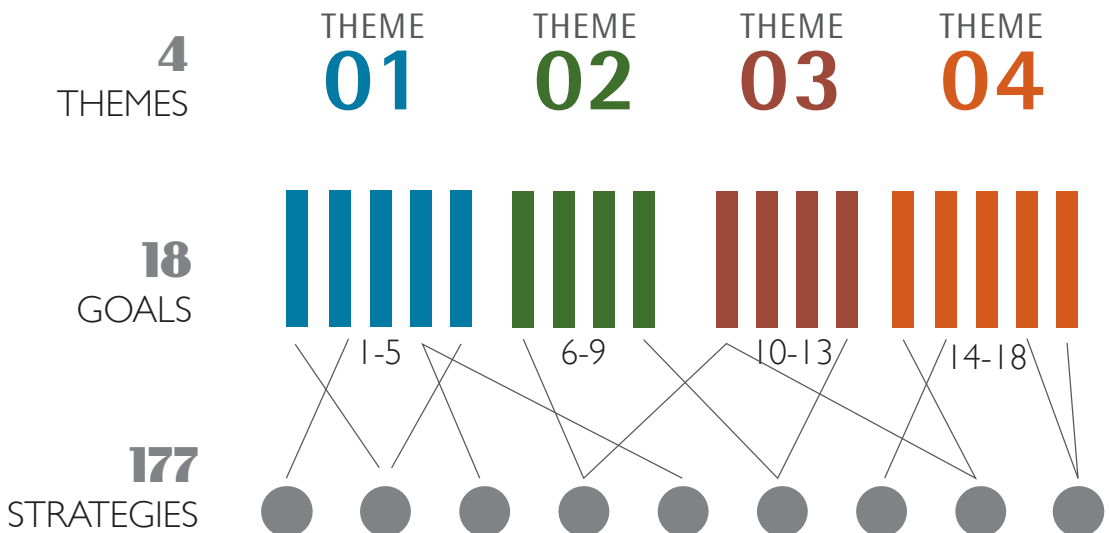
About this report

This final plan provides important information about the region, priority goals that have been identified by citizens, and a menu of action items. Communities can select from these action items to best address their most pressing challenges, while at the same time helping to accomplish regional goals. The key trends identified in the Interim Livability Report are included and expanded upon in this final report.

The first section provides a brief description of the Livability Initiative including its outreach and technical process. It is followed by a **vision for the future** along with **18 specific goals** and important demographic and economic **trends** that informed goal development. The final section includes a menu of **strategies** with specific recommendations for action by government, businesses, institutions, and individual households. Each of the strategies cuts across conventional topic areas to present a comprehensive approach to the region's major challenges. Each of the plan's goals can relate to multiple strategies, and each strategy seeks to achieve multiple goals. This approach is informed by the understanding that there is rarely one single action that can achieve a particular goal, and each policy action has implications across many different areas of interest.

The information in this report was gathered by:

Livability Initiative partners, New River Valley Planning District Commission staff, seven topic area working groups (**arts and culture, community health, economic development, energy, housing, natural resources, and transportation**), and through numerous outreach activities in which close to 3,000 residents of the NRV shared their perspectives and priorities.



Partners

THE LIVABILITY CONSORTIUM

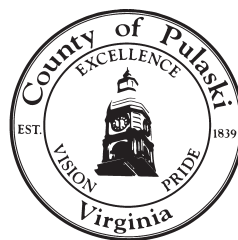
The Livability Initiative was a coalition of local governments, nonprofits, educational institutions, and community organizations interested in having a regional conversation about the future. The Livability Initiative Consortium was comprised of the following partners:

New River Valley Planning District Commission, Floyd County, Giles County, Montgomery County, Pulaski County, City of Radford, Towns of Christiansburg and Blacksburg, the NRV HOME Consortium, Community Housing Partners, The Community Foundation of the NRV, New River Community Action, The New River Valley Health District, The New River Valley Metropolitan Planning Organization, and Virginia Tech.

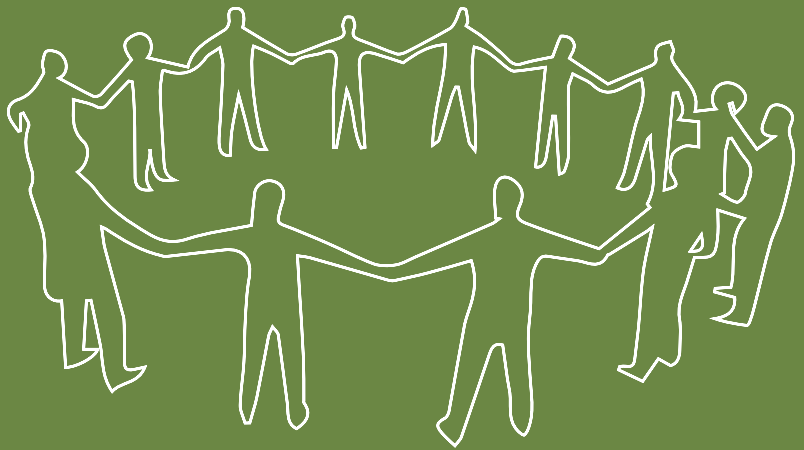
Consortium partners met **quarterly** to receive project updates and provide regional perspective and guidance to plan activities and development.

THE LEADERSHIP TEAM

The Leadership Team, comprised of a core group of consortium representatives, met twice monthly to provide guidance with on-going activities and to advise staff as project challenges and opportunities arose.



PUBLIC ENGAGEMENT



TIMELINE FOR PUBLIC ENGAGEMENT

Kick Off Summit

150 participants gathered at Claytor Lake State Park to identify strengths and challenges in their communities as well as to develop a future vision for the region. Participants also identified key issues that they wanted to see investigated and considered during the remainder of the planning process.

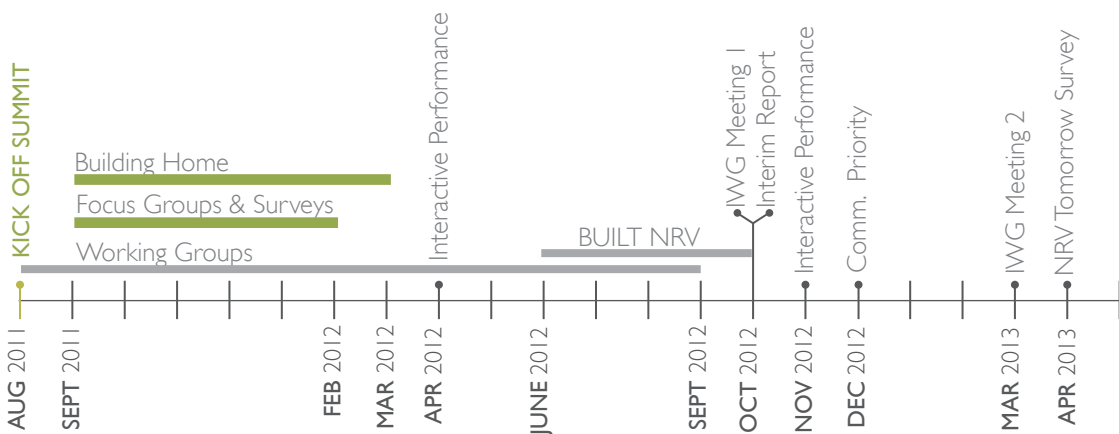
Focus Groups and Surveys

500 people were reached through a series of focus groups, paper and on-line surveys designed to better understand the challenges facing some of the region's more vulnerable populations.

- » 10 focus groups were held with community-based and non-profit organizations that work with lower-income, elderly, and minority populations (October-December 2011).
- » New River Community Action and the Literacy Volunteers of the NRV helped conduct one-on-one survey interviews with Head Start parents as well as households receiving other types of assistance (November-January 2012).
- » The Christiansburg Institute coordinated two community meetings with members from the Spanish-speaking community (December 2012).
- » On-line and paper surveys were made available at public libraries throughout the region (October- December 2012).

Building Home

A team of actors and musicians from Virginia Tech's Performing Arts program created and conducted 26 interactive theatre and music events with communities throughout the New River Valley. These gatherings used art as a medium for community visioning and dialogue about community-based strengths and challenges.



Interactive Performances

Members of the Building Home team created two interactive performances, “Whether System: A Town Hall Nation Event” and “Behind a Stranger’s Face”, in response to stories and perspectives collected from Building Homes’ 26 community gatherings. The interactive performance blended storytelling, music, and theatre to build awareness and invite healthy, productive public dialogue about community concerns. 637 people participated in both the community dialogues and interactive performances.

BUILT NRV

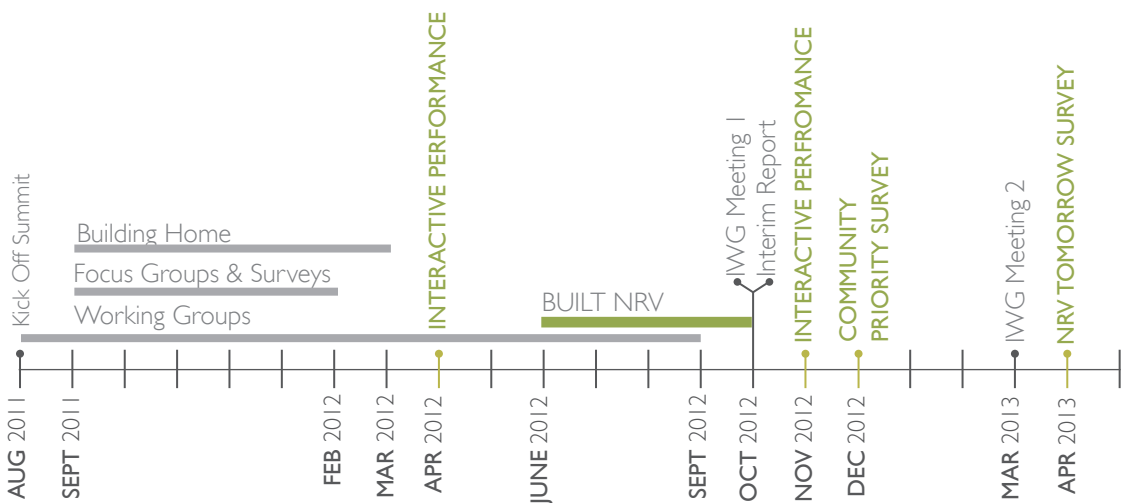
An interactive board game for citizens, ‘BUILT NRV’ provided 249 participants with an opportunity to discuss priorities and preferences as well as concerns about what they see happening in their communities. During the game, tradeoffs and tensions were surfaced in a way that enabled participants to find areas of common ground and potential solutions rather than focusing on areas of conflict and controversy. This information helped to support strategy identification and development.

Community Priority Survey

This on-line survey sought feedback on proposed goals developed by the seven topic-area working groups. Based on the information of 660 respondents, staff was able to determine which goals represented regional priorities and which were more specific to the different communities across the NRV. This information was then used to better inform scenario and strategy development in the next phase of the planning process.

NRV Tomorrow Survey (<http://interact.nrvlivability.org>)

This survey effort asked people to share what they value most about their communities and the region and then to prioritize which projects and policies they think should be pursued to help to preserve or enhance what they value most. The project and policy options included in the survey were selected from a longer list of draft strategies developed by the technical working groups and related to the highest priority goals identified in the previous survey effort. Responses helped to prioritize strategies included in this report. 750 community members shared their perspectives on-line or at one of 14 events held at public libraries throughout the region.



KICK OFF SUMMIT



FOCUS GROUP - SPANISH LANGUAGE EVENT



TOWN HALL NATION
INTERACTIVE PERFORMANCE



BUILT NRV GAME



BEHIND A STRANGER'S
FACE
INTERACTIVE PERFORMANCE



TECHNICAL PROCESS

The technical process sought to:

IDENTIFY priority issues and trends facing the New River Valley.
DEVELOP regional goals that addressed key issues and trends.
EXPLORE scenarios and strategies for achieving those goals.

Nearly 200 people participated in the technical process including interested citizens and representatives from community-based organizations, educational institutions, local governments, state and federal agencies, and the business sector.



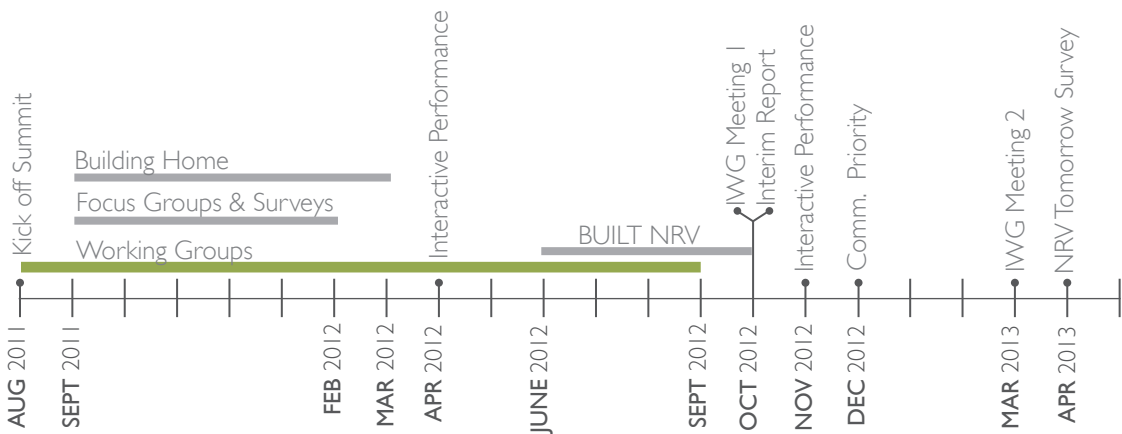
THREE YEARS IN THE MAKING....

For the first year, The Livability Initiative held **7 monthly WORKING GROUPS:**

7 WORKING GROUPS

- ARTS & CULTURE
- COMMUNITY HEALTH
- ECONOMIC DEVELOPMENT
- HOUSING
- NATURAL RESOURCES
- TRANSPORTATION
- AGING TASK FORCE

The working groups helped to **guide the planning process around their topic**. They also combined public input with regional information to **develop draft goals and strategies** that could help to address priority issues identified for each topic area. Staff also continually engaged other organizations and experts that could help provide additional expertise to inform working group discussions.



THE INTERIM REPORT - October 2012

Based on priority challenges and trends identified by working groups and public input, the Livability Initiative staff compiled the Livability Initiative Interim report during the summer of 2012. The report highlighted draft working group goals, and the following six trends were identified as major drivers behind the region's biggest challenges: **An Aging Population, Agricultural Shifts, Commuting Patterns, Housing Costs, Jobs and Education, and Community Health.**

The Interim report was reviewed by working group and consortium members and then distributed to all local governments and followed up by presentations to all Town Councils and Boards of Supervisors in the region. Additional presentations were provided upon request of consortium partners and community groups. **(September 2011 - January 2012)**

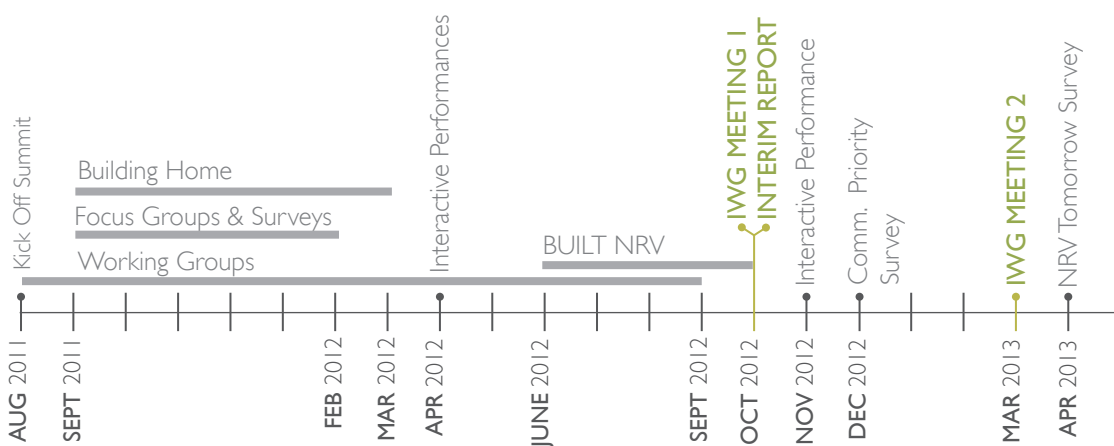
INTEGRATED WORKING GROUPS

Working group members were invited to two **integrated working group meetings** to review the draft Interim report and to help prioritize and review information generated for the scenarios and strategies phase of the project. Representatives from each topic-specific working group were present at each meeting.

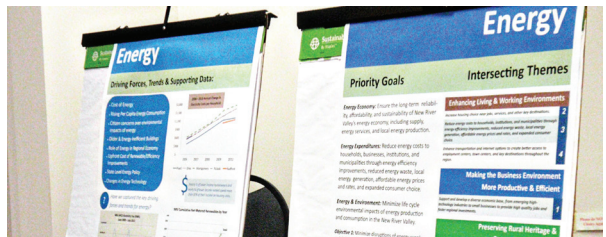
45 working group members reviewed the products from other working group efforts and identified overlapping trends and priorities. They also prioritized key trends and driving forces behind those trends they wanted to see incorporated into alternative scenarios and strategy development. **(October 2012)**

50 working group members reviewed the results from the Community Priority survey, which asked the public to prioritize draft working group goals. Members were then asked to review and prioritize strategies identified by topic-specific working groups that could help achieve these priority goals. These strategies were then incorporated into the final interactive **public survey called NRV Tomorrow.** **(April 2013)**

Additional feedback was provided by local government staff in each locality to ensure that the data incorporated into the scenarios process was an accurate reflection of existing population, employment, and land use trends.



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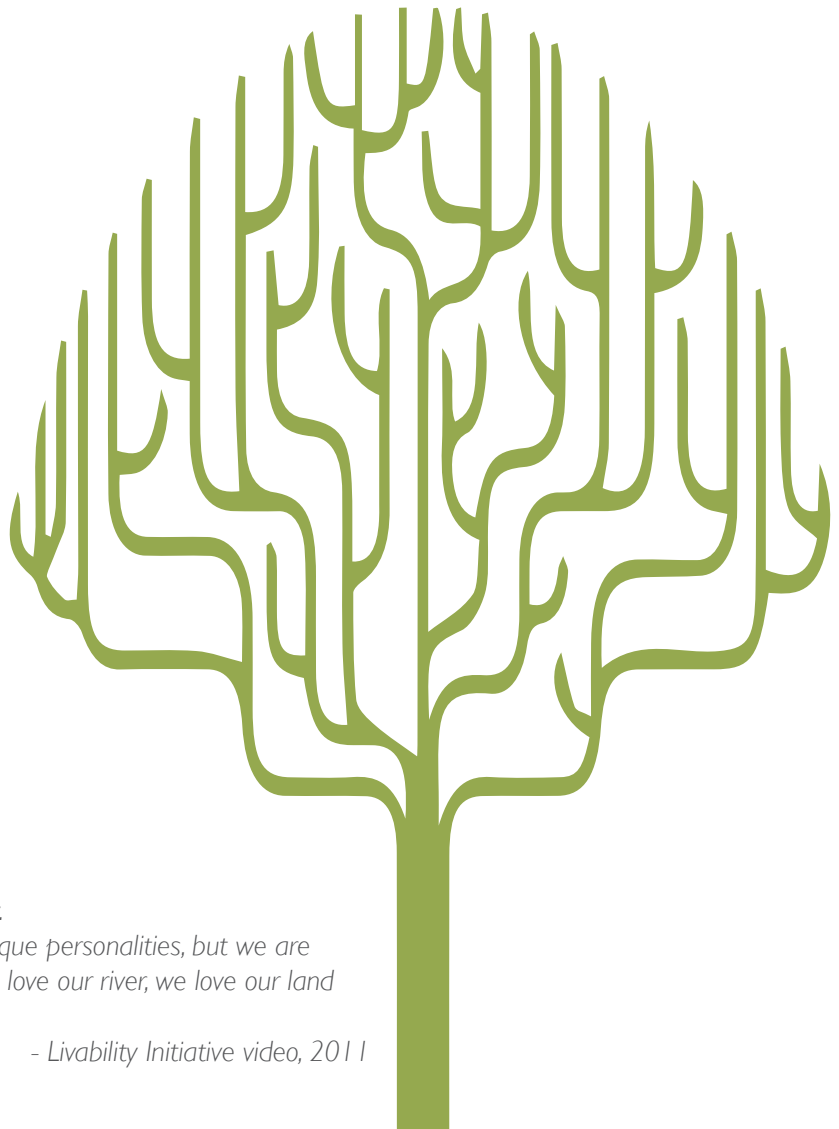


OVERARCHING VISION

From the beginning, the Livability Initiative has been about discovering what people value most in their communities and what they want for the New RiverValley in the future. Through community conversations, large-scale surveys and smaller-scale working groups, thousands of people worked to define, learn about and wrestle with the challenges and opportunities facing the region, contributing their voices to the creation of a vision for the future and generating good ideas that can be turned into action.



**THE NEW RIVER VALLEY...
PRESENT REALITIES,
FUTURE VISION**



*"We are the New River Valley.
We are communities with unique personalities, but we are
connected in many ways: We love our river, we love our land
and we love our way of life."*

- Livability Initiative video, 2011

From the beginning, the Livability Initiative has been about discovering **what people value most in their communities and what they want for the New River Valley in the future.** Through community conversations, large-scale surveys and smaller scale working groups, thousands of people worked to define, learn about and wrestle with the challenges and opportunities facing the region, contributing their voices to the creation of a vision for the future and generating good ideas that can be turned into action.

Citizens who engaged this process were asked to consider what would most contribute to creating and sustaining livable communities throughout the New River Valley.

Community “livability” is a concept that attempts to capture how well people are able to meet their basic needs for housing, employment, education, and health while also accounting for those less tangible attributes that make a community a great place to live out an entire lifetime - a place where our children can reach their full potential and our grandparents can grow old with independence and dignity. Livability in the places where we live, work and grow is not a simple thing - it requires that people have options that are affordable, appropriate and accessible.

Achieving a vision for livable communities throughout the New River Valley is where we all come in - local governments, businesses, community groups, faith communities and citizens like you.

What follows is an overview of key elements of this vision, broken down into **four major focus** areas:

 **ENHANCING LIVING AND WORKING ENVIRONMENTS**

 **PRESERVING RURAL HERITAGE AND COMMUNITY CHARACTER**

 **MAKING THE BUSINESS ENVIRONMENT MORE PRODUCTIVE AND RESILIENT**

 **BUILDING HEALTHY COMMUNITIES**

** You will notice these focus areas follow throughout the remainder of the report, organizing community generated goals and the strategies suggested for achieving them.*

THEME
01



Enhancing Living and Working Environments

The places where we live and work powerfully contribute to the quality of life in our communities: our homes, the spaces where we make a living and the manner in which we get where we need to go.

Living in the NRV has become less affordable over the years. Average affordability for both renter and owner-occupied housing has been declining across the whole NRV – particularly near the universities and the region's major job centers. Rising energy prices have also impacted overall housing affordability especially for those living in older, less energy efficient homes. As gasoline prices rise, many of the region's rural residents are beginning to really struggle with the cost of getting to and from work. On top of all that, the population is aging and it is difficult for older residents to age at home if they do not have houses that are adapted to their changing needs. This is a particular challenge in rural localities lacking adequate public support services for those who want to age in place.

In the future, residents would like to see an increase in the energy efficiency of new and older building stock, an expansion of alternative and renewable energy sources and creation of more transportation and commuting options throughout the NRV. They want plenty of housing choices that serve a wide range of incomes, ages and preferences. Where possible, the majority of new housing development should be focused in existing towns and employment centers to take advantage of existing infrastructure, save on costs of services, cut down on commute times and preserve rural landscapes and character. Both new and older homes can move towards higher levels of energy efficiency, allowing people to stretch their finances further.

Residents also want to maintain the ability to be self-reliant in their homes. Aging in place can be made possible through retrofits of existing homes and new housing built to accommodate the needs of an older population. There is also a need to provide adequate systems of transportation to ensure mobility and access to medical care and shopping among the elderly.





Preserving Rural Heritage and Community Character

New River Valley residents care a great deal about the character of their communities. They value natural landscapes, beautiful views and rural character, as well as the Valley's natural resources and open spaces that provide benefits through recreation and environmental quality. They also value the arts and community culture and take pride in the region's history and unique identity.

There is concern, however, that population growth, combined with sprawling development patterns will end up compromising the New River Valley's natural assets and ecosystems, particularly the quality of its rivers and streams. Agricultural land is increasingly being shifted into housing and other forms of development, and residents are worried about loss of community character and a shared appreciation of the unique qualities that make the region so special.

Citizens said that they want the New River Valley of the future to continue to be a place of breathtaking natural beauty with plenty of wooded, mountainous landscapes, working farms, and fields of pasture and livestock. The New River itself should serve as the healthy heart of the region, yielding multiple benefits to residents: clean water, sustainable fish and wildlife habitat, recreation, natural beauty and economic opportunity.

People of the region also care about the quality of their air and water. This means choosing economic development options that create prosperity while practicing good stewardship of the environment. A healthy environment, it was argued, will help the region maintain its natural bounty as well as its unique identity while attracting newcomers and boosting tourism to the area.

There was a desire for a future with thriving downtowns throughout the region that will reflect the character of each locality and will have attractive, well-maintained buildings full of shops and restaurants. The hope is that these places will draw locals and visitors alike to engage one another and the available arts and cultural activities that meaningfully connect them to the local community and to the broader world. Visitors and new residents bring dollars into the region, creating jobs and raising standards of living.



THEME
03



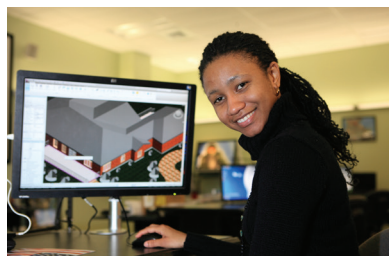
Making the Business Environment Productive and Resilient

Communities with productive and resilient business environments ensure quality jobs for residents, provide a wide range of options for workers and are an attractive place for new businesses and industries to make their home.

At present there is a troubling mismatch between the skills of many residents and the needs of employers in the main areas of fastest job growth in the region. Long-term residents worry about whether they will be able to find work that will allow them to stay in their communities as they confront a changing economic landscape. Since most job opportunities are also concentrated in a few localities, many residents face long commutes to get to job centers, driving up their cost of living as energy prices rise.

Citizens said that they wanted to see growth of a diversified economic landscape with opportunities for development and employment in a wide range of sectors including education, agriculture, innovation and high tech industry, tourism, services and manufacturing. They expressed value for both innovation and tradition: moving forward into accessing the global economy while at the same time fully developing what is local including small businesses and local agriculture. Residents indicated a desire for future investment in telecommunications and transportation infrastructure necessary to allow the region to compete in the broader economy.

All residents of the New River Valley should have access to quality educational experiences that will help prepare them to gain access to quality jobs in the region and to participate fully in the life of their communities. Participants also wanted to see a future where NRV farmers are able to make a living by supplying local and regional markets with a diversity of products - providing sources of high quality fresh, local foods to residents. By doing these things, residents see more opportunities for young people to have a chance at making a good living and raising their own families here in the region.





THEME 04

Building Healthy Communities

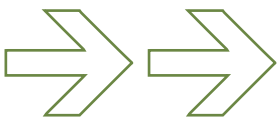
A healthy community extends well beyond adequately caring for those who are sick. A healthy community supports healthy choices and lifestyles and proactively addresses health problems such as teen pregnancy, substance abuse and disease. Healthy communities also attend to the needs of those who are most vulnerable – people in poverty, babies and young children, the elderly and people with disabilities - making sure that all residents have the ability to live up to their potential.

Citizens voiced a range of concerns about the health in and of New River Valley communities. While there are several good health care facilities throughout the region, access is not evenly distributed, and the cost of health care is more than many families can afford. Too many of the region's children are living in poverty and are not able to access early childhood development opportunities. There are worries over high levels of teen pregnancy and substance abuse, and in many areas there is limited access to healthy foods and access to safe walking and biking opportunities.

Citizens felt strongly about the need to ensure future access to clean and high quality water for all residents. They also prioritized expanding individual and community choices about food, fitness, work and play. They valued promoting healthy behaviors and community-based initiatives that prevent and reduce the burden of chronic conditions and disease, and supported improvements to community health including reduced rates of teen pregnancy and substance abuse.



The next step was for citizens to participate in a process of translating the vision of the future for the New River Valley into a **concrete set of goals and strategies** that could inform local governments, businesses, community groups, faith communities and citizens as they work independently and together to build the New River Valley of tomorrow.



*The next section of the report provides an overview of the significant trends taking place in the region and what continuing along the current course may mean for the future. This is followed by an exploration of **eighteen “priority” goals** that citizens identified as important, along with specific **strategies** that were identified as key to achieving these goals. The report concludes with ideas for how citizens, local governments, businesses and community organizations can work together to create a positive future for the region.*

CURRENT TRENDS

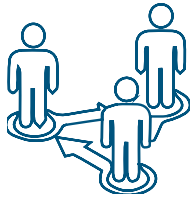
The New RiverValley faces a complex future: uneven population and housing growth, a changing economic landscape, and shifting demographics. This section takes a look at what will happen over the next 20 years if current land use and demographic trends continue. The purpose of this 'Current Trends' analysis is to better understand the possible future outcomes of maintaining existing regional trends, policies, and practices through 2030. This analysis can also help us reflect on some areas where action may be needed in order to achieve the Future Vision of the New RiverValley.



THEME
01

CURRENT TRENDS

WHICH AREAS OF THE NEW RIVER VALLEY ARE EXPERIENCING POPULATION GROWTH?



**POPULATION % CHANGE
2000-2010**

PULASKI CO.	-.7%
GILES CO.	3.8%
RADFORD CITY	3.5%
BLACKSBURG	7.7%
DUBLIN	10.8%
FLOYD CO.	10.1%
MONT. CO	12.9%
CHRISTIANSBURG	24.2%

BLACKSBURG / CHRISTIANSBURG ○.....

As Virginia Tech, CRC and medical centers continue to attract new professionals to the area, the demand for both single family and town homes continues to grow in the Town of Christiansburg and Blacksburg. There will generally be an increase in the current density of housing in order for people to take advantage of the amenities that the community has to offer.

DUBLIN ○.....

Dublin's central location and newer housing stock both make it attractive for population growth within Pulaski County.

FLOYD COUNTY ○.....

Floyd County continues to grow, and most of that growth takes the form of large lot rural neighborhoods along the corridor from Riner to Floyd. Although the overall character of the county's land remains, farms and other agricultural lands along this corridor gradually transition to residential uses.

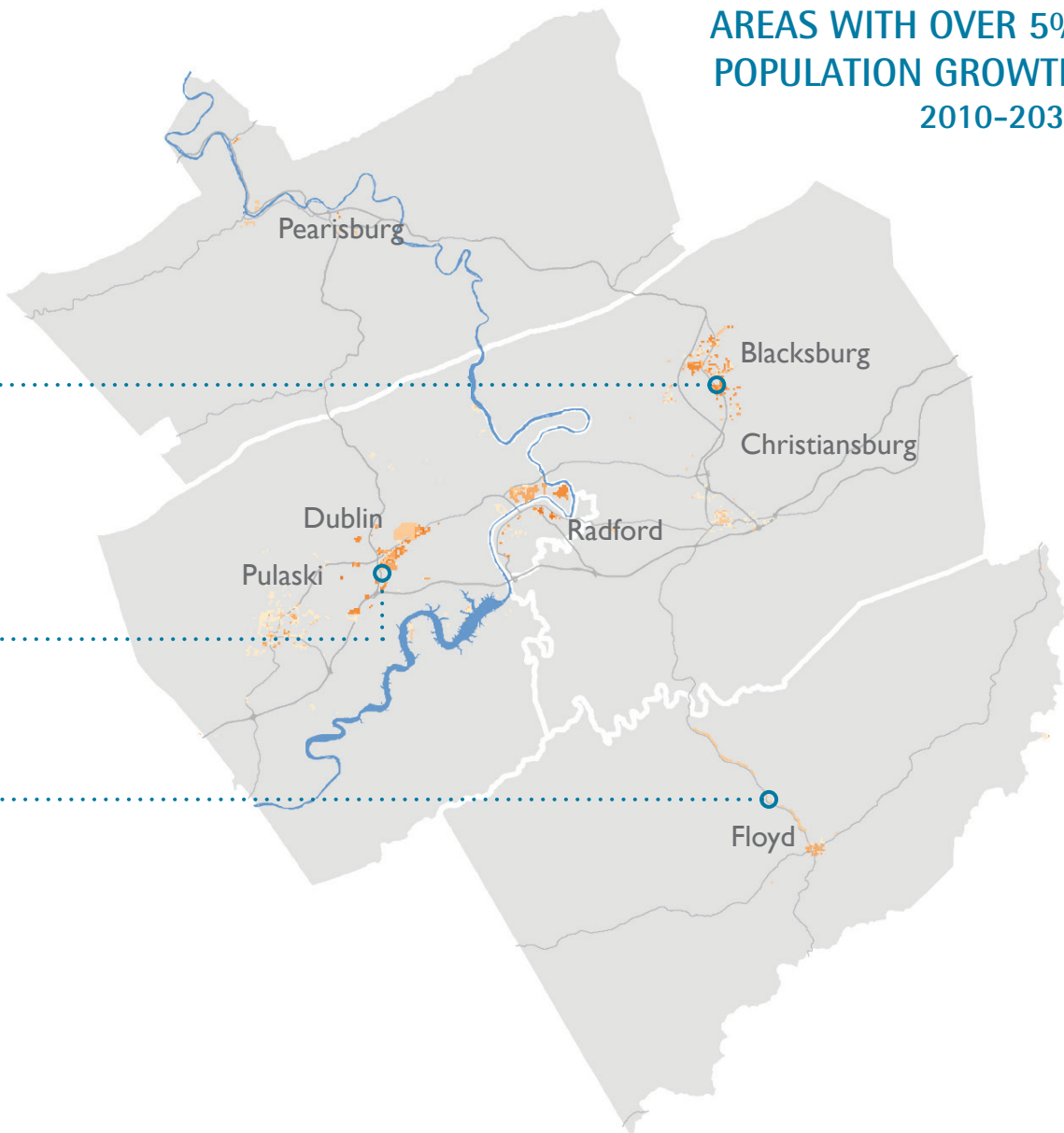


Montgomery
Floyd Co.
Town of Dublin

Montgomery and Floyd Counties are experiencing high population growth, while the population in Giles and Pulaski is declining, except for the Town of Dublin.

Most NRV residents live in or near towns and villages. These locations create opportunities to enhance livability for residents with more walkable, mixed-use and transit oriented patterns of development. By encouraging most of the region's future population growth into increasingly vibrant and attractive towns and villages, localities will be in a better position to affordably provide infrastructure and services while preserving the rural character and scenic beauty of the region as a whole. This will also help to keep rural areas 'rural' for those who choose to live a more rural lifestyle.

AREAS WITH OVER 5% POPULATION GROWTH 2010-2030



* PlaceMatters Inc., NRV/PDC, Weldon Cooper Center 2013.

THEME
01

CURRENT TRENDS

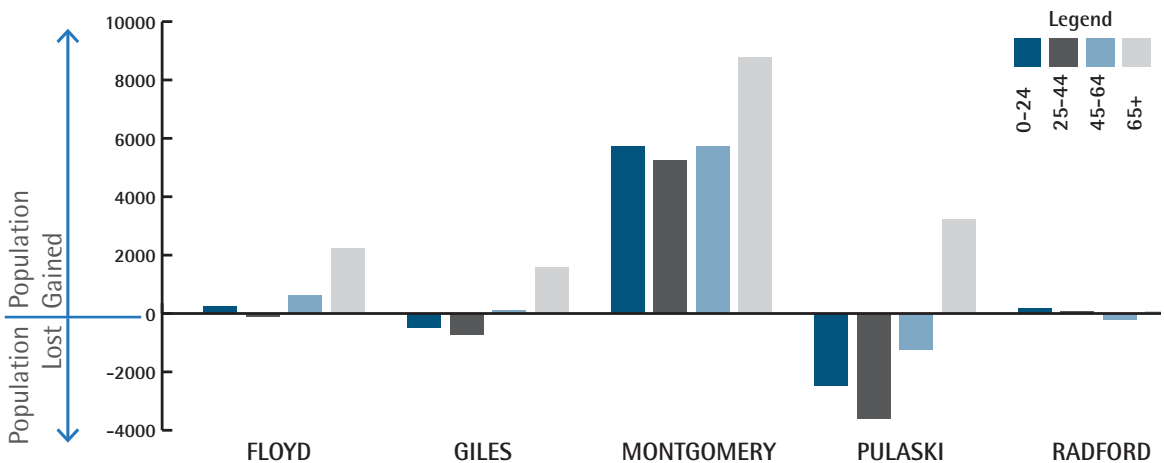
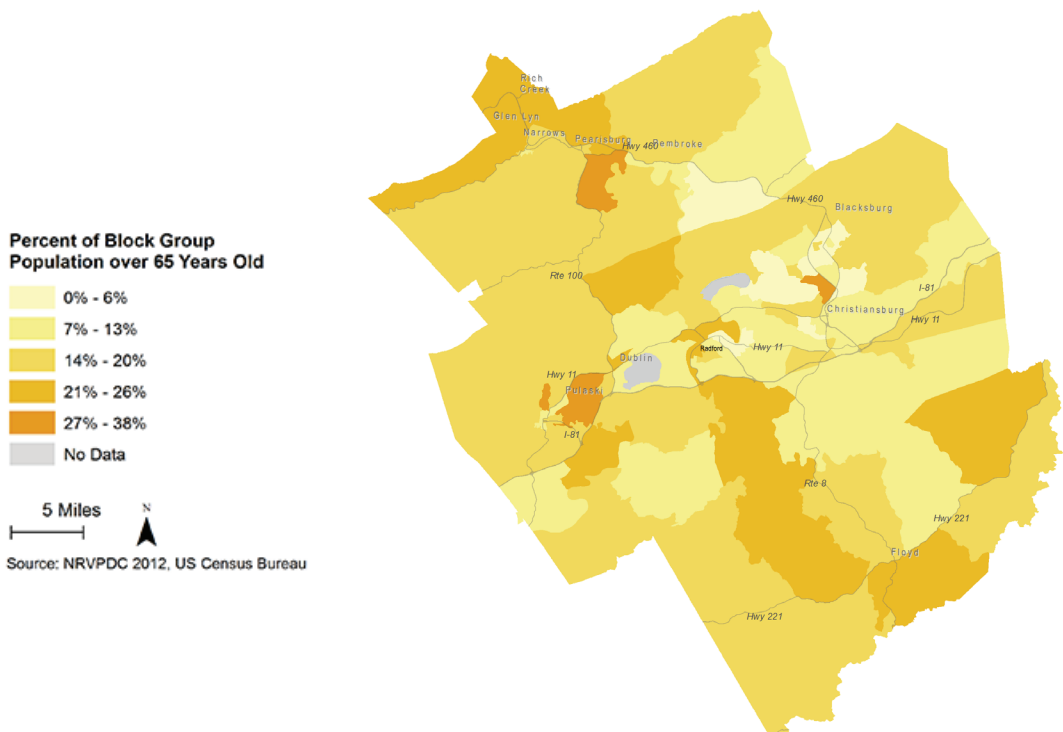
HOW IS THE POPULATION CHANGING?

In Giles and Pulaski, the under-25 year-old population is declining, as many young people seek opportunities outside the region.

Meanwhile, following national trends, the New RiverValley's overall population is aging and the number of seniors is expected to nearly double by 2030.



PERCENT OF POPULATION OVER 65 IN THE NRV



What does this mean for the region?

- » An increased demand for services to support older citizens across the region.
- » A smaller tax base to support those services in non-growth areas.
- » Less young and middle age residents contributing to the tax base.

What can be done to shift the trends?

Developing amenities that are likely to attract and retain new businesses and younger employees, including access to technology, arts and cultural experiences, places to shop, outdoor recreation, and vibrant walkable communities will help to create a more diverse employment landscape.

THEME 01

CURRENT TRENDS

DEMANDS ON HOUSING & TYPES OF HOUSING

Agricultural

very large parcels, primarily farming or natural land with occasional houses



Rural Residential

large parcels, primarily single-family homes along major corridors



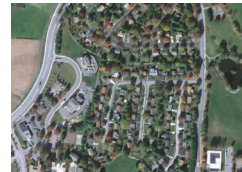
Rural Neighborhood

medium-large parcels, primarily single-family homes clustered around local roads



Suburban Low Intensity

medium parcels, single-family homes on local roads with few outlets to other roads



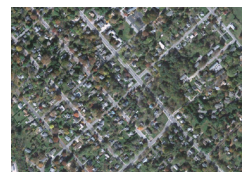
Suburban Medium Intensity

small-medium parcels, attached single-family or multi-family homes on local roads with few outlets to other roads

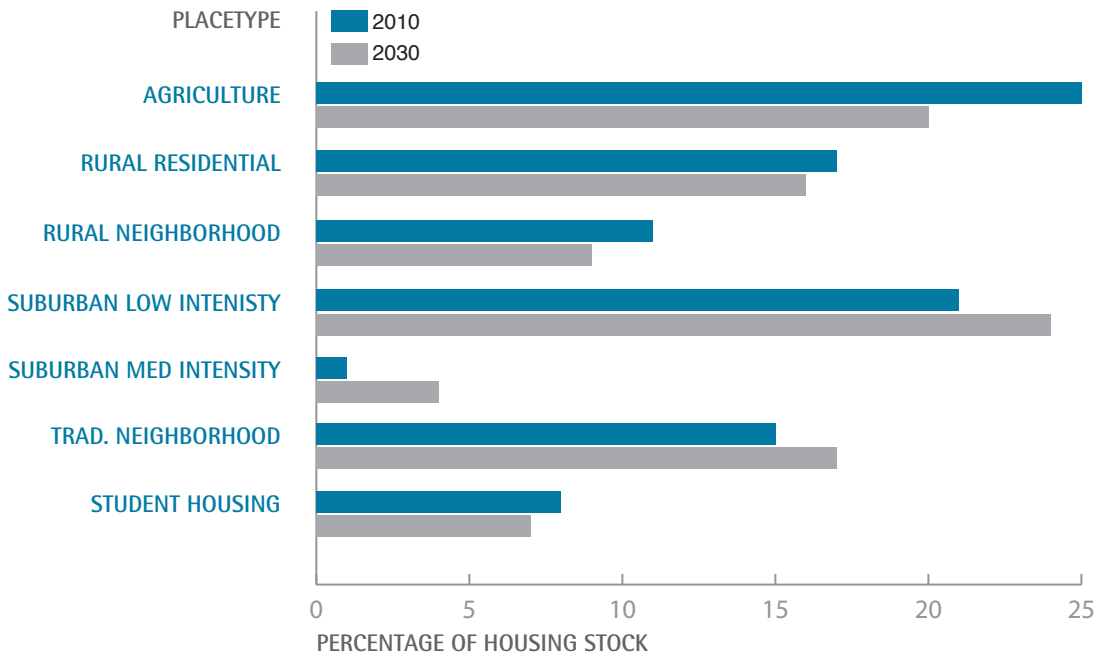


Traditional Neighborhood

small-medium parcels, primarily single-family or multi-family homes with occasional shops on local streets with many outlets to other roads, often with sidewalks



CHANGE IN HOMES BY PLACETYPE



** PlaceMatters Inc., NRVPCDC 2013*

○ People live in different “Placetypes” that have different demands on natural resources, financial resources, and community resources.



The largest percentage of new housing will continue to be single family homes, followed by multi-family units near job and town centers.

What does this mean for the region?

- » Single-family homes in growth areas will cost more.
- » Newer homes will be more energy efficient than older homes.
- » An increase in multi-family units will provide more choice, especially for students and professionals.
- » Larger farm parcels will continue to be subdivided into smaller lots for residential development.
- » Major road fronts will become more developed, changing the character of these regional corridors.
- » Higher tax revenue in growth areas, lower tax revenue in slow to no-growth areas.
- » More stormwater runoff and lower water quality.

What can be done to shift the trends?

Through a combination of local and regional land use approaches, it is possible to encourage new development within close proximity to established town centers thereby preserving rural areas. Over time, this would increase the number of residents living or working close enough to daily needs to make use of biking, walking or transit. It would also help reduce the pressure of housing development on agricultural land and open space in growth areas.

THEME
01

CURRENT TRENDS

HOW DO PEOPLE GET AROUND?

The majority of the region will remain car dependent. Those who live near existing public transportation service areas will continue to see improvements in public transportation access, while transit options in the more rural areas will remain limited without additional investment.

**HOMES WITHIN WALKING
DISTANCE OF A
TRANSIT STOP
(1/4 MILES)**

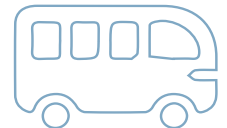


	2010	2030 TREND	2030 RURAL ● SERVICE OPTION
FLOYD	0%	0%	11%
GILES	0%	0%	16%
MONTGOMERY	28%	50%	52%
PULASKI	1%	12%	16%
RADFORD	57%	91%	92%
TOTAL	17%	38%	41%

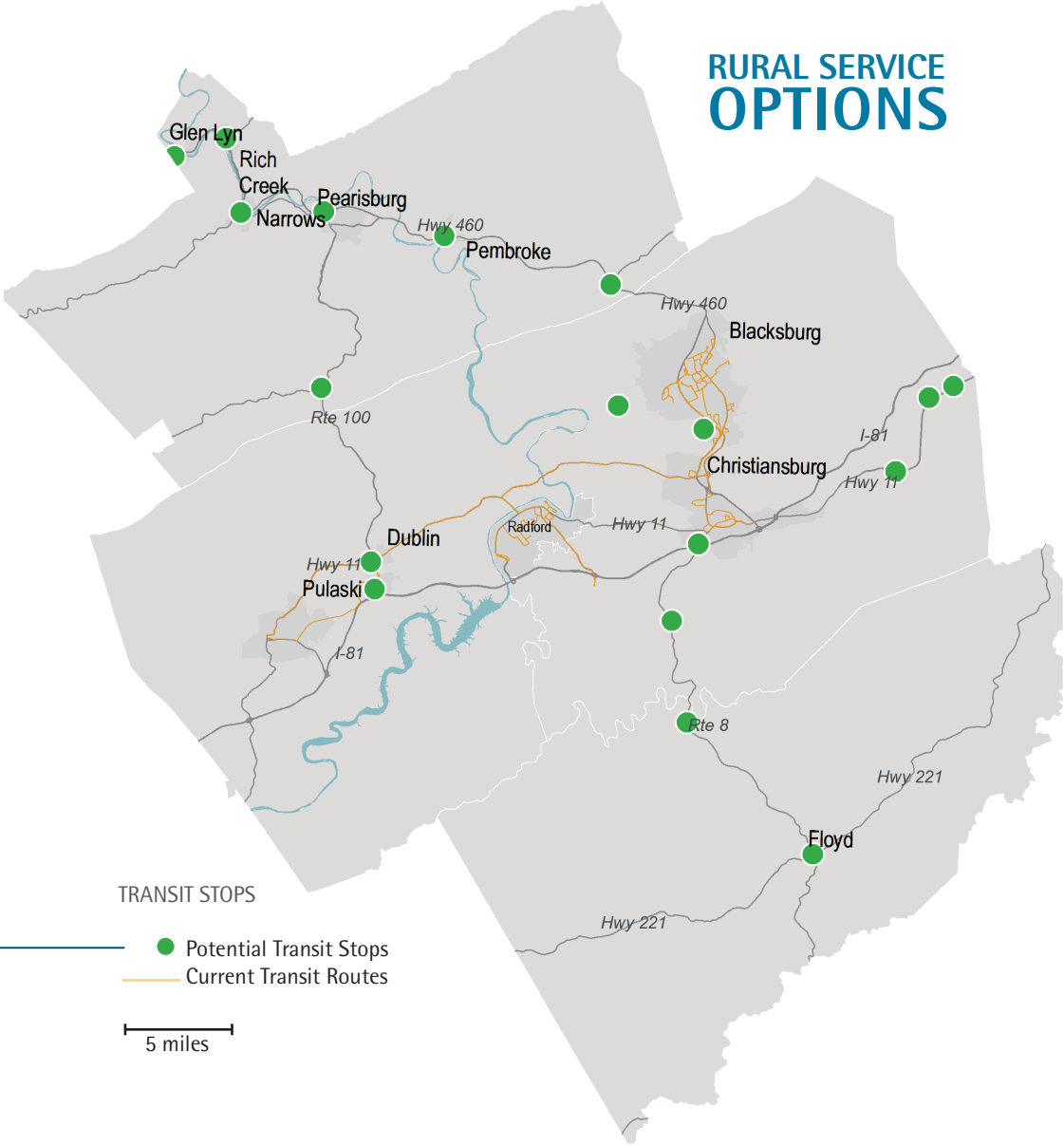


**HOMES WITHIN BIKING
DISTANCE OF A
TRANSIT STOP (2 MILES)**

	2010	2030 TREND	2030 RURAL SERVICE OPTION
FLOYD	0%	0%	32%
GILES	0%	0%	66%
MONTGOMERY	70%	74%	81%
PULASKI	43%	85%	85%
RADFORD	98%	100%	100%
TOTAL	42%	51%	73%



RURAL SERVICE OPTIONS



TRANSIT STOPS

- Potential Transit Stops
- Current Transit Routes

5 miles

* PlaceMatters Inc. and NRPDC 2013. Employment Mobility Study 2009

What does this mean for the region?

- » People living in areas with higher population concentrations will have greater access to transit options and see greater efficiency in transit service.
- » Rural areas will remain car dependent and continue to see an increase in transportation related costs.

What can be done to shift the trends?

The Rural Service option shows the impact that expanding transportation access would have to more rural areas of the region. If a park-n-ride set up was included in this expansion more rural residents would likely benefit from rural transportation options. Sidewalks and bike lanes can also help make it easier for people to access transit stops and help increase ridership.

THEME
02

CURRENT TRENDS

WHAT IS HAPPENING TO THE CHARACTER OF COMMUNITIES WITHIN THE REGION?

The character of communities within the region is slowly changing. Some communities are experiencing a **revitalization** of their town centers, while others continue to see a **growing number of vacant commercial and residential properties**.



National forests, state parks, and privately conserved lands will continue to protect important natural resources and will increasingly serve as a draw for outdoor recreation and tourism. Those localities with fewer conserved lands may face future threats to water quality and ecological diversity due to anticipated changes in land use.



Increased attention towards creating arts and culture opportunities in some communities has helped to bring them tourist dollars and generates pride and a sense of cultural identity among local residents.

Top 10 Most Popular Outdoor Activities in the New River Valley

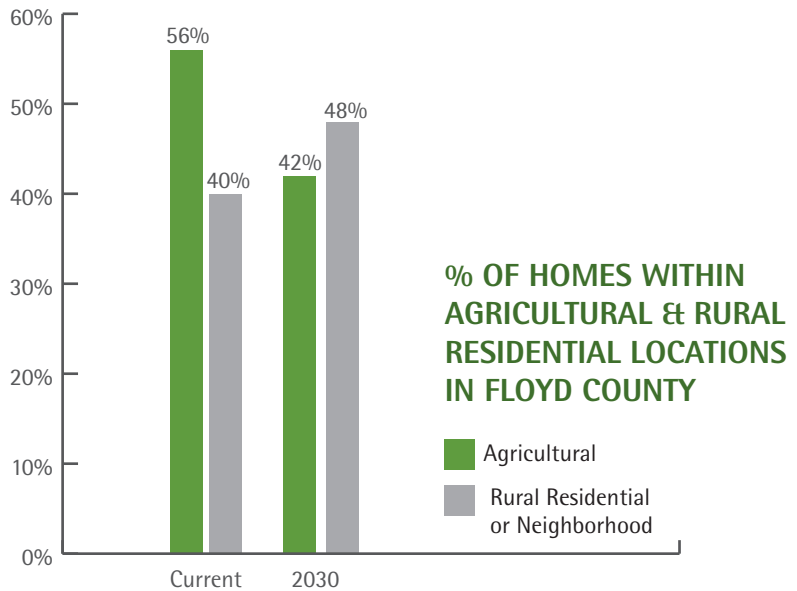
**2006 Virginia Outdoor Survey*

- | | |
|-------------------------|---------------------------|
| 1. Walking for Pleasure | 6. Hunting |
| 2. Swimming | 7. Using a Playground |
| 3. Driving for Pleasure | 8. Visiting Natural Areas |
| 4. Jogging & Running | 9. Sunbathing |
| 5. Fishing | 10. Bicycling |



Floyd County, in particular, can expect to see more large-lot development with farmland shifting slowly but steadily into low density rural residential properties.

Montgomery County is becoming more suburbanized near major employment centers, with more dense housing and commercial development along its major road corridors.



What does this mean for the region?

- » Scenic landscapes along major road corridors become increasingly dotted with development.
- » Average farm size decreases.
- » More stormwater runoff and lower water quality in rivers and streams.
- » More tax dollars required to extend and improve public water, sewer and stormwater systems.
- » More housing units relying on septic and well systems.
- » Increasing number of arts, culture, and outdoor recreation amenities.

What can be done to shift the trends?

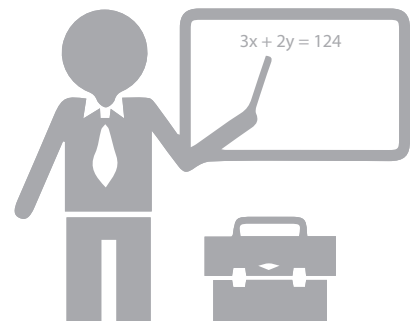
Improving land use planning and practices can help protect forest and water resources as well as the rural character, scenic views and opportunities for active recreation they provide. Strengthening small town centers provides an opportunity to revitalize local economies without sacrificing the beauty of the surrounding landscape or unique character and identity of communities. Developing arts and cultural activities to serve as a “community draw” can stimulate business activity, attract tourism revenue, and help retain high quality employers and employees by creating highly desirable places in which to raise a family, work and retire. Channeling investments into existing main streets can also preserve existing infrastructure, historic character and spur new economic opportunities, while making wiser use of public resources.

THEME
03

CURRENT TRENDS

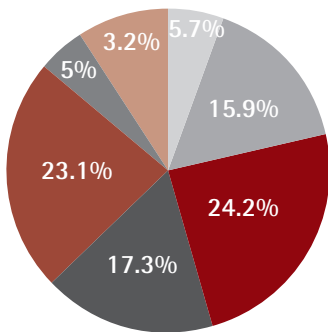
WHERE ARE THE JOBS?

The number of jobs available in the region is projected to grow, but current trends would lead to growth that is uneven both in total number of jobs and the types of jobs available. Recently, the Blacksburg-Christiansburg-Radford metro area experienced a year-on-year employment growth of 7.1%, ranking 9th in the country. This is primarily due to the growth in health care and professional sectors, which includes technology. Employment in Pulaski and Giles counties however has declined, primarily due to job losses in the manufacturing sector.

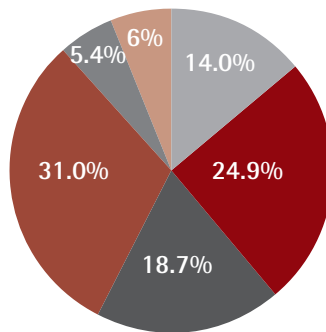


MEDIAN EARNINGS BY LEVEL OF EDUCATION IN 2009

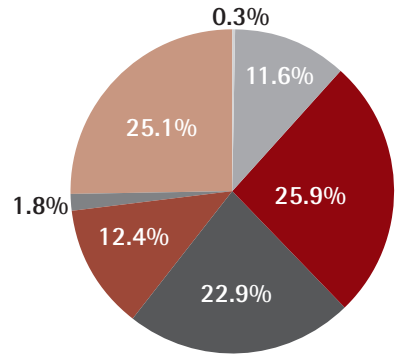
	FLOYD	GILES	MONT	PULASKI	RADFORD
Less than high school graduate	\$ 14,778	\$ 22,869	\$ 20,575	\$ 19,890	\$ 17,925
High school graduate	\$ 27,364	\$ 26,047	\$ 26,732	\$ 23,417	\$ 17,041
College / associate's degree	\$ 30,459	\$ 30,301	\$ 31,317	\$ 31,796	\$ 29,484
Bachelor's degree	\$ 36,172	\$ 41,917	\$ 37,836	\$ 38,088	\$ 34,139
Graduate / professional degree	\$ 37,042	\$ 48,871	\$ 52,681	\$ 49,872	\$ 54,157



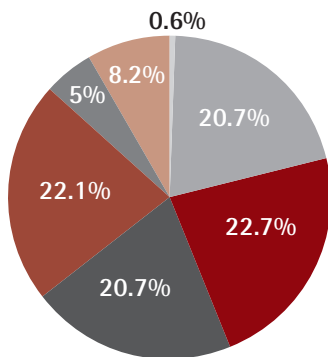
FLOYD



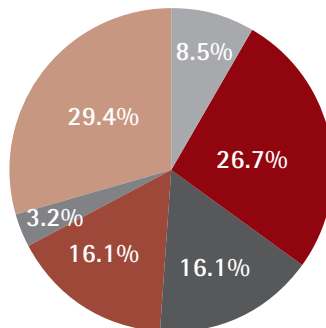
GILES



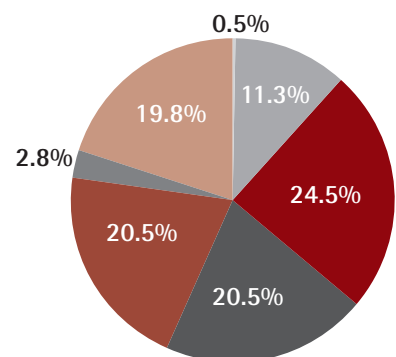
MONTGOMERY



PULASKI

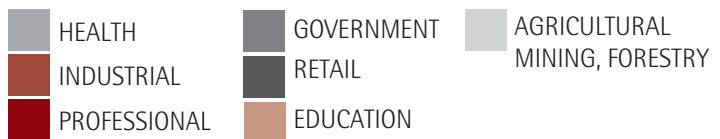


RADFORD



REGION

PROJECTED EMPLOYMENT BY SECTOR IN 2030



What does this mean for the region?

- » Pulaski and Giles will have fewer jobs for those without a college education.
- » Montgomery County will see an increase in overall job growth including more job opportunities for professionals and an even larger increase in those that do not require a college degree.
- » An increase in commuting from the more rural counties into Montgomery County.

What can be done to shift the trends?

In order for this region to be prosperous, residents need the tools, resources and education necessary to reach their full potential as citizens, workers and leaders. This requires expanding education and training opportunities that meet the needs of critical growth sectors and small businesses. Increasing local awareness about the nature of jobs available locally and the types of education and skills necessary to succeed in these fields is also important. The region also needs sufficient infrastructure to support economic growth including modern commercial and industrial building stock, public water and sewer, easy access to major roads and highways, and high speed internet connectivity.

THEME 03

CURRENT TRENDS

WHAT ABOUT POVERTY IN THE REGION?

Poverty rates across the region are higher than state averages. Montgomery County and Radford City's poverty rates are skewed upward by large student populations, but poverty is an issue in every locality across the New River Valley. This coupled with a trend that sees most current and future regional job growth occurring in sectors that require higher education or training means there is a real risk that currently under-privileged populations will experience further marginalization.



% BELOW THE POVERTY LEVEL 2007–2011

VIRGINIA	10.7%
RADFORD	33.9%
MONTGOMERY	23.6%
FLOYD	13.1%
GILES	15.0%
PULASKI	15.0%

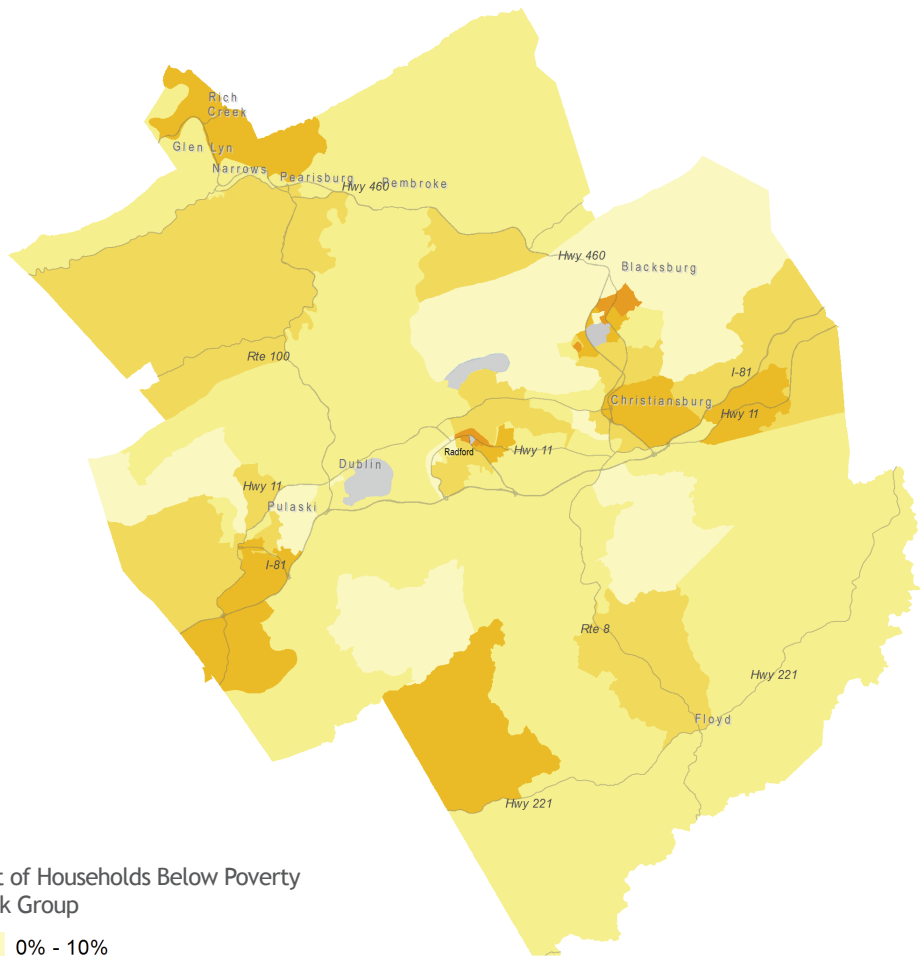
What does this mean for the region?

- » Growing economic disparities across the region.
- » Economic opportunity largely dependent upon location, access to quality education and training.
- » Ensuring health and wellbeing of children and families will remain a major challenge.

What can be done to shift the trend?

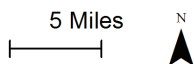
Diversifying local economies and focusing attention and resources on connecting lower income residents with opportunities for quality education and training in skills aligned with areas of job growth can help to ensure future economic growth and decrease disparities in economic opportunity across the region. Addressing issues of poverty in the longer term will also depend upon strengthening programs to help children and families affected by problems such as poor health, lack of affordable housing, teen pregnancy and substance abuse.

PERCENT OF HOUSEHOLDS IN POVERTY



Percent of Households Below Poverty by Block Group

- 0% - 10%
- 11% - 25%
- 26% - 38%
- 39% - 55%
- 56% - 91%
- No Data



Source: NRVPCD 2012, US Census Bureau
 Note: Blacksburg and Radford have very high poverty rates because most college students are classified as poor based on their own incomes.

THEME
04

CURRENT TRENDS

WHAT MAKES A HEALTHY COMMUNITY?

Location isn't everything, but having easy access to recreation and other **physical activity, healthy food, and medical services** are key ingredients to building a healthy region. Current trends show mixed results. While many residents are in close proximity to these resources, parts of the region will continue to struggle.



How Close To FRESH FOOD?

Where you live in the New River Valley can lead to significant differences in access and consumption of healthy food. Access to healthy food was based on access to SNAP (Supplemental Nutrition Assistance Program) approved food stores that provide a variety of fresh fruits and vegetables. These include farmers markets, grocery stores, and convenience stores with a selection of fresh fruit, vegetables, and meat.



HOMES WITHIN WALKING DISTANCE OF FRESH FOOD (.25 MILES)

	2010	2030
FLOYD	2%	8%
GILES	4%	9%
MONTGOMERY	5%	12%
PULASKI	3%	7%
RADFORD	3%	9%
TOTAL	3%	10%

HOMES WITHIN BIKING DISTANCE OF FRESH FOOD (2 MILES)

	2010	2030
FLOYD	19%	45%
GILES	54%	71%
MONTGOMERY	67%	74%
PULASKI	54%	90%
RADFORD	91%	99%
TOTAL	61%	77%



How Close to RECREATION?

Being close to recreation options is often linked to a person's level of physical activity. Recreation options include outdoor trails, multi-purpose paths, gyms and public recreation centers.



HOMES WITHIN WALKING DISTANCE OF RECREATION (1/4 MILES)



	2010	2030
FLOYD	0%	3%
GILES	4%	12%
MONTGOMERY	4%	9%
PULASKI	2%	13%
RADFORD	5%	14%
TOTAL	3%	10%

HOMES WITHIN BIKING DISTANCE OF RECREATION (2 MILES)



	2010	2030
	15%	38%
	60%	78%
	69%	77%
	61%	97%
	92%	100%
	64%	79%

HOMES WITHIN 10 MILES OF HOSPITAL

	2010	2030
FLOYD	1%	1%
GILES	69%	95%
MONTGOMERY	90%	97%
PULASKI	86%	100%
RADFORD	100%	100%
TOTAL	80%	90%

How Close to a MEDICAL CENTER

Physical access to regional hospitals and medical centers with health care specialists is one measure of health care access. If people can't access health care because of distance, cost, or lack of transportation, they aren't going to get the best care they need. Comprehensive insurance coverage, a good ratio of health care providers to patients, and primary care providers located in the community are also important to expanding health care access.

What does this mean for the region?

- » Rural residents will continue to live further from services. This will continue to impact household budgets and health, especially low income and older residents.
- » Outside of Floyd, more than half of residents live within 2 miles of healthy food or recreation options.
- » Residents across the region generally live close enough to medical centers and hospitals.
- » The region will primarily need to focus on non-infrastructure related solutions to address problems with disparities in health care access.

What can be done to shift the trends?

Extending sidewalks and bike lanes from nearby neighborhoods to transit stops, grocery stores, places to recreate, and places of employment can help increase overall community health. Access to healthy food and recreation options can also be accomplished through school or community-based programs and by expanding relationships with local businesses. Improving health insurance options, increasing hours of operation at medical offices and clinics, and increasing coordination between health and social service providers can also help to increase health care access.

THEME
01

Enhancing Living and
Working Environments

THEME
02

Preserving Rural Heritage
and Community Character

THEME
03

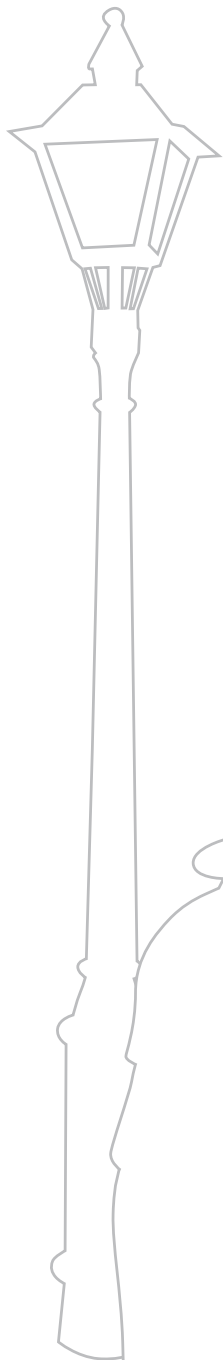
Making the Business
Environment More
Productive and Resilient

THEME
04

Building Healthy
Communities

GOALS

- 01 Provide Support for an Aging Population
02 Ensure Affordability of Housing, Energy & Transport
03 Improve Transportation Options for Residents
04 Increase the Energy Efficiency of Buildings
05 Expand Renewable Energy Systems
- 06 Encourage Development that Preserves Rural Character
07 Protect Natural Landscapes and Ecosystems
08 Recognize and Strengthen, Natural, Cultural and Historic Assets
09 Support Arts, Culture and Community Character
- 10 Enhance Education and Workforce Readiness
11 Support Infrastructure Needed for Economic Development
12 Support Small Business Development
13 Strengthen Agricultural Viability
- 14 Ensure Access to Healthcare
15 Create Healthy Environments
16 Promote Healthy Behaviors and Lifestyles
17 Support Children and Youth Reaching their Full Potential
18 Protect and Improve Water Resources



THEME
01

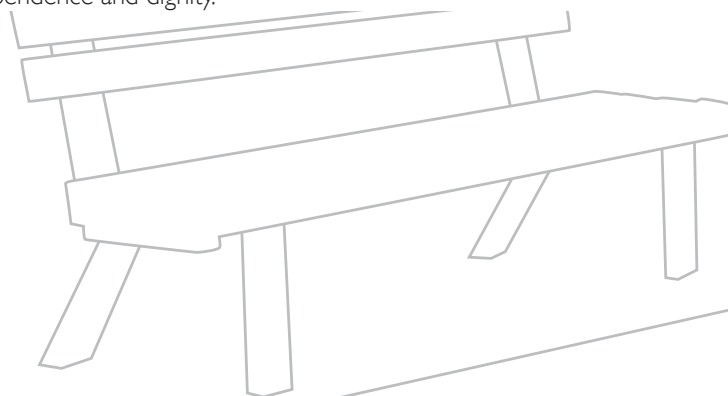
GOAL
01

PROVIDE SUPPORT FOR AN AGING POPULATION

SEEK WAYS FOR PEOPLE TO SUCCESSFULLY AGE AT HOME IN THEIR COMMUNITIES

The New River Valley's population is aging. An aging population brings specific challenges to the community. Declining mobility makes it harder for older adults to navigate stairs and bathrooms and many find their existing homes no longer meet their needs. When older adults are no longer able or comfortable driving, few options exist to get to and from the grocery store, the doctor, or people and places they want to visit. These challenges can increase both health risks and isolation - which are significant factors that drive premature placement in a nursing home, an extremely costly housing option for older adults, their families, and the public.

Overwhelmingly, older adults say they prefer to age in their homes, near family and the community they love. Modifying existing housing can help meet changing physical and cognitive needs and enable more people to age successfully in their homes and communities. Thinking about how to make housing more age-friendly at the design and construction phase is also important. Greater choice in supportive services - from help with housekeeping to in-home healthcare - will help more people live in their homes with greater safety, independence and dignity.





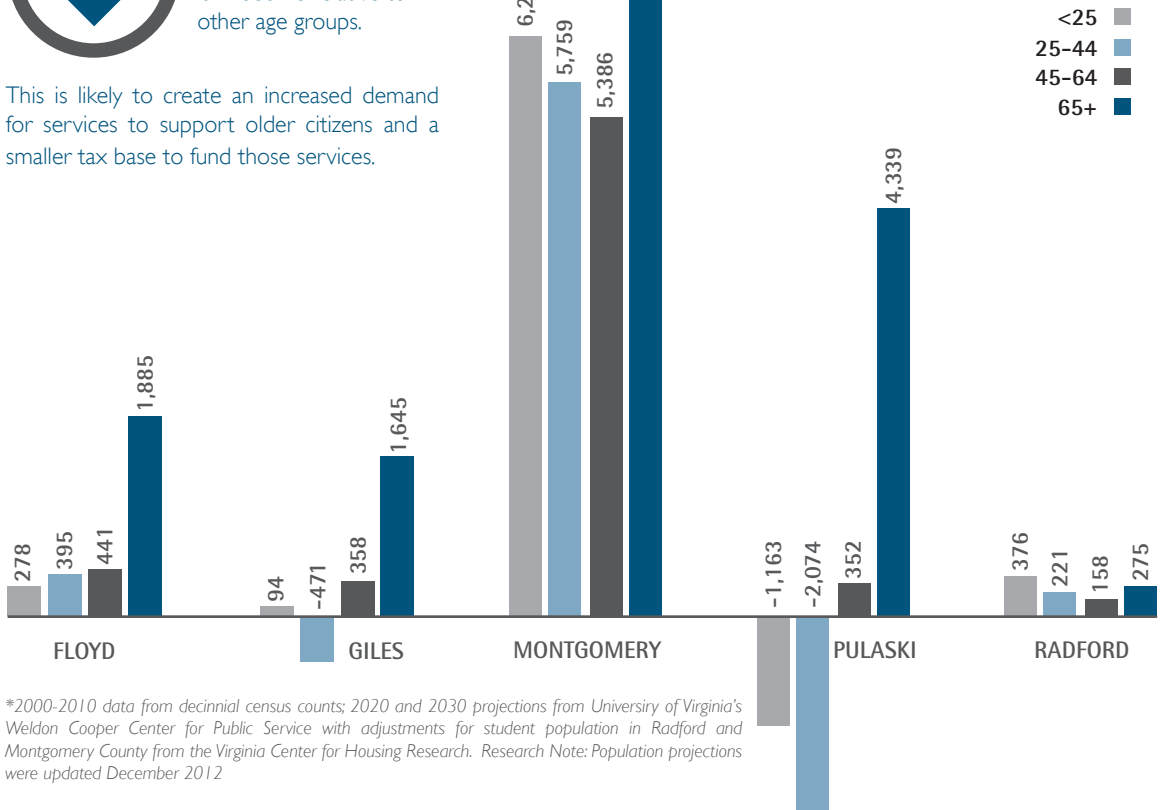
Seniors would nearly double in the NRV in the next 20 years.



In Giles and Pulaski, the under-25 population is in decline relative to other age groups.

This is likely to create an increased demand for services to support older citizens and a smaller tax base to fund those services.

FROM 2000 - 2030 CHANGE IN NUMBER OF RESIDENTS



*2000-2010 data from decennial census counts; 2020 and 2030 projections from University of Virginia's Weldon Cooper Center for Public Service with adjustments for student population in Radford and Montgomery County from the Virginia Center for Housing Research. Research Note: Population projections were updated December 2012

FLOYD: Floyd faces an aging population and workforce, but is maintaining populations of early and mid-career workers. The County's population increase is primarily comprised of late-career workers and retirees, which should improve income levels in the county.

GILES: Giles faces an aging population and workplace. There has been insufficient job expansion to attract or keep younger workers and as older workers retire, the labor force will shrink, possibly making replacement hiring more difficult. An aging population will place strains on services and the tax base supporting those services.

MONTGOMERY: Montgomery is experiencing an increase in early, middle and late career workers, with a significant increase in retirees and senior citizens. As a result, the county will see growth in housing, retail and services.

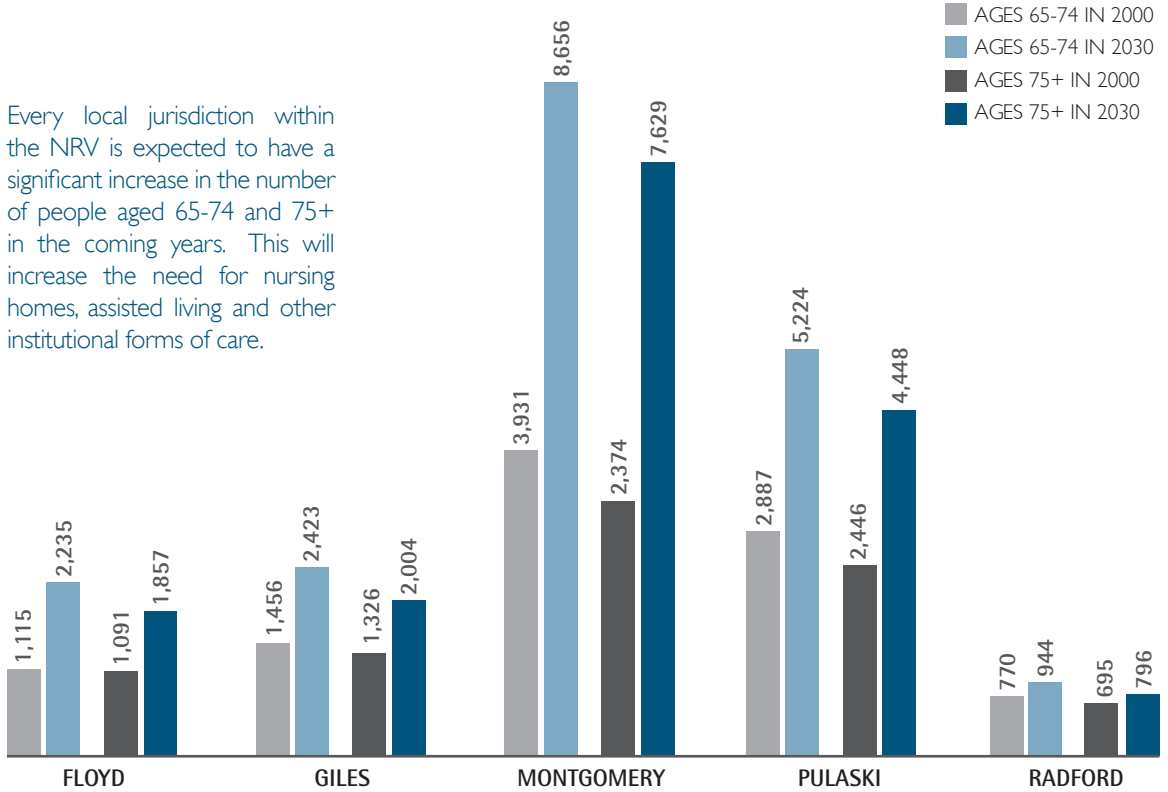
PULASKI: Pulaski's working-age population is declining, as early and mid-career workers leave to find jobs outside the county. This will result in a significantly older labor forces and a much older population.

RADFORD: Radford's population should remain stable and experience slight growth across all age groups.

THEME GOAL
01 01

Every local jurisdiction within the NRV is expected to have a significant increase in the number of people aged 65-74 and 75+ in the coming years. This will increase the need for nursing homes, assisted living and other institutional forms of care.

POPULATION GROWTH



*Virginia Tech Housing Research Center 2012. Includes 2000-2010 data from decennial Census Counts; 2020 and 2030 projections from University of Virginia's Weldon Cooper Center for Public Service.





- » In 2010 less than 4% of the 65+ population in the NRV lived in institutional or group care facilities. Most have continued to live independently and this trend is likely to continue with much aging likely to occur “in-place”.
- » The level and quality of services available to elderly residents who choose to age in their homes varies widely across the region. Currently residents age 75 and older are more likely to stay in or relocate to Montgomery County in order to access services.
- » Each year 1-in-3 adults aged 65+ accidentally falls. Main risks in the home include lack of grab bars, poor lighting and trip hazards. 1-in-4 older adults have some kind of lower body limitation. Home modifications can contribute to creating a safer living environment for older residents.



Costs for home modifications range from a few hundred dollars for handrails and bathroom grab bars to more than \$5,000 for a roll-in shower or a stair lift.

AVERAGE COST OF ELDER CARE PER MONTH IN VIRGINIA

	COST
NURSING HOME / PRIVATE ROOM	\$6,360
ASSISTED LIVING	\$3,743
ADULT DAY SERVICES	\$2,880
HOME HEALTH AIDE	\$1,860

**2010 MetLife Market Survey of Long-Term Care Costs*

STRATEGIES TO SUPPORT AND AGING POPULATION

SUPPORT HOME MODIFICATIONS TO ASSIST AGING IN PLACE

As people age, they often have trouble with stairs and standard bathrooms. Accessibility problems can lead to falls, serious injuries, and premature placement in a nursing home or assisted living facility. It generally costs \$5,000 - \$15,000 to modify a home to make it safe for an older adult with limited mobility. Financing options could include low-interest loan funds, grants or other incentives. Home modifications help older adults remain in the community as long as possible and help reduce costs associated with assisted living and nursing home care.

EXPAND AND COORDINATE SUPPORT SERVICES TO ASSIST AGING IN PLACE

Some communities outside the NRV have programs that offer a comprehensive range of services for older adults. These services can range from simple assistance such as help with housekeeping or yard maintenance, to rides to the grocery store and the doctor. They can also include more intensive help such as a visiting home health aide who can assist with bathing and medical monitoring. These programs are often supported by a combination of volunteers and paid professionals. Implementing a similar program in the New River Valley could help increase the effectiveness and availability of care for older adults and help reduce costs associated with assisted living or nursing home care.



ENCOURAGE BUILDERS AND DEVELOPERS TO INCLUDE LIFE SPAN FRIENDLY DESIGN FEATURES IN NEW CONSTRUCTION AND RENOVATION PROJECTS

If supportive, adaptable, and accessible housing was built in the first place, many problems that existing home environments present for aging in place would be eliminated. “Universal design” or “design for all” is about creating attractive, stylish spaces that everyone, regardless of age, size, or ability, can live in or visit, even as needs and abilities change.

DEVELOP NEW HOUSING AND NEIGHBORHOOD OPTIONS DESIGNED FOR AGING IN PLACE

The growth in householders aged 65 and older presents opportunities for developing new housing that is specifically designed for an aging population. Housing and neighborhood options could include clustered housing, pocket neighborhoods, co-housing, intergenerational housing, continuum of care, or medi-cottages. This housing would also include life span friendly features to make living independently safer greater access to shopping and services, and life style amenities (e.g., socialization and exercise) that can promote healthy aging. The NRV is periodically identified as one of the best places for retirement living in the nation, and new types of housing could serve the needs of current residents and also attract retirees to the community. The senior housing market could expand business opportunities beyond real estate development for services and shopping.



SUPPORT THE DEVELOPMENT OF AFFORDABLE ASSISTED LIVING & LONG-TERM CARE OPTIONS CLOSE TO COMMUNITY SERVICES AND AMENITIES

At some point, aging residents may need more physical, financial and medical support than they can receive at home. If residents are unable to safely age in place at home, they should at least be able to age within their community, which requires expanding the availability of affordable, supportive and comforting assisted living and/or long-term care options in the New River Valley. Virginia ranks as one of the lowest states in the country in the amount provided to low income people (called "auxiliary grants") to live in assisted living, making it financially un-viable for assisted living facilities to accept low income seniors.

THEME
01

GOAL
02

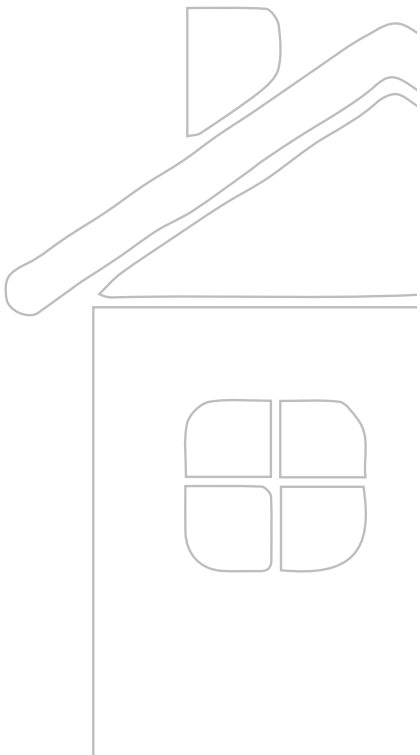
**ENSURE AFFORDABILITY
OF HOUSING, ENERGY AND
TRANSPORTATION**

**ENSURE THERE ARE AFFORDABLE OPTIONS FOR ALL
STAGES OF LIFE AND INCOME GROUPS**

Housing affordability has a major impact on quality of life. Housing is usually the largest single cost in a household budget. Household costs include rent or mortgage, property taxes, insurance, maintenance and utilities. However, transportation costs are the second-biggest draw on households' income. Housing and transportation costs combined claim about half of the average household's budget. Because transportation costs aren't easily discernible like monthly rent or mortgage payments, households may not fully account for those costs when making decisions about where to live and work.

In 2000, the NRV was considered an affordable place to live and work. The median income was sufficient to affordably purchase the median priced home. However, by 2010, affordability across the region declined, especially in Radford, Blacksburg and Christiansburg where there is more competition for housing due to their large university student populations. In rural parts of the Valley, housing costs tend to be lower, but the increased distance from job centers and amenities often create higher transportation costs for rural households. As energy use and prices continue to rise, households in the NRV are spending more and more of their income on home heating bills and fuel. The cost increases have been even more dramatic for those who live in older and less energy efficient homes.

These changes affect not just household budgets, but our local and regional economy as families limit their spending on recreation and retail items when funds required for basic needs are stretched too thin.



NUMBER AND PERCENT OF COST BURDENED HOUSEHOLDS

	RENTERS		OWNERS	
	#	%	#	%
FLOYD	354	34%	2,543	19%
GILES	542	44%	2,557	19%
MONTGOMERY	5,024	50%	9,994	21%
PULASKI	1,455	42%	5,492	23%
RADFORD	1,086	62%	1,546	26%
NRV	8,461	48%	22,132	21%

* American Community Survey, 2006-10 Note: Excludes Student Dominated Block groups

- » 1-in-3 households in the NRV spend more than 30% of their household income on housing costs and therefore are considered housing “cost-burdened”.
- » Nearly one half of lower income homeowners and three quarters of lower income renters spend more than 30% of their income on housing costs.



To be considered affordable, housing & transportation costs must take up no more than 45% of household budget.

If a household spends more than 45% of their income on these costs, it is considered “cost-burdened”.

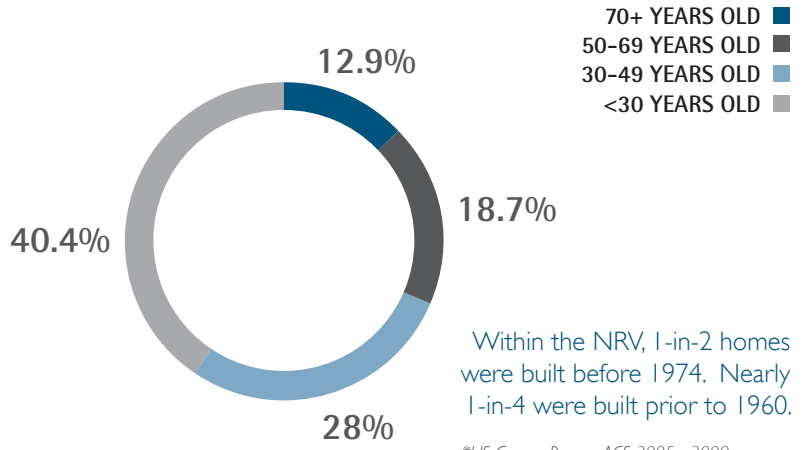
MEDIAN HOUSEHOLD INCOME AND PERCENT REQUIRED FOR AVERAGE HOUSING AND TRANSPORTATION COSTS

FLOYD	\$42,044	44%
GILES	\$41,186	37%
MONTGOMERY	\$48,598	45%
PULASKI	\$41,163	34%
RADFORD	\$37,294	46%

*US Census Bureau ACS 2006-2010, Virginia Center for Housing Research 2012, AAA. Note: Median Household income excludes the student population in the City of Radford and Montgomery County

THEME GOAL
01 02

PERCENT OF TOTAL HOUSING STOCK BY YEAR BUILT



As energy use and prices continue to rise, households in the NRV are spending more and more of their income on electric and home heating bills. The cost increase is even more dramatic for those who live in older and less energy efficient homes.





MEDIAN HOUSE PRICE

	2000	2010	% CHANGE
FLOYD	\$79,700	\$138,800	43%
GILES	\$69,200	\$97,800	29%
MONTGOMERY	\$114,600	\$187,600	39%
PULASKI	\$80,000	\$121,100	34%
RADFORD	\$95,100	\$154,700	39%
BLACKSBURG	\$144,000	\$256,300	56%
CHRISTIANSBURG	\$101,600	\$174,100	58%
NRV	\$80,000	\$138,800	42%

Home-values in the New River Valley have increased substantially since 2000. The median home value in the NRV in 2000 was \$80,000 and in 2010, the median value grew to \$138,800.

**US Census Bureau ACS 2010. Note: Montgomery County data includes the Towns of Blacksburg and Christiansburg.*

- » To accommodate projected population growth over the next 20 years, the region will need 12,000 new homes, and 14,000 existing homes will either need to be replaced or substantially rehabilitated due to their age.
- » Looking at population growth and other demographic changes, it will be important to consider how development patterns and redevelopment efforts can provide greater availability and access to jobs, services, entertainment, and healthy environments, while helping residents find more affordable options for how they live.



IN 20 YEARS

12,000
NEW HOMES
NEEDED

14,000
EXISTING HOMES
WILL NEED REPAIR

**Center for Housing Research, Virginia Tech 2012*



Communities that offer a variety of housing types, such as single family homes, townhouses, duplexes and apartments attract and retain residents at all life phases - from young families to retirees.

STRATEGIES TO ENSURE AFFORDABILITY

PROVIDE INCENTIVES TO HOMEBUILDERS AND DEVELOPERS FOR DEVELOPING AFFORDABLE HOUSING

Affordable housing development frequently is not feasible under market conditions without incentives. Local governments have several tools and powers that can provide incentives for affordable housing development such as adopting fast-track development review for affordable housing that cuts down on costs for developers, helping non-profit housing developers acquire land for developing affordable housing, and promoting public-private partnerships for development of affordable housing.

IDENTIFY HIGH PRIORITY SITES LOCATED CLOSE TO EXISTING TOWN AND JOB CENTERS AND PROMOTE THE DEVELOPMENT OF WORKFORCE AND AFFORDABLE HOUSING IN THESE LOCATIONS

By actively identifying and promoting appropriate, affordably priced housing development sites close to job centers and towns, localities can encourage an adequate quantity and mix of housing types with a variety of price points. This will allow workers of all income levels to cut down on commute time and costs, as well as reduce environmental impacts. It is particularly helpful to localities, landowners and developers when adequate information is made publicly available about priority site suitability for such developments, including site characteristics, topography, infrastructure requirements, etc.

ENCOURAGE THE PUBLIC, PRIVATE AND NON-PROFIT SECTORS TO WORK TOGETHER TO INCREASE THE NUMBER OF HOMES IN CLOSER PROXIMITY TO JOB CENTERS

Public-private partnerships are long-term contractual arrangements between the public (government), private (business) and non-profit sectors. These partnerships combine the expertise of all sectors and are often used to solve problems that are difficult for each to tackle independently. Local governments and other public or non-profit entities are often best equipped to recognize the particular housing needs and deficits in an area when it comes to meeting the needs of residents for quality housing close to jobs and services. Private developers and landowners are likely to be well attuned to market conditions and opportunities. Development of public-private partnerships can help pave the way towards financing and development of housing and infrastructure in targeted areas that will serve to benefit individuals and communities.



PROMOTE THE MAINTENANCE AND RENOVATION OF EXISTING MANUFACTURED HOUSING SUBDIVISIONS (MOBILE HOME PARKS)

Manufactured housing subdivisions offer one of the most important affordable housing options in the New River Valley, but many of them are in need of both infrastructure improvements and improvements to the structures themselves. There is a need to inventory land-lease communities, conducting preliminary assessments and cost estimates of maintenance and renovation needs. Landowners should be encouraged to create neighborhood associations to help residents' better coordinate maintenance and improvement activities. These subdivisions can also benefit from identification of capable contractors and an evaluation of the feasibility of providing incentives for residents to undertake such improvements and renovations. The U.S. Department of Energy's Weatherization program is another potential source of support for making improvements. Civic and religious organizations can be encouraged to promote and coordinate voluntary action for paint-up, fix-up campaigns in mobile home parks and localities can look for ways to improve enforcement of the Virginia Maintenance Code and the Virginia Rehab Code to facilitate property improvements. These activities together would help ensure improved health, quality of life, and energy savings for residents of mobile home neighborhoods.



PROVIDE INCENTIVES FOR REPAIR AND RENOVATION OF EXISTING HOUSING AS WELL AS RETROFITS THAT PROMOTE ENERGY EFFICIENCY

Energy inefficiencies in the older housing stock can result in excess energy consumption, high operating expenses, unhealthy indoor environments and environmental costs. Many of the repairs and improvements needed in this stock involve structural or mechanical systems in the home. Local service providers in the region have established experience and expertise in improving the energy efficiency of the older housing stock - including lower-cost, affordable housing - and these services are becoming increasingly available to home owners. It will be important to seek additional sources of financing to expand energy efficiency programs to lower income households, which are often the most in need of these improvements. Localities and providers may be able to leverage existing work of local university research teams when seeking funding and to create incentives for participation such as providing free preliminary energy audits, free technical assistance materials (e.g., publicly maintained web-site), and free post-upgrade energy audits.

THEME
01

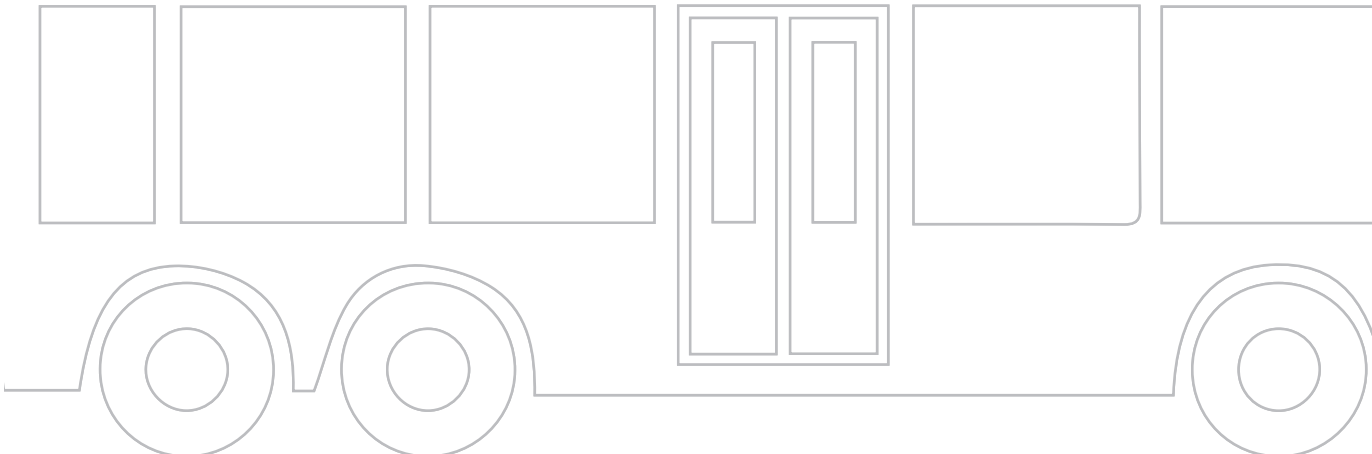
GOAL
03

**IMPROVE TRANSPORTATION
OPTIONS FOR RESIDENTS**

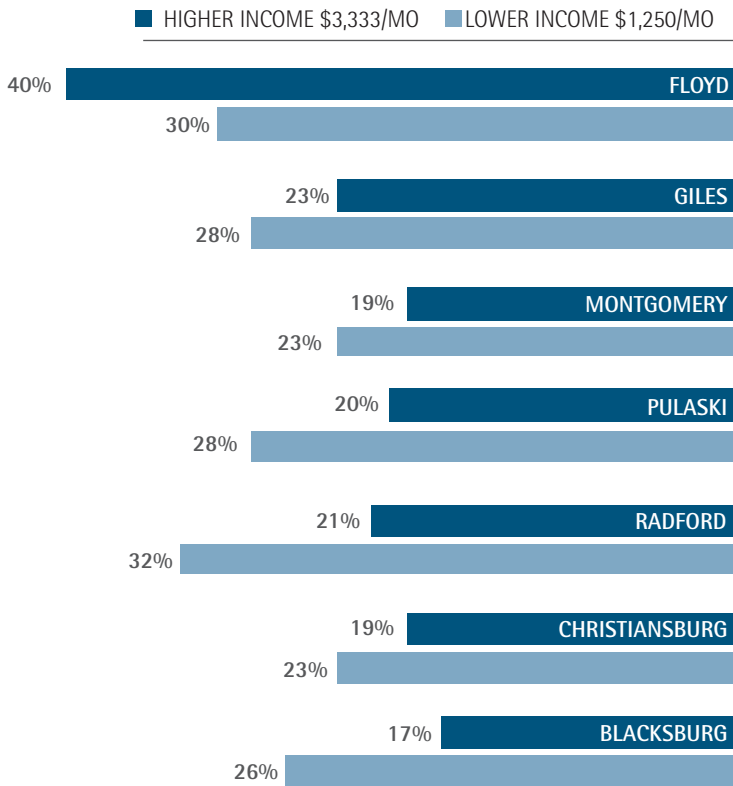
**EXPAND AND ENHANCE PUBLIC TRANSPORTATION
AND ALTERNATIVE COMMUTING OPTIONS**

Rural residents are highly dependent on automobiles and face longer travel distances to get to jobs, shopping and other amenities. Lower income rural residents' transportation costs are further impacted by reliance on older, less efficient vehicles. Meeting the transportation needs of older or disabled residents is a particular challenge in rural and remote areas where public transit options are limited. For those who don't have secure transportation, or are unable to drive, the lack of transportation options can limit access not only to jobs, but also to medical care and education. There is a need to think creatively about how to expand transit options for rural residents through both public and privately coordinated efforts.

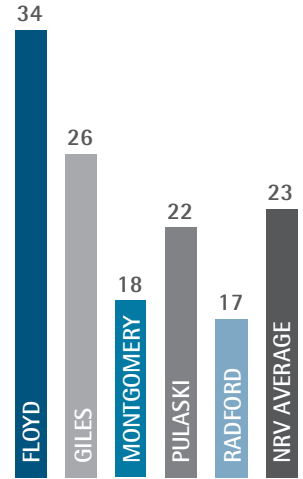
More concentrated development patterns in towns and cities enable convenient and cost-effective transit systems like Blacksburg, Radford and Pulaski Area Transits. While these are successfully serving student populations, there is a need to consider how to better serve the local non-student population, who often have different destination and timing needs. There are also benefits to be gained from better coordination between different transit providers to allow more integration of routes, thereby extending the reach and enhancing the convenience of public transportation in the region.



WORKERS TRAVELING 25+ MILES TO WORK BY INCOME

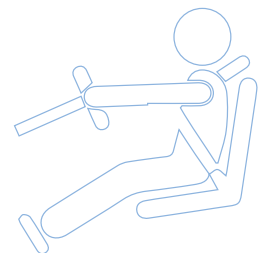


*US Census Bureau, On the Map. 2006-2010.
Note: Montgomery County data excludes Blacksburg and Christiansburg



MEAN TRAVEL TIME TO WORK IN MINUTES

*US Census Bureau, ACS 2010

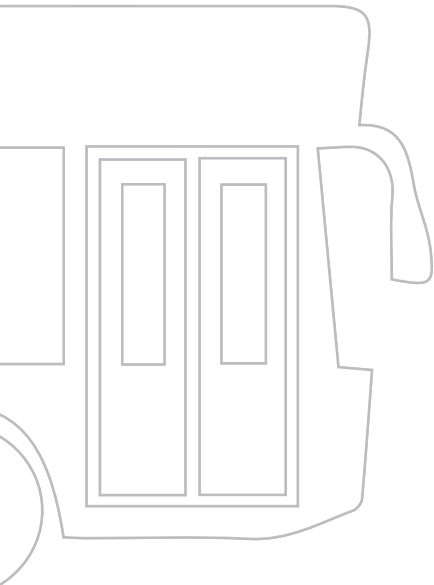


PERCENT OF WORKERS COMMUTING OUT OF COUNTY FOR WORK

Declining employment in the manufacturing sector has also increased the number of people, particularly in Pulaski County who have to commute outside of their home county for work.

	2005		2010
FLOYD	61.1%	DECREASE ▼	55.9%
GILES	61.0%	▲ INCREASE	63.3%
MONTGOMERY	32.4%	DECREASE ▼	31.7%
PULASKI	39.5%	▲ INCREASE	53.6%
RADFORD	60.6%	DECREASE ▼	54.2%

*Virginia Center for Housing Research, On the Map, U.S. Census Bureau *Based on Unemployment Insurance (UI) Wage records and the Quarterly Census for Employment and Wages (QCEW). Coverage under these datasets currently excludes several groups of workers including uniform military, self-employed workers, and informally employed workers



TRANSPORTATION SERVICES

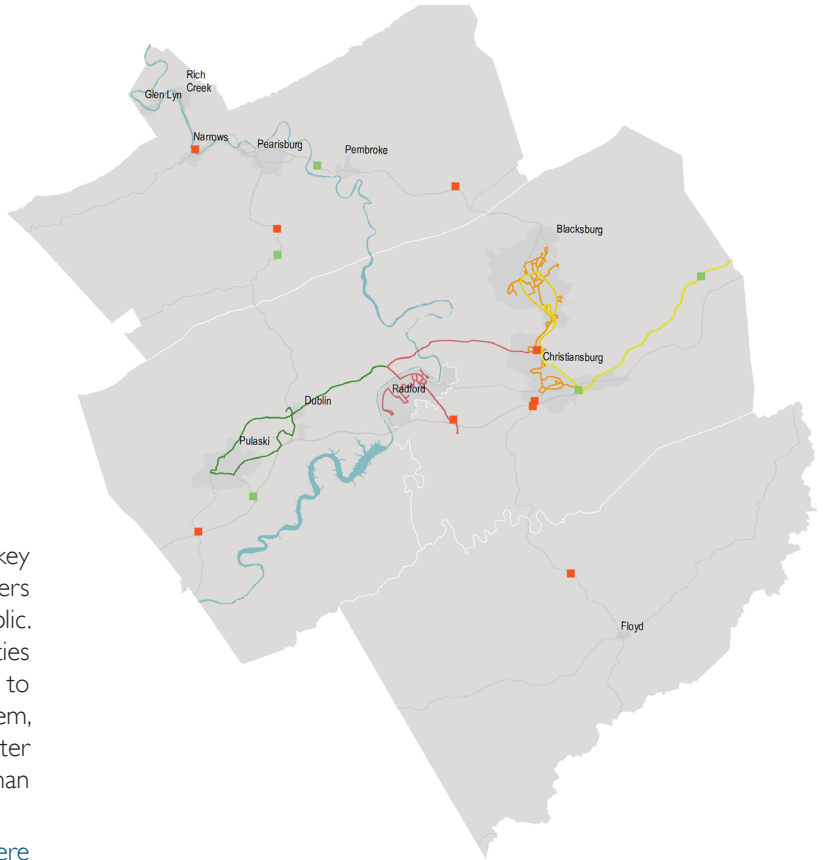
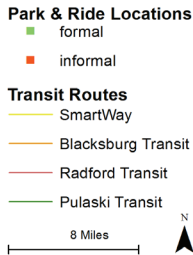
	FIXED ROUTE	ON DEMAND	SENIOR SERVICES	SPECIAL NEEDS
FLOYD	⊘	⊘	✓	✓
GILES	⊘	⊘	✓	✓
MONTGOMERY	✓	⊘	✓	✓
PULASKI	✓	✓	✓	✓
RADFORD	✓	⊘	✓	✓
BLACKSBURG	✓	⊘	✓	✓
CHRISTIANSBURG	✓	✓	✓	✓
PULASKI	✓	✓	✓	✓

- » The Public Transportation System serves the community by enabling citizens to access jobs, resources, and amenities in an efficient manner at a reasonable cost and supports the area's quality of life.
- » The region currently offers fixed route, deviated fixed route, on-demand service, senior's service, non-emergency medical service, low-income or special needs service, vanpool and carpool commuter programs.



- » There are three public transit service operators in the New River Valley: Blacksburg Transit, Radford Transit and Pulaski Area Transit. Each of the public service providers is responsible for operating various services within the New River Valley. Blacksburg Transit recently extended service to Christiansburg. Radford Transit provides service to Fairlawn in Pulaski County and to Blacksburg on weekends.
- » Non-emergency medical public transportation services are offered to seniors, veterans, and qualifying disabled with an originating address anywhere in the NRV.
- » Apart from weekly/bi-weekly trips for seniors, transportation options remain limited for residents in Giles and Floyd.
- » The SmartWay Bus provides commuting options between Blacksburg, Christiansburg, and Roanoke, with a link to rail service in Lynchburg. The MegaBus also stops at Falling Branch in Christiansburg, offering a very affordable express link for travelers to Washington, DC and Knoxville.

NRV TRANSIT



- » Existing routes do connect to key activity and employment centers that benefit the general public. However, because the universities make substantial contributions to the public transportation system, many of the existing routes cater to student schedules rather than those of the general public.
- » As demand for transit grows, there is an increased need to coordinate services across jurisdictional boundaries to increase both efficiency of time and cost of service as well as reduce service duplication.
- » Support from different partners, such as local governments, large employment centers, and private businesses could create a more dynamic alternative transportation system for a variety of users.
- » A Regional Transit Coordinating Council was recently established to facilitate regional dialogue, coordinate planning efforts, and inform transit partners.



- » Major differences in urban vs. rural transit funding lie within capital costs. In the urban areas a 50% federal match is provided, while the rural areas receive an 80% federal match along with a 13% state match in funding.
- » As costs continue to increase for equipment, staff, and fuel, local communities are stretched to find additional revenues to support existing transit services. In areas where public transportation is successful, often there is not sufficient funding to provide additional services, let alone respond to the existing demand.
- » Large employers, such as Virginia Tech, offer a number of alternative transportation options for commuters, including a vanpooling program that currently operates three vanpools from Pulaski, Rich Creek, and Roanoke.
- » RIDE Solutions, a service of the NRV Planning District Commission, also provides commuting options and car-pool matching for NRV commuters.

STRATEGIES FOR IMPROVING TRANSPORTATION

COMPLETE A PUBLIC TRANSIT NEEDS ASSESSMENT TO IDENTIFY WHERE NEW OR EXPANDED SERVICES ARE NEEDED AND TO EVALUATE THE EFFECTIVENESS OF EXISTING SERVICES

A public transit needs assessment examines both the feasibility and demand of new or expanded transit service. Such a study would analyze quantitative and qualitative data on population, land use, and other relevant factors. It would also identify potential alternatives and associated costs to operate a new service and develop a solid understanding of the travel needs and locations of potential transit riders. A transit service plan would then be prepared and presented to the community. If the community agreed to commit the associated funds towards the new service, the implementation process would require them to complete federal and state funding applications through Department of Rail and Public Transportation (DRPT). The local community would then be responsible for purchasing and maintaining the necessary equipment, coordinating memoranda of understanding with additional funding partners, annually applying for state and federal funds, and entering into necessary contracts and agreements to operate the new service.



TARGET TRANSPORTATION INVESTMENTS TOWARDS PROJECTS THAT INTEGRATE MORE THAN ONE MODE OF TRANSPORTATION, INCLUDING CREATION OF MULTIMODAL ACCESS TO MAJOR EMPLOYMENT CENTERS

By targeting transportation investments towards projects that integrate more than one mode of transportation (walking, biking, car or bus), communities can increase transportation efficiency. And when transport systems are efficient, they provide economic and social opportunities and benefits that result in positive multiplier effects such as better accessibility to markets, employment and additional community investments. Examples include: developing safe and convenient neighborhood-scale bicycle and pedestrian networks to provide safe and efficient alternatives to local destinations; promoting low-speed local traffic circulation and multimodal access to businesses, neighborhoods and services; limiting regional vehicle traffic in neighborhoods; improving transit service to village areas; and maximizing neighborhood access to transit stops and Park and Ride areas.

CREATE MORE BICYCLING AND WALKING OPTIONS THAT CONNECT RESIDENTIAL AREAS TO COMMUNITY CENTERS

Many communities have sidewalks downtown but few continuous paths between residential areas and key community destinations. Fostering walkable and bike-friendly communities means creating safe and convenient ways for residents to walk or bike from where they live to the places they want to go around town. This could mean extending sidewalks, bike lanes, and trails into larger neighborhoods or connecting sections to create a more continuous system for pedestrians and cyclists to use.

EXPAND NON-EMERGENCY MEDICAL TRANSIT SERVICES

Elderly, low-income, mobility-impaired, and minority populations in this region often depend on others for transportation to employment, education, shopping, and healthcare. The limitations that come with transportation dependency generally result in reduced access to health care services, which place them at risk for poor health outcomes. These individuals are more likely to miss or postpone routine care or preventative services, which can lead to a need for emergency care and preventable hospitalizations. This can be addressed by identifying populations that are most likely to miss non-emergency medical care because of lack of available transportation, determining medical conditions and other important characteristics about these populations, estimating the cost of providing medical transportation according to various transportation service needs and trip modes, and estimating the costs and benefits that would result if these individuals obtained transportation to non-emergency medical care.

ENHANCE AND EXPAND RURAL TRANSPORTATION OPTIONS

Alternative transportation options can be fairly straightforward, like ride-sharing coordination (carpooling and vanpooling) and making infrastructure investments (e.g., park-and-ride lots) that make ride-sharing easier. Expanding routes or schedules for in-town buses or creating linkages between local bus systems would involve more significant investments. While it is very costly to serve rural areas with traditional bus service, there are rural models such as workplace or recreation center vanpools that could expand transportation options to rural citizens at less cost.



THEME
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GOAL
04

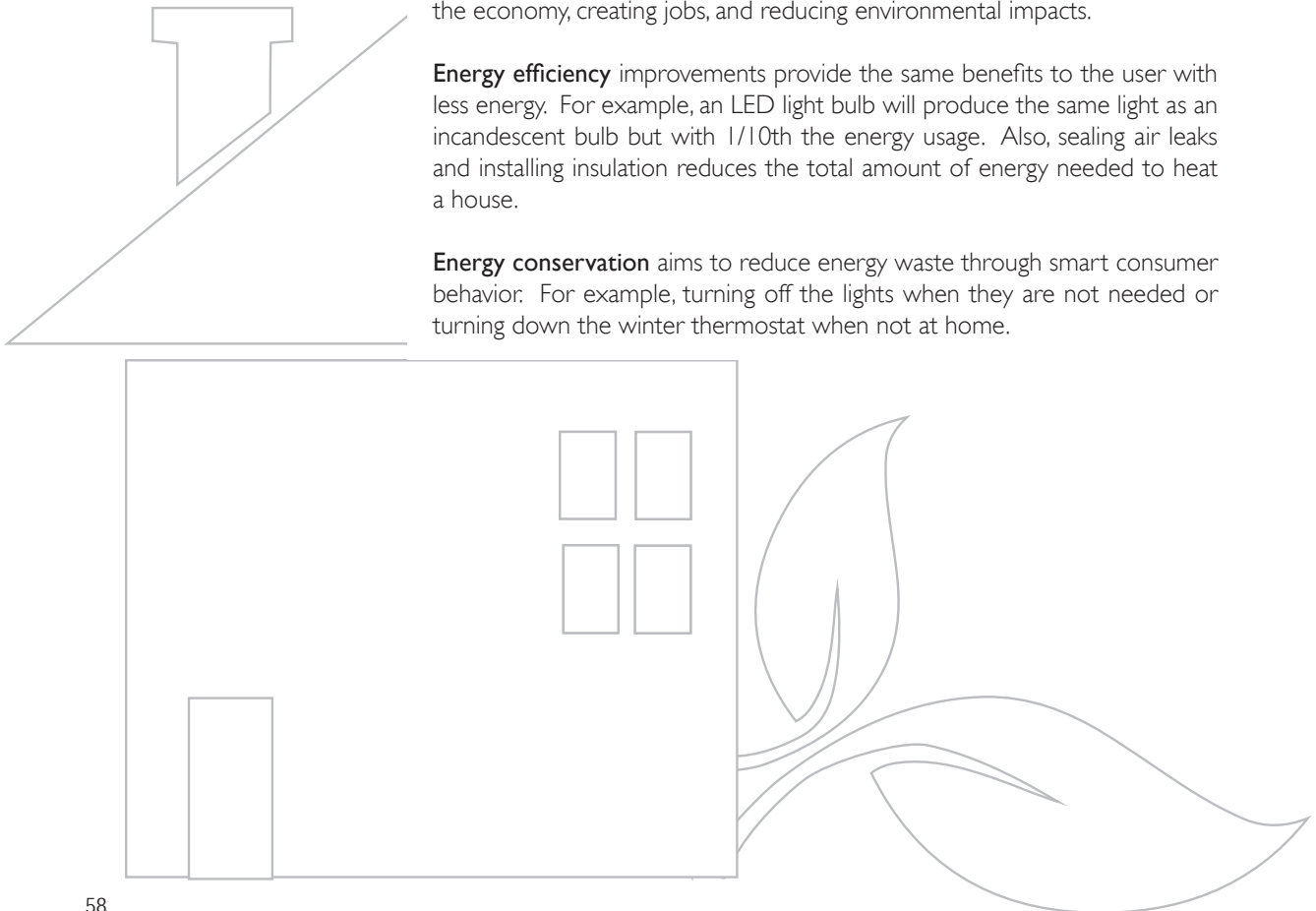
**INCREASE THE ENERGY
EFFICIENCY OF BUILDINGS**

IMPROVE ENERGY EFFICIENCY AND EXPAND ENERGY CONSERVATION IN NEW AND EXISTING RESIDENTIAL, COMMERCIAL, INSTITUTIONAL, AND MUNICIPAL BUILDINGS

Energy drives the New RiverValley economy and long-term economic viability depends on reliable, affordable, and sustainable sources of energy. Energy efficiency retrofits and improved energy efficiency in new construction can help businesses, governments, and residential consumers meet their needs by using less energy, saving them money, driving investment across all sectors of the economy, creating jobs, and reducing environmental impacts.

Energy efficiency improvements provide the same benefits to the user with less energy. For example, an LED light bulb will produce the same light as an incandescent bulb but with 1/10th the energy usage. Also, sealing air leaks and installing insulation reduces the total amount of energy needed to heat a house.

Energy conservation aims to reduce energy waste through smart consumer behavior. For example, turning off the lights when they are not needed or turning down the winter thermostat when not at home.



70%



Coal-fired power plants provide more than 70% of the region's electricity.

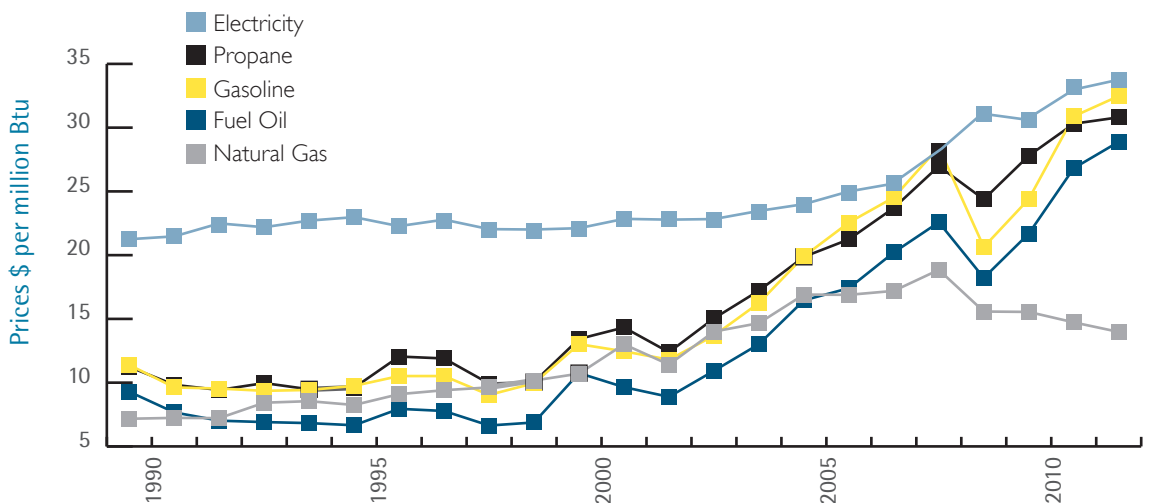


All energy prices, including natural gas, will increase by more than 2% per year through 2040 for the mid-Atlantic region, even without additional environmental controls.

**U.S. Energy Information Administration 2013*

- » Market forces and environmental protection will likely cause coal- and petroleum-based energy prices to increase in the future, making the current rise in energy costs even more dramatic in coming years.
- » Appalachian Power Company's electricity rates are set by the state based on cost recovery and a fair market return to the utility. Municipal utilities (VirginiaTech Electric Service, Radford) primarily resell APCO electricity, and their rates are based on APCO wholesale rates.
- » The NRV is highly dependent on fossil fuel energy, including coal-fired electricity and petroleum-based transportation fuels.
- » Virginia ranks 37th out of 50 states on their energy efficiency policy and program efforts, according to The American Council for Energy Efficiency.

VIRGINIA RESIDENTIAL - ELECTRICITY, NATURAL GAS, AND PETRO FUEL COST (1990-2012)



**Energy Information Administration*



62%

62% of households rely on electricity as their primary heating fuel



16%

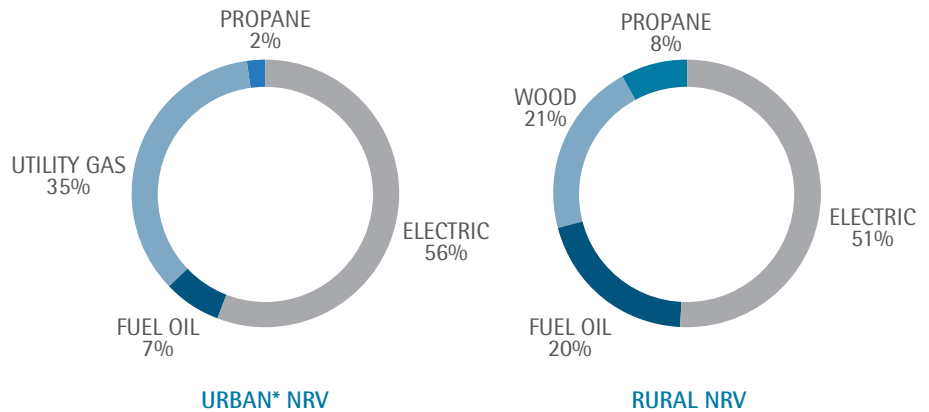
16% of households rely on natural gas as their primary heating fuel

** US Census Bureau, ACS 2006-2010*

- » Natural gas prices rose to historic highs in 2008, but have dropped by 25% from 2008 to 2012 due to higher domestic production.
- » Since 2006, household electricity expenses in the NRV have increased an average of 30% per year due to an increase in both price and use. With electricity being the dominant heating source for NRV residents, this increase in cost has large impacts.

HEATING FUEL VARIES BY URBAN/RURAL

*URBAN - Blacksburg, Christiansburg, Dublin, Town of Pulaski, Radford



- » **Rural households are more vulnerable to high-energy prices than urban households.** They are more dependent on costly electricity, fuel oil, and propane for heating, because they are outside of natural gas service areas and therefore do not benefit from lower natural gas prices. They also have longer commuting distances and higher vehicle fuel costs.
- » Most large commercial, industrial, and institutional facilities are located in natural gas service areas and can benefit from lower natural gas prices. Exceptions are rural schools and government offices that depend on electricity.





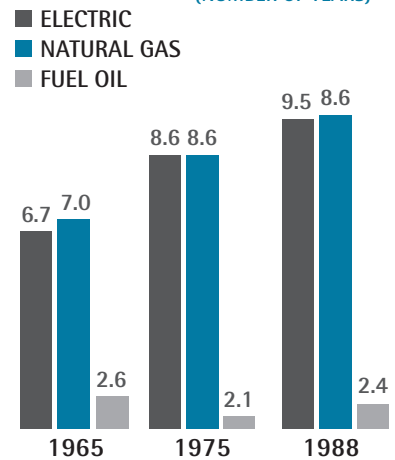
1974

Over half of the homes in the NRV were built prior to the 1974 adoption of the Virginia Uniform Building Code. This code is updated every three years and ensures continuous energy improvements in new construction. Therefore, a large percentage of homes in the region are poorly insulated and very inefficient compared to current standards.

Energy retrofit of older homes built in 1965 or earlier is cost effective regardless of fuel type and financing and despite their high retrofit costs.



AVERAGE PAYBACK PERIOD FOR A HOME ENERGY RETROFIT (NUMBER OF YEARS)



**John Proffitt 2013.*

- » Improving household energy efficiency through home modifications is one way to protect against rising energy costs and preserving affordability.
- » The high upfront costs of residential energy efficiency retrofits create a major market barrier to energy efficiency investments, even when these investments will pay for themselves in energy savings over the long-term.
- » The federal Weatherization Assistance Program (WAP) provides weatherization assistance to low-income households and is operated in the NRV by Community Housing Partners (CHP).
- » As energy prices rise, large commercial, industrial and institutional facilities will see a better return-on-investment from any energy efficiency improvements made.



Higher energy costs not only impact households, but are a drain on the local economy. The NRV imports nearly all of its energy, therefore nearly all of the dollars spent on energy exit the region immediately. Reducing the 'leakage' of these energy dollars from the local economy through improvements in energy efficiency and conservation, will not only lower consumers' energy bills but will also allow these funds to circulate locally, creating additional economic activity and employment.

STRATEGIES FOR INCREASING ENERGY EFFICIENCY

OFFER INCENTIVES FOR CONSTRUCTION OR DEVELOPMENT PRACTICES THAT ACHIEVE ENHANCED ENERGY EFFICIENCY STANDARDS (EARTH CRAFT, ENERGY STAR, LEED)

When new homes are built, they have to meet minimum standards for health, safety, and durability. These minimum standards comprise the Virginia Uniform Building Code, or “the code.” A few NRV builders are going beyond the code and developing highly efficient EarthCraft, Energy Star, and LEED certified buildings that further reduce energy use and future energy costs. Localities can help expand these practices by offering attractive incentives to homebuilders that voluntarily go “beyond the code.” Examples of incentives include density bonuses, property tax relief, and reduced cost or expedited permitting.



WORK WITH THE NRV REALTORS ASSOCIATION TO INCLUDE GREEN FEATURES AND CERTIFICATIONS IN THE MLS REAL ESTATE LISTING SYSTEM

A “green” Multiple Listing Service (MLS) system offers data entry fields to identify green features and energy efficiency attributes of homes for sale. This would help agents and prospective buyers search for sustainable and energy efficient homes and properties, and allow builders and sellers to market their green endeavors. Promoting appraisal accuracy of green or energy efficient buildings through appraiser and realtor education can also help to better reflect true energy costs in the price of a home.

DEVELOP AN ENERGY INFORMATION CLEARINGHOUSE

Lack of adequate information often serves as a barrier to energy efficiency investments. An energy information clearinghouse would help provide up-to-date information for making better energy related decisions in homes, businesses, communities, or municipalities. An online clearinghouse could provide energy facts and local trends, listings of local energy related businesses, available financing options to support energy upgrades, energy assessment tools to help consumers identify cost effective investments, and links to resources for finding energy efficient appliances and certification programs.

DEVELOP ATTRACTIVE FINANCING MECHANISMS FOR MODERATE INCOME HOMEOWNERS TO PURSUE ENERGY RETROFITS

The high upfront costs and access to financing of whole-house residential energy efficiency retrofits create a major barrier to energy efficiency investments, even though these investments will usually pay for themselves many times over in energy savings. Working with lenders to offer buyers energy efficient or energy improvement mortgages can help to increase the number of energy efficiency retrofits of existing homes. Energy Improvement Mortgages finance the energy upgrades of an existing home in the mortgage loan using projections of monthly energy savings. Energy Efficient Mortgages use the energy savings from a new energy efficient home to increase the home-buying power of consumers and capitalize the energy savings in the appraisal. Other possible means to finance energy retrofits besides bank financing include utility demand-side management programs, on-bill financing programs, and Property Assessed Clean Energy (PACE) programs. These approaches work in similar ways - offsetting the up-front cost of the retrofit to the homeowner by absorbing those costs into their monthly utility bill or property taxes.

TARGET RESIDENTIAL RETROFIT PROGRAMS TO OLDER LESS EFFICIENT HOMES, HOMES DEPENDENT ON EXPENSIVE FUEL TYPES AND HOMES OF LOWER-INCOME AND ELDERLY HOMEOWNERS

Older buildings are poorly insulated and very inefficient compared to current building standards. One quarter of the homes in the NRV were built prior to 1960, before building codes had requirements for insulation in exterior walls. Targeting NRV residential retrofit efforts to these older homes or homes heated using electricity, fuel oil, and propane, which are currently more costly than natural gas, will deliver the greatest net benefits to residents for the dollars invested. Expansion of the Weatherization Assistance Program (WAP) would make it possible for low-income households to reduce their energy consumption and save a great deal on monthly utility bills. In the New River Valley, the WAP program is operated by Community Housing Partners (CHP), which also runs the nationally recognized Energy Solutions Research and Training Center that provides training and advances in the latest energy retrofit techniques.





THEME
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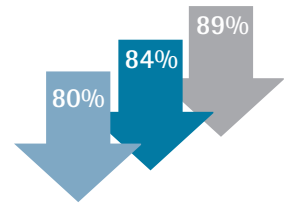
GOAL
05 **EXPAND RENEWABLE
ENERGY SYSTEMS**

EXPAND THE USE OF CLEAN AND RENEWABLE FORMS OF
ENERGY IN THE REGION

All energy sources have some adverse impact on the environment. However, clean energy technologies, such as renewable solar; wind, small hydroelectric, and some bio-fuels, have a lower impact on land, water, air, and ecological systems than fossil fuel based energy sources. Diversifying the mix of energy sources in our region can reduce the environmental impact of energy production and consumption and help to keep more money circulating in our regional economy. Development of renewable energy systems, especially solar photovoltaic (PV), provides the NRV its best opportunity to expand renewable energy production. The region has a good inventory of existing systems, experienced installation contractors, and an excellent installer certification training program. The region also has utilities that facilitate grid interconnection and net metering, a good solar resource, and enjoys low solar PV system costs. One impediment is that Virginia policies to promote renewable energy are relatively weak compared to other states, creating an obstacle to significant solar energy expansion.

- » Electricity is supplied primarily from Appalachian Power Company (APCO) a division of American Electric Power. APCO has regional generating facilities at Claytor Lake hydroelectric dam (750 MW) and Glen Lyn coal-fired power plant (330 MW). The vast majority of APCO power is generated at AEP facilities in West Virginia and Ohio.

Electricity from APCO is largely coal based (80% in 2011) but down from 2010 (84%) and 2008 (89%). This trend in declining coal is expected to continue to 71% by 2015 offset by conversion to natural gas and renewables.



APCO's Glen Lyn power plant generates electricity from coal originating outside the region. This plant is scheduled to close in 2014.



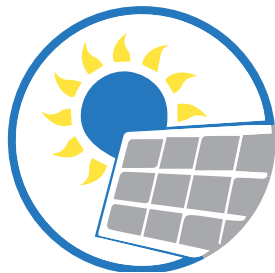
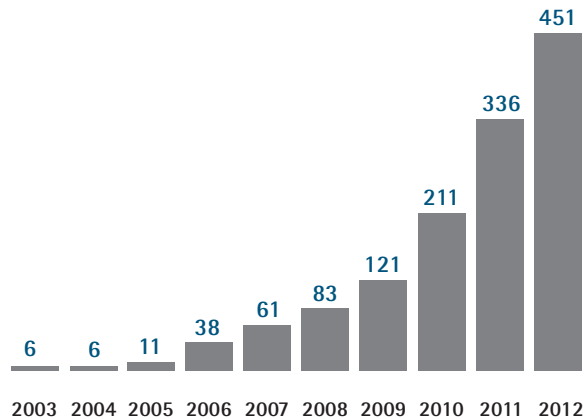
- » Municipal utilities in Radford and a portion of Blacksburg-Virginia Tech Electric Service (VTES), purchase wholesale power from APCO and distribute it to their customers. Radford municipal utility has a 1 MW hydro plant at the Little River Dam and VTES has a cogeneration facility on campus, both of which supplement their supply.
- » Local energy production in the NRV is limited to utility hydroelectric facilities, residential wood fuel use, and on-site photovoltaics.



THEME GOAL
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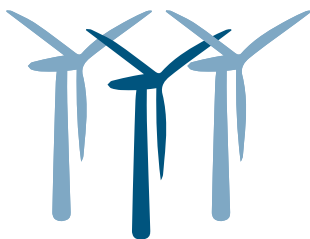
NRV CUMULATIVE INSTALLED SOLAR CAPACITY IN KW

- » Substantial growth of renewable energy sources depends on the APCO fuel mix, state energy policy, and a continued decline in the price of these technologies.
- » The growth of distributed renewable energy in the region, especially in Blacksburg and Floyd County, has been significant through mid-2011, driven largely by state rebates funded by federal economic stimulus funds.



Solar energy provides the most potential for renewable energy development in the NRV. Installing solar PV on 10% of the region's south-facing roof tops could provide 35% of the region's electricity demand. * John Randolph, Virginia Tech 2012.

- » The NRV has valuable experience and expertise in residential and commercial energy efficiency and solar system installation. The New River Energy Solutions Research and Training Center, located in Christiansburg, is a first-class training center for residential building retrofit. The New River Community College also has a well-regarded solar and wind energy installation training program.



Wind potential is limited in the region due to a low average wind speed. There are some ridge tops in Giles and Floyd counties that have potential but have development limitations due to their close proximity to federal recreation lands (Appalachian Trail and Blue Ridge Parkway).

* John Randolph, Virginia Tech 2012.

Methane driven turbines fueled by landfill gas recovery and sewage sludge digestion has some potential. There is a landfill gas recovery pilot project at the Montgomery County landfill. There is also a landfill gas recovery project at Cloyd's Mountain Landfill in Pulaski County.

- » The 2013 General Assembly authorized agricultural-based renewable systems which would allow a customer to operate a solar, wind, or aerobic/anaerobic digester gas facility of up to 500 kilowatts, as part of an agricultural business. There is significant potential for ground- and barn-roof-mounted solar PV systems in the New River Valley.



Supporting energy efficiency and renewables can not only help to lower energy bills, but can also contribute to local economic development and job creation.



- » The NRV is home to large employers, which are dedicated to clean energy and provide models for other firms and institutions in the region. Volvo, Celanese, WalMart, Virginia Tech, and others can demonstrate the pathways to clean energy for others and help promote a culture of conservation in the region.
- » Limited clean energy sources for electricity were a factor in the region's inability to attract major economic development prospects, including Microsoft and Sierra Nevada brewery.

STRATEGIES FOR EXPANDING RENEWABLE ENERGY

ENCOURAGE NEIGHBORHOOD FARM, CAMPUS, COMMERCIAL AND COMMUNITY-SCALED DISTRIBUTED ENERGY PRODUCTION

Distributed energy production refers to energy generated by users themselves, typically on-site, whether it's tied to the larger energy grid or stored on-site. Distributed systems include biomass-based generators, solar photovoltaic systems, fuel cells, wind turbines, engine and storage technologies, among others. In addition to being better for the environment, these projects offer opportunities to create or expand small businesses, local jobs and local investment. They can also provide greater reliability by allowing a variety of power generating technologies and decreasing dependence on any one source of energy. In Virginia, existing net-metering rules inhibit community-scaled solar or other forms of distributed energy, but enacting the Community Renewables Net Metering law introduced in the 2013 General Assembly would eliminate this barrier. Community net metering would allow a group of residential, commercial, industrial, and other customers to establish themselves as an "eligible community customer" to act collectively to generate renewable energy for their own use. Members of an eligible community customer group may develop a net-metered system, in which excess energy generation by some members can be applied to others in the group.

WORK WITH LANDOWNERS AND AGRICULTURAL BUSINESSES TO IDENTIFY AND DEVELOP POTENTIAL RENEWABLE ENERGY PROJECTS

The NRV's rural areas are land-rich and offer potential for farm-based renewable energy, particularly biomass fuels and larger scale photovoltaic systems. Intermediate ridges on rural properties also offer some limited potential for wind energy production. In 2013, the General Assembly authorized net metering of these agriculturally-based renewable systems, which provides a unique opportunity for rural landowners to diversify the profit base of their properties. Agricultural net metering will allow a customer that operates a renewable energy system of up to 500 kilowatts as part of an agricultural business to be served by multiple meters that are located at separate but contiguous sites, provided the generating facility is located on land owned or controlled by the agricultural business and is used to provide energy to metered accounts of the agricultural business.



WORK WITH MUNICIPAL UTILITIES TO DEVELOP POWER PURCHASE AGREEMENT PROJECTS AND OTHER COMMUNITY-SUPPORTED SOLAR PROJECTS ON PUBLIC BUILDINGS AND PROPERTIES

As municipal utilities, Virginia Tech Electric Service (VTES) and Radford Electric Department (RED) are not subject to the same rules as Appalachian Power (APCO). They may be able to enter into Power Purchase Agreements (PPA) and other arrangements with their customers. PPAs involve solar projects developed by a solar firm, which owns, finances, and maintains the project on a customer's rooftop or property. The customer has no upfront costs but buys all produced solar energy at a fixed rate. The solar firm is referred to as a third party, distinct from the customer and the serving utility. Such agreements have driven solar development in other states. Successful projects in Blacksburg and Radford could be used to demonstrate benefits to others.

CONTINUE TO ADVANCE THE REGION'S INTEREST IN ENERGY EFFICIENCY AND RENEWABLE ENERGY DEVELOPMENT

Local governments can lead by example through their actions and policies. NRV localities can take advantage of opportunities for cost effective energy efficiency improvements in municipal and school buildings, include policy statements for energy in their comprehensive plans, address energy use in their implementing ordinances or capital improvement plans, adopt a property tax exemption for the value of an installed solar system, and adopt local ordinances for small solar and small and large wind systems. Local groups can advocate for public policies and programs that support energy efficiency and renewable energy development, and encouraging public officials and private businesses to take these issues seriously.

DEVELOP LOCAL GOVERNMENT LEGISLATIVE PACKAGE IN CONJUNCTION WITH VIRGINIA MUNICIPAL LEAGUE AND VIRGINIA ASSOCIATION OF COUNTIES THAT PROMOTES COMMUNITY CLEAN ENERGY POLICIES

Virginia ranks 33rd among states in energy policies that would help advance the development of solar and renewable energy. This puts the state and the NRV at a disadvantage relative to other places in growing renewable energy development and a renewable energy industry. The following policy revisions could remove current barriers and incentivize renewable energy development in the NRV: 1. Power Purchase Agreements (PPAs): extend the current pilot program authorizing limited PPAs in the Dominion Virginia Power service area to statewide application. Revise capacity limits to include residential scale systems. 2. Community-scale net metering: extend the current agricultural net metering policy to community-scale projects. 3. Change the current Voluntary Renewable Portfolio Goals to a Renewable Portfolio Standard, which would obligate electricity supply companies to produce a specified fraction of their electricity from renewable energy sources. 4. Change the current Voluntary Solar Resource Development Fund to a ratepayer supported Public Benefit, which would amount to a very small surcharge on electricity consumption by customers and would provide a stable funding source to support energy efficiency and renewable energy programs.

THEME
02

GOAL
06

**ENCOURAGE DEVELOPMENT
PATTERNS THAT PRESERVE
RURAL LANDSCAPES**

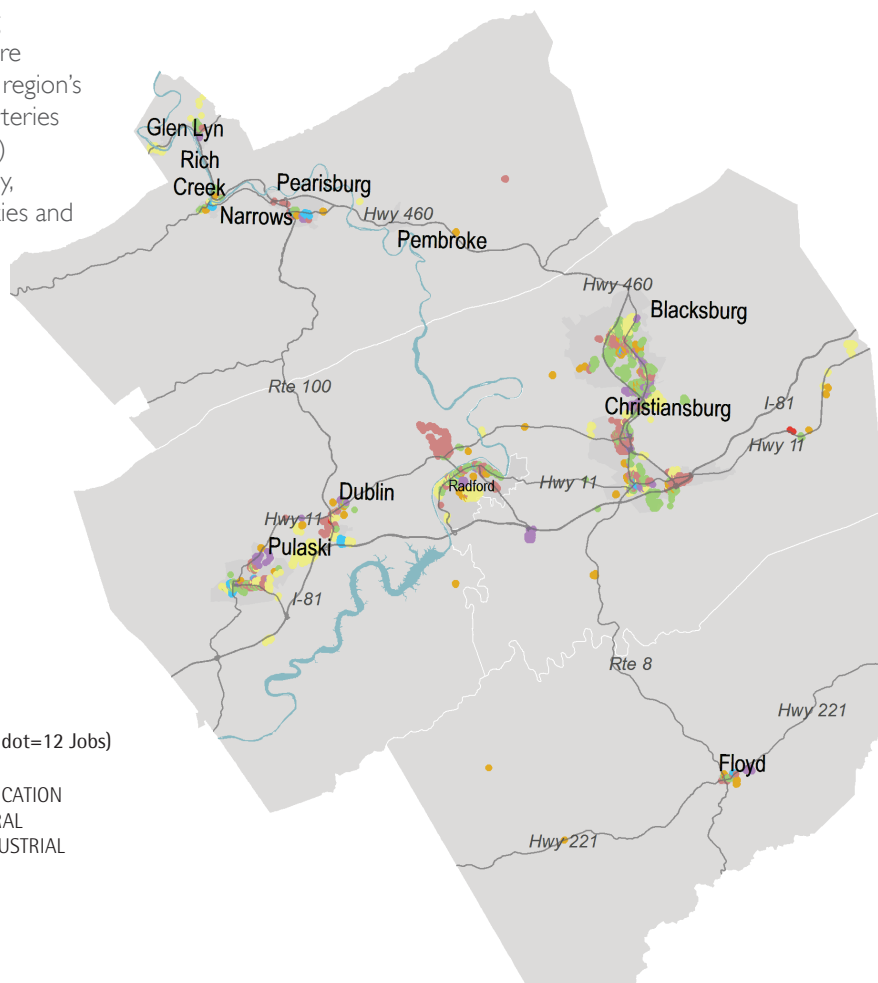
**FOCUS INFRASTRUCTURE INVESTMENTS AROUND EXISTING
TOWN AND JOB CENTERS TO CONSERVE RURAL LANDSCAPES**

Most NRV residents live in or near towns and villages. These locations create opportunities to enhance livability for residents with more walkable, mixed-use and transit oriented patterns of development. By encouraging most of the region's future population growth into increasingly vibrant and attractive towns and villages, localities will be in a better position to affordably provide infrastructure and services while preserving the rural character and scenic beauty of the region.

Local governments play a large role in determining where and how development occurs through zoning and local decisions around public investments. The location of public infrastructure, including roads, public water and sewer, and internet within the region influences both job growth and housing demand. Focusing new infrastructure investments around existing town and job centers can help leverage existing systems and capacity, reduce public expenditures, preserve rural landscapes, and help to create more diverse housing choices close to services and amenities.



The majority of existing jobs within the region are concentrated along the region's major transportation arteries (I-81, US460, and US11) connecting Montgomery, Pulaski and Giles Counties and the City of Radford.



* US Census Bureau, On the Map and NRVPC 2013

- EMPLOYMENT SECTORS (1 dot=12 Jobs)
- GOVERNMENT
 - EDUCATION
 - HEALTH
 - RURAL
 - PROFESSIONAL
 - INDUSTRIAL
 - RETAIL SERVICES

» Increasing housing choices near job centers and better linking them to places where people work, shop and do business can provide residents with more flexibility and affordability in how they get to and from work and go about their daily lives. In addition to the jobs-housing connection, when more housing choices are available in closer proximity to schools and other community amenities, it can save families significant time and money as well as public dollars spent on infrastructure and municipal services.



IN 20 YEARS

The New River Valley will need approximately **12,000 new homes** to meet projected demand and another 3,000 to 5,000 homes due to changes in housing preferences and the replacement of older homes.

Single family homes will continue to be in greatest demand.
 If the current average of 4 single family units per acre continues, **12,000 new homes** would **transform 3,000 acres** of farmland, hillsides and ridges to new development.



THEME GOAL
02 06

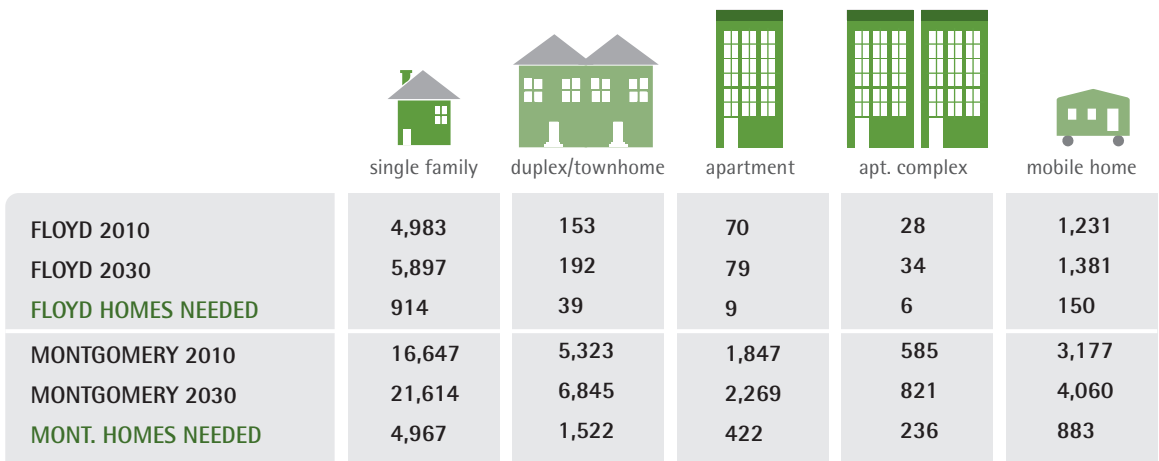
Several NRV localities are embracing development patterns in their comprehensive plans that encourage concentration of future development of housing and employment in already developed areas:

“Encourage growth in existing population nodes and focus future development into serviceable areas of the County.” ~Pulaski County

“Redevelopment of underutilized residential and business properties should be pursued for development before considering new development on vacant, undeveloped land.” ~Radford City

“Encourage residential infill in the Downtown area” and “Support the addition of a mix of uses and services that will attract and support a Downtown residential population.” ~Town of Blacksburg

PROJECTED HOUSING DEMAND BASED ON CURRENT TRENDS



*US Census Bureau, ACS 2006-2010. Center For Housing Research, Virginia Tech 2012. Note: Based on past housing market trends

- » Only Montgomery County and Floyd County are expected to experience an overall increase in housing demand.
- » Pulaski and Giles are projected to have shrinking demand, but there could be shifts in the type of housing demanded due to their aging population.
- » Housing demand in Radford is projected to remain stable.



PROJECTED CHANGE IN HOUSING DEMAND

BY AGE HOUSEHOLDER, 2010-2030

- » Montgomery County is expected to have increases in demand across all age groups, with the largest growth in the 65 plus age group. The demand in the younger age segments, particularly 25 through 44, will depend on job creation in the knowledge, health and services sectors.
- » Housing demand is projected to increase in Floyd County but the increase is variable across age groups. The most significant growth will be among householders aged 65 to 84.

	FLOYD	MONTGOMERY
AGES 15 TO 24	11	176
AGES 25 TO 34	95	979
AGES 35 TO 44	-53	1,307
AGES 45 TO 54	-145	388
AGES 55 TO 64	90	705
AGES 65 TO 74	535	2,161
AGES 75 TO 84	544	1,882
AGES 85+	93	431

*US Census Bureau, ACS 2006-2010. Center For Housing Research, Virginia Tech

STRATEGIES THAT ENCOURAGE DEVELOPMENT PATTERNS THAT PRESERVE RURAL LANDSCAPES

ADOPT PLANS, INCENTIVES, AND POLICIES THAT ENCOURAGE MIXED-USE, PEDESTRIAN FRIENDLY AND COMPACT DEVELOPMENT NEAR TOWN CENTERS

Mixed-use development allows for greater efficiencies in businesses and housing, creating economic benefits and opportunities to meet development needs and preserve the region's rural character. Local governments play a large role in determining where and how development occurs. One way is through zoning. Another is through local decisions around investments in infrastructure, mainly roads, public water and sewer that favor some patterns of development, over others. Focusing infrastructure around existing town centers will help reduce public expenditures, preserve rural landscapes, and help to create more diverse housing choices close to services and amenities.



ENSURE THAT CAPITAL IMPROVEMENT PLANS OFFER OPTIONS THAT PROTECT THE NEW RIVER VALLEY'S RURAL CHARACTER

A Capital Improvement Plan (CIP) is a locality's plan for improving its public infrastructure (roads, waste, water and storm water systems, utilities, telecommunications, parks, and public facilities). It identifies the improvements planned over a five to ten year period and the funding needed for these improvements. Capital improvements are often costly and need to be planned and budgeted within the fiscal constraints of the locality. The CIP is an important strategic and pragmatic link between the community's longer-term goals and its ongoing budgeted improvements and helps determine the land use and development patterns supported by these investments. A regional CIP discussion could promote efficient investment for all of the region's local governments through increased information sharing across the region and help ensure that the investments protect qualities valued highly by residents such as rural character and vibrant, attractive communities.

RESTORE AND REDEVELOP DOWNTOWN PROPERTIES

Redeveloping downtown properties means looking for opportunities to reimagine and improve properties that are empty, abandoned, or run-down. Citizens strongly support preserving historic resources and restoring town character, but renovating and restoring older, historic buildings and updating them for modern uses can be much more costly and complicated than building new commercial areas on the outskirts of town. Localities can create incentives that reduce these redevelopment costs and spur revitalization of their downtown areas.

PERIODICALLY REVIEW THE CUMULATIVE IMPACT OF NEW RESIDENTIAL DEVELOPMENT PATTERNS ON RURAL CHARACTER

Frequently, the cumulative impacts of small residential developments are not recognized until after irreversible damage is done to the rural character of a community. The problem stems from the difficulty of demonstrating that while each single land use change results in a negligible impact, the accumulation of these individual changes over time and within a landscape or region may constitute a major impact. In order to plan wisely, citizens and decision makers of local communities need a systematic analysis of quality data on the relative effects of different development patterns on environmental and community values. Such an analysis is likely to benefit, where possible, from acquisition of spatial data, scenario mapping based upon different development patterns, modeling indicators that reflect important values, and computation of the effects of scenarios on indicators using spatial overlay analysis.

TARGET LAND CONSERVATION PROGRAMS TO LOCATIONS WITH THE HIGHEST PRIORITY FOR PRESERVING RURAL CHARACTER

Communities can identify and direct growth away from important natural assets including groundwater recharge areas, intact forests, wildlife corridors, prime farmland, and scenic views - all of which contribute to the region's rural character. There are a variety of land conservation programs that can support efforts to conserve rural lands including Purchase of Development Rights (PDR) programs, Conservation Easements, Transfer of Development Rights (TDR) programs, and Scenic Designations. Conservation easements provide permanent protection when a landowner voluntarily agrees to sell or donate certain rights associated with his or her property, often the right to subdivide or develop, and a private organization or public agency agrees to enforce the landowner's promise. PDR programs are offered in 21 counties in Virginia and pay willing landowners for all or part of the value they give up by putting a conservation easement on their land. TDR programs enable localities to transfer the development rights of one parcel in an area to another parcel in an area where they may want to encourage development. Scenic designations do not offer permanent protection or bring any regulations but can encourage local governments to adopt land use measures to protect natural resources.





THEME
02

GOAL
07

**PROTECT NATURAL
LANDSCAPES AND
ECOSYSTEMS**

PROMOTE IMPROVED STEWARDSHIP OF THE REGION'S
NATURAL RESOURCE BASE

The scenic beauty of the New River Valley is highly valued by its citizens – particularly for the peaceful surroundings and slower pace of life the rural and natural landscapes provide.

The farms, forests, and water resources that form the region's rural landscape also serve as important economic, ecological and cultural resources. Farmland and open space add to the rural character of the region and form the foundation for local food production and agricultural employment. Forest cover and other natural land cover such as grasslands and wetlands provide important habitat for a diversity of species. Water resources are abundant in the NRV, but they are also vulnerable to pollution from development and agriculture production.

Improving land use planning and management practices can help protect these resources as well as the rural character, scenic views, and opportunities for economic diversity and active recreation they provide.



SCENIC VISTAS AND RURAL CHARACTER

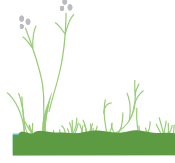
- » Scenic beauty is arguably one of the most cherished features of the NRV. Protecting key view sheds is a priority when it comes to protecting this scenery.
- » There are number of priority view sheds in the area that should be protected, including Interstate 81, US 460, US 221, US 58, Route 8, Route 61, Route 100, Route 42, Bikeway 76, The Crooked Road, Blue Ridge Parkway, New River Trail, and the Appalachian Trail.
- » Most established roadways and trails are protected in the immediate vicinity of the resource, but more expansive views are often marred by continued population growth and development.
- » There are also a number of high priority river ways listed for protection, including:
 - * The Little River from Route 8 to the New River in Floyd and Montgomery counties.
 - * Craig Creek from its headwaters to the Montgomery County line.
 - * The New River from Claytor Dam to the West Virginia line in Giles and Montgomery counties.
 - * Little Stony Creek from its headwaters to the New River in Giles County.
 - * Big Reed Island Creek from the Pulaski County line to the New River.
 - * Walker Creek from Point Pleasant to the New River.
 - * Sinking Creek from Route 680 to the New River.

Currently, there is no coordinated effort to protect view sheds and prevent fragmentation caused by population growth and development.

PERCENT PROTECTED BY MAJOR HABITAT TYPE



DECIDUOUS, EVERGREEN, & MIXED FORESTS



GRASSLAND/HERBACEOUS & SHRUB/SCRUB



PASTURE/HAY & CULTIVATED CROPS



WOOD & EMERGENT HERBACEOUS WETLANDS

FLOYD	5%	5%	4%	4%
GILES	36%	22%	3%	44%
MONTGOMERY	33%	15%	21%	33%
PULASKI	5%	3%	12%	33%
RADFORD	36%	22%	3%	44%



The New River Valley has many intact forested cores, but forested lands adjacent to waterways receive less protection and are crucial for maintaining and improving water quality.



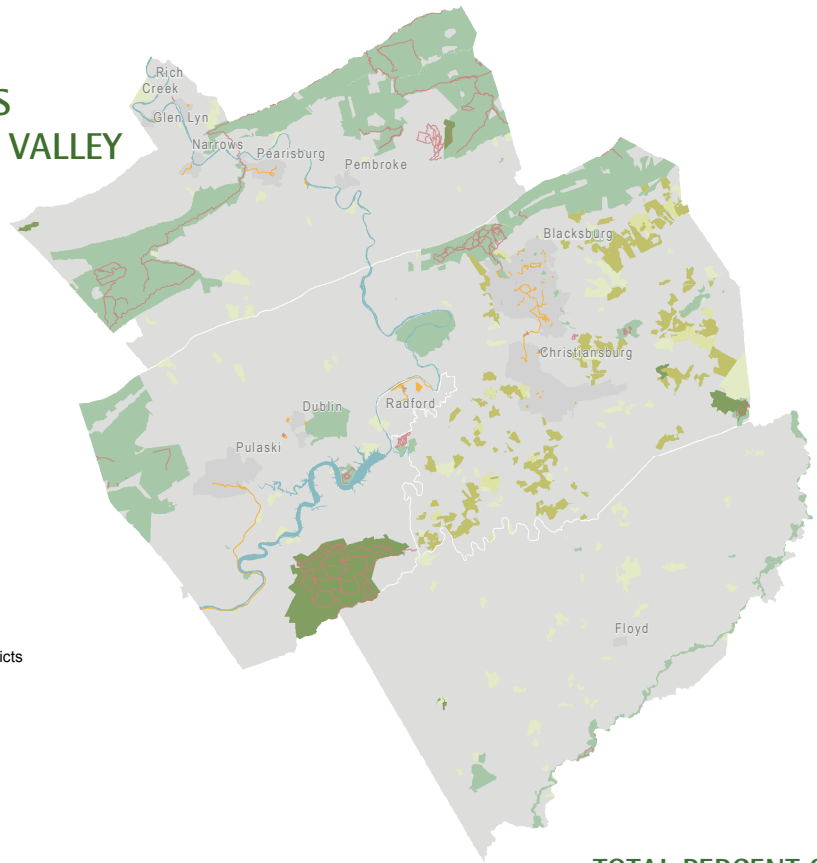
Floyd has the least amount of protected natural lands and a large number of impaired waterways.

- » Forest and wetland habitats currently receive the greatest protection in the New River Valley.
- » 68% of the New River Valley is forested. Forests in the NRV support the tourism, outdoor recreation, farming, and forestry sectors of the local economy, contribute to increased water quality, and help attract new businesses and people to the region.
- » Significant cave/karst habitats, found throughout the NRV, are home to many Species of Greatest Conservation Need and are directly affected by water quality.
- » Continuing efforts to maintain and restore riparian forests, wetlands, and grasslands can help to prevent the loss of fish and wildlife diversity.

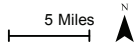
Farmland and open space in Floyd and Montgomery Counties is the most vulnerable to development pressure. Although population growth in the region is relatively slow, Floyd and Montgomery Counties experienced 9.6% and 9.2% population growth, from 2000 to 2010.



CONSERVED LANDS IN THE NEW RIVER VALLEY



- Privately Conserved Lands*
- Publicly Conserved Lands
- Agriculture and Forestal Districts
- Conservation Easements
- Town Boundaries
- Multi-purpose Trails
- Hiking Trails



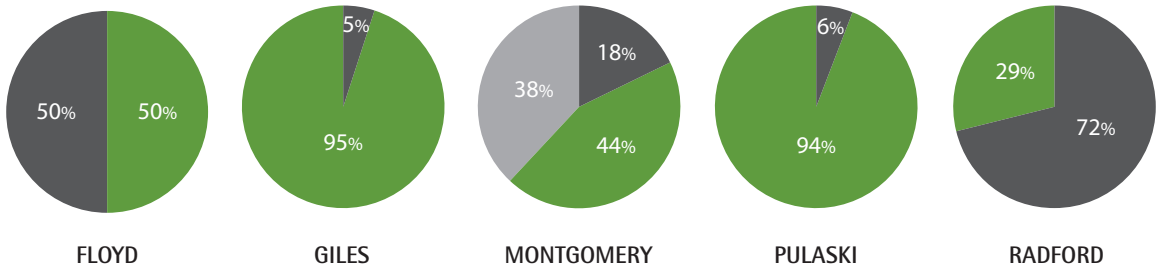
Source: NRVPCDC, DEQ, DCR, US Forest Service, US NPS, US Census
 *Note: Privately conserved lands include lands conserved by

TOTAL PERCENT OF LAND PROTECTED

- Floyd 5%
- Giles 30%
- Montgomery 27%
- Pulaski 21%
- Radford 5%

% OF PROTECTED LANDS BY TYPE OF PROTECTION

- CONSERVATION EASEMENTS
- PUBLICLY CONSERVED LAND
- AGRICULTURE and FOREST DISTRICTS



* Percentages in the above pie charts show the breakdown of the total land protected

- » Floyd and the City of Radford have a greater proportion of privately protected land, in the form of conservation easements.
- » Montgomery has a relatively high level of protection for natural lands but a majority of these lands fall under agricultural and forest districts which do not offer permanent protection.
- » Giles has a large quantity of publicly conserved lands (national forest).

STRATEGIES THAT PROTECT NATURAL LANDSCAPES AND ECOSYSTEMS

DEVELOP A RESOURCE INVENTORY OF PRIORITY VIEWSHEDS AND INCORPORATE VIEWSHED CONSIDERATIONS INTO PLANNING EFFORTS

A viewshed assessment would include a resource inventory of priority views, views at greatest risk (protected vs. non-protected), views that could be classified as environmentally sensitive, and an assessment of the economic contribution of viewsheds in our region. Incorporating viewshed considerations into local comprehensive plans can help promote compatible land use activities. Developing corridor management plans for priority scenic byways can also help preserve viewsheds based on their contribution to quality of life, tourism- and recreation-based economies, and attracting new businesses. A viewshed assessment can also play a part in promoting community involvement in viewshed maintenance projects.

DEVELOP AN AIR QUALITY MONITORING PLAN AND CONDUCT AN ASSESSMENT TO IDENTIFY RISKS

Since there is currently no regular or permanent air quality monitoring station in the NRV, there is no way to address citizen concerns about air quality and its effects on public health. A one year pilot study with a temporary air monitoring station could help to establish a baseline for National Ambient Air Quality Standards for the area. This pilot study could be run with borrowed equipment and university staffing and measure all six criteria pollutants based on Environmental Protection Agency (EPA) and Virginia Department of Environmental Quality (VADEQ) standards to ensure the viability of the results). This information would help inform discussion on the need for a more permanent monitoring program and any actions that would be needed to protect the health of NRV residents.

TARGET LAND CONSERVATION PROGRAMS TO LOCATIONS WITH THE HIGHEST PRIORITY FOR PRESERVING RURAL CHARACTER

Communities can identify and direct growth away from important natural assets including groundwater recharge areas, intact forests, wildlife corridors, prime farmland, and scenic views - all of which contribute to the region's rural character. There are a variety of land conservation programs that can support efforts to conserve rural lands including Purchase of Development Rights (PDR) programs, Conservation Easements, Transfer of Development Rights (TDR) programs, and Scenic Designations. PDR programs are offered in 21 counties in Virginia and pay willing landowners for all or part of the value they give up by putting a conservation easement on their land. TDR programs enable localities to transfer the development rights of one parcel in an area to another parcel in an area where they may want to encourage development. Scenic designations do not offer permanent protection or bring any regulations but can encourage local governments to adopt land use measures to protect natural resources.



PROTECT AND RESTORE RIPARIAN AREAS IN HIGH PRIORITY WATERSHEDS

Riparian areas include flood plains, wetlands, and stream banks. Trees, shrubs and grasses stabilize stream banks and help reduce flooding. Protecting these riparian areas also helps block pollutants and sediment that otherwise would be carried into the stream. Riparian areas should be protected and expanded as necessary corridors for movement of wildlife species connecting otherwise isolated populations and ecosystems. Riparian areas can be protected through public and private efforts including implementation of agriculture, forest and stormwater best management practices; public protection as parks or recreation areas; private protection in the form of conservation easements; or through voluntary tree planting programs.

ENCOURAGE LAND DONATION OR ACQUISITION FOR CONSERVATION EASEMENTS

Conservation easements provide permanent protection of farmland, forests, streams, wildlife habitat, scenic areas or historic sites. In a conservation easement, a landowner voluntarily agrees to sell or donate certain rights associated with his or her property – often the right to subdivide or develop – and a private organization or public agency agrees to enforce the landowner's promise. Conservation easements enable landowners to qualify for tax benefits. Because easements are permanent and bind future landowners to the same conditions, the land may be worth less on the open market than comparable unrestricted and developable parcels.

ENCOURAGE LAND USE POLICIES THAT MINIMIZE NEGATIVE ENVIRONMENTAL IMPACTS FROM DEVELOPMENT

Localities can preserve rural landscapes by allowing more dense development within incorporated areas and encouraging lower-impact development overall. Some policy options include allowing mixed-use development: enabling residential dwellings to be built alongside or on top of commercial structures; infill development: identifying lots closer to town where residential units could fit; and cluster-style development: offering developers the option to preserve natural features and rural character on a site while building the same number of homes.

THEME
02

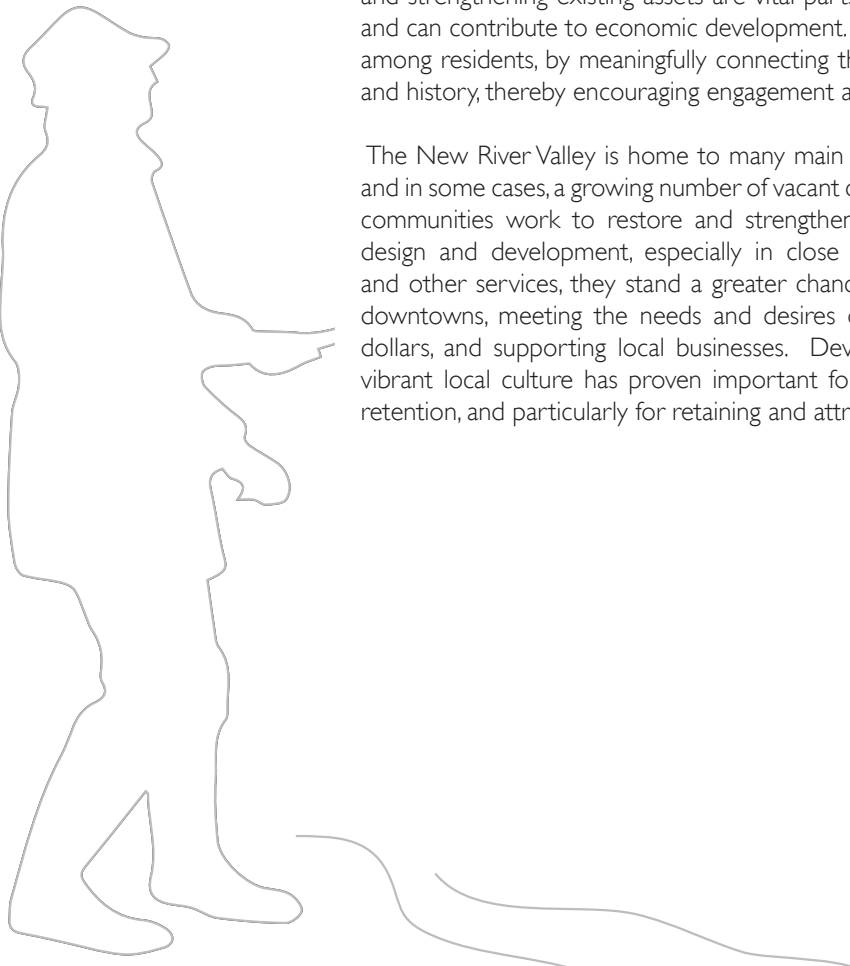
GOAL
08

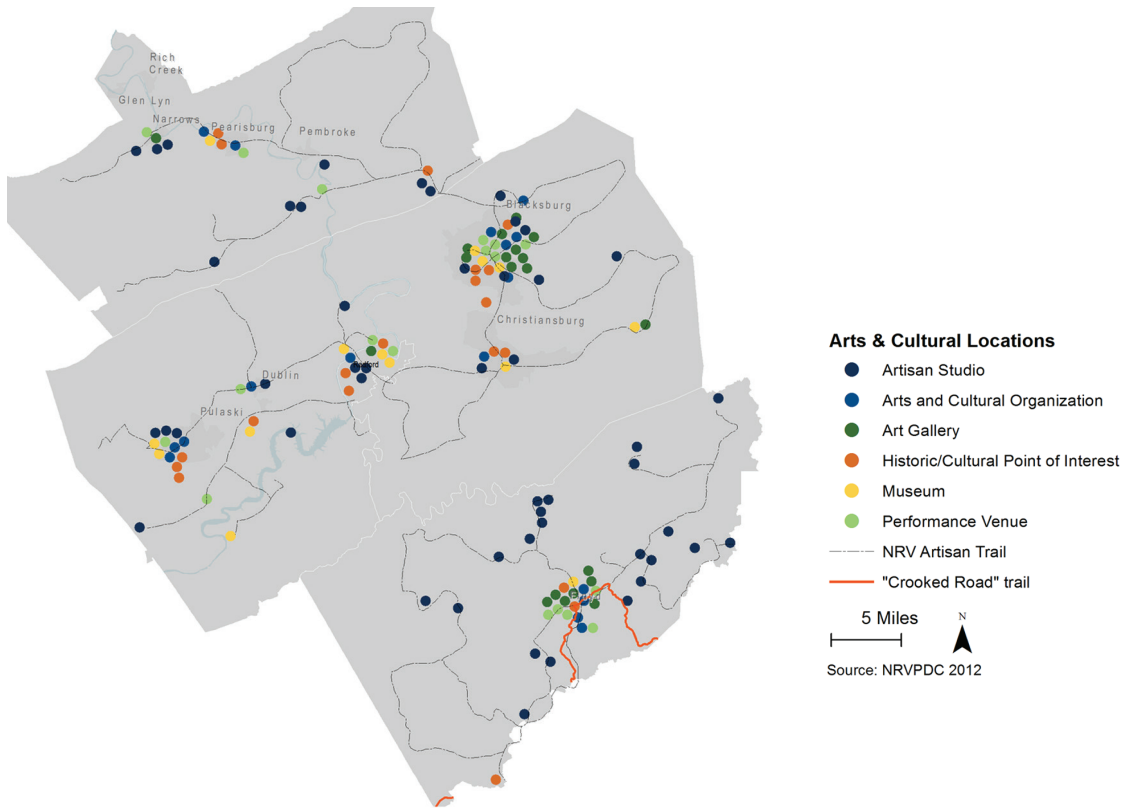
RECOGNIZE AND STRENGTHEN NATURAL, CULTURAL AND HISTORIC ASSETS

STRENGTHEN THE CULTURAL LANDMARKS, HISTORIC SITES AND NATURAL ASSETS OF THE NEW RIVER VALLEY

The New River Valley is known for its natural beauty, its outdoor amenities, its rich and unique cultural and artistic history and the character of its communities. The cultivation of a rich and readily accessible array of historic, cultural and natural assets benefits localities in a variety of ways. Recognizing and strengthening existing assets are vital parts of community development and can contribute to economic development. These assets help build pride among residents, by meaningfully connecting them to the local land, culture and history, thereby encouraging engagement and local investment.

The New River Valley is home to many main streets with historic buildings and in some cases, a growing number of vacant commercial properties. When communities work to restore and strengthen these assets, in community design and development, especially in close proximity to shopping, food and other services, they stand a greater chance of revitalizing their historic downtowns, meeting the needs and desires of residents, attracting visitor dollars, and supporting local businesses. Developing a community with a vibrant local culture has proven important for workforce recruitment and retention, and particularly for retaining and attracting younger workers.





“More than 20 million visitors enjoy outdoor recreational opportunities in the NRV each year.”

**2007 Virginia Outdoor Plan*



Per capita spending on parks and recreation for each locality was:

Floyd	\$2.70
Giles	\$32.05
Montgomery	\$6.57
Pulaski	\$20.31
Radford	\$63.20

Statewide per capita spending on parks and recreation was \$55.31 (including \$85.51 from towns, \$43.75 from counties).

**2007 Virginia Outdoor Plan*

THE TOP 10 MOST POPULAR OUTDOOR ACTIVITIES IN THE NEW RIVER VALLEY

- | | |
|-------------------------|---------------------------|
| 1. Walking for Pleasure | 6. Hunting |
| 2. Swimming | 7. Using a Playground |
| 3. Driving for Pleasure | 8. Visiting Natural Areas |
| 4. Jogging & Running | 9. Sunbathing |
| 5. Fishing | 10. Bicycling |

**2006 Virginia Outdoor Survey*



- » Protection and enhancement of parkland, open space, trails and land or water corridors provides for outdoor recreation opportunities, such as fishing, hiking, biking, paddling, hunting, wildlife viewing, camping and trail-based activities. These amenities add to quality of life for locals and draw visitors and tourist dollars to the region.
- » Creating and supporting outdoor recreation opportunities is also a key factor in protecting open space and providing habitat for wild species by encouraging the establishment and continued protection of public lands.



25 HISTORIC DISTRICTS

Floyd: 1	Numerous properties/structures in the New River Valley region are listed on both the Virginia Landmarks Register and the National Register of Historic Places. Historic districts can be a related cluster of buildings, a village, or agricultural structures / sites.
Giles: 3	
Montgomery: 13	
Pulaski: 6	
Radford: 2	

» Due to efforts and investments to enhance cultural venues and activities, Floyd has experienced a 90% increase in visitor spending on accommodations from 2003-2007. Annual visitor spending in 2007 was \$ 858,729.

RECENT LOCAL INVESTMENTS IN THE TOWN OF FLOYD:

- 2006 – Angels in the Attic - \$53,000
- 2006 – Town of Floyd - \$160,000
- 2007 – Floyd Country Store - \$360,000
- 2007 – Town of Floyd - \$ 235,000
- 2007 – Hotel Floyd - \$2, 358,000
- 2007 –Village Green - \$650,000
- 2007 –Winter Sun - \$ 201,000

**2008 Economic Impact Assessment of the Crooked Road*



- » The Towns of Blacksburg and Pulaski have historic zoning overlay districts and a historic design and review board which provides a way to participate in state and national historic preservation programs and seek funding assistance from the Department of Historic Resources for preservation activities.
- » Preserving historic assets makes economic sense. There are a number of locations and properties across our region ripe for restoration and revitalization.

MAIN STREET PROGRAM

DOLLARS
INVESTED

DOLLARS

$$\begin{array}{ccc}
 \$ & = & \$ \\
 \$1.00 & & \$40.35
 \end{array}$$

The average number of dollars generated in a community for each dollar invested to operate a local Main Street Program is \$40.35 for every \$1 spent. (Brookings Institution 2005).



STRATEGIES FOR STRENGTHENING NATURAL, CULTURAL AND HISTORIC ASSETS

RESTORE AND REDEVELOP DOWNTOWN PROPERTIES

Redeveloping downtown properties means looking for opportunities to reimagine and improve properties that are empty, abandoned, or run-down. Citizens strongly support preserving historic resources and restoring town character, but renovating and restoring older, historic buildings and updating them for modern uses can be much more costly and complicated than building new commercial areas on the outskirts of town. Localities can create incentives that reduce these redevelopment costs and spur revitalization of their downtown areas.



INTEGRATE EXISTING COMMUNITY CHARACTER INTO THE DESIGN OF COMMUNITY CORE IMPROVEMENTS

The community character of a county, town or neighborhood can be seen as a story or narrative of a place. Planners and community members can come together to describe and articulate the historic, cultural, and economic context of their community with the purpose of reinforcing and enhancing that identity. This process can then inform the implementation of policies, regulations and incentives that support and enrich the most valued aspects of community identity in the way it evolves over time.

CREATE TRAIL SYSTEMS THAT CONNECT TOWN CENTERS TO OUTDOOR DESTINATIONS

Citizens appreciate opportunities to get out in nature for physical activity. Trails connecting town and village centers to natural and recreational destinations are particularly popular. Often these require longer-distance trail construction, but are less complicated to create than in-town trails, sidewalks and bike lanes.

ESTABLISH A REGIONAL DESTINATION MARKETING ORGANIZATION AND DEVELOP A REGIONAL MARKETING PLAN

Although the NRV has wonderful artistic, cultural, historic and outdoor recreation assets, there is little coordination to organize and market these assets on a regional scale. A regional destination marketing organization would bring together representatives from arts and culture organizations, members of the economic development community, and outdoor recreation and agri-tourism interests to more effectively promote the whole region as a place to live, do business, and as a tourism destination.

INVENTORY CULTURAL ASSETS, HISTORIC SITES AND RELATED ASSETS IN THE NRV AND IDENTIFY PRIORITY SITES FOR PRESERVATION

Developing an inventory of the region's natural, historic and cultural sites is the first step towards preservation. A comprehensive inventory may include: population and demographic information, local social and architectural history, food culture, unique customs and traditions, current landscape, public spaces, markets and fairs, patterns, colors and materials of buildings, natural resources, native plants, streets, business and community signage, art forms, special places, local educational institutions, arts and cultural institutions and galleries.

ESTABLISH A HISTORIC ZONING OVERLAY DISTRICT ORDINANCE TEMPLATE, HISTORIC REVIEW BOARD, AND DESIGN GUIDELINES

Historic Overlay Districts are created for the purpose of promoting the general welfare, education, and recreational pleasure of the public through the perpetuation of those general areas or individual structures and premises that have been officially designated by the Board of Supervisors as having historic, architectural, or cultural significance. Regulations within such districts are intended to protect against destruction or encroachment upon such areas, structures, and premises; to encourage uses that will lead to their continuance, conservation, and improvement in a manner appropriate to the preservation of the cultural, social, economic, political, architectural, or archaeological heritage of the County; to prevent creation of environmental influences adverse to such purposes; and to assure that new structures and uses within such districts will be in keeping with the character to be preserved and enhanced.



THEME
02

GOAL
09

**SUPPORT ARTS, CULTURE
AND COMMUNITY CHARACTER**

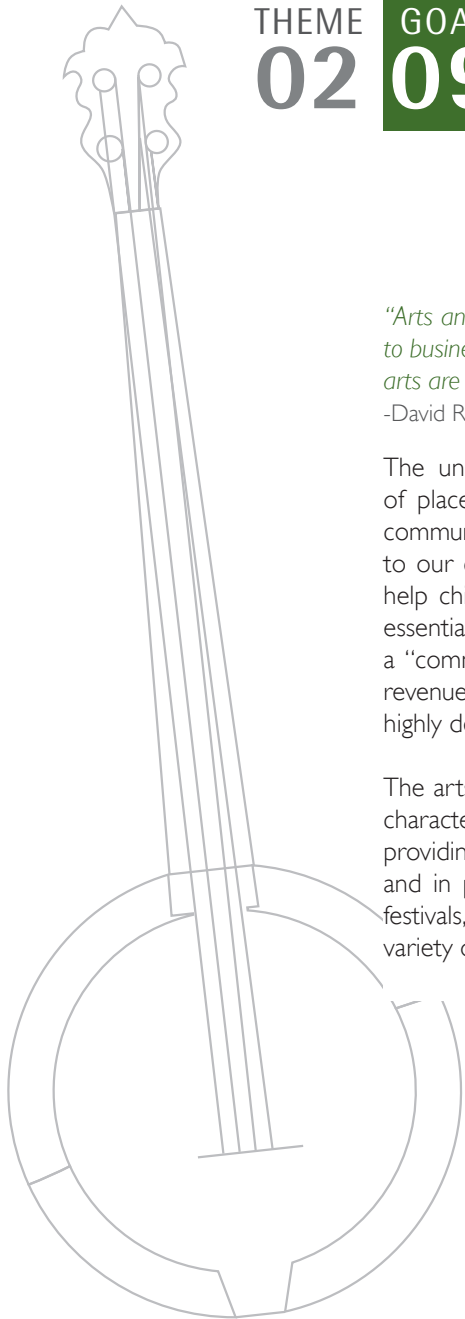
DEVELOP AND DRAW UPON THE ARTS AND CULTURE ASSETS OF THE REGION TO DEFINE AND BUILD COMMUNITY CHARACTER AND PRIDE, AND TO SPUR COMMUNITY RENEWAL

"Arts and cultural activities make a community attractive both to its citizens and to business. Simply put the arts contribute to the quality of life for our people. The arts are good for business. Business should be good to the arts."

-David R. Goode, former Chairman of the Board and CEO, Norfolk Southern Corp.

The unique culture, history and traditions of our region create a sense of place and shared identity. The arts and cultural resources within our community bring us together around local traditions that can be passed along to our children and grandchildren. The arts foster young imaginations and help children develop critical thinking, communication, and innovation skills essential to today's workforce. Artistic and cultural activities also serve as a "community draw" which can stimulate business activity, attract tourism revenue, and help retain high quality employers and employees by creating highly desirable places in which to raise a family, work and retire.

The arts, culture and history are central to defining and building community character and pride. Arts and cultural programming play an important role in providing education about the historical and cultural context of a community and in providing opportunities for participation in community life through festivals, events and performances, interactive classes and workshops, and a variety of other activities.



- » Many communities in the NRV offer seasonal or annual community events that build upon artistic and cultural assets and offer ways for citizens to celebrate their history.
- » There are approximately 30 arts and culture organizations operating in the New River Valley. However, there is currently no regional organization that helps to coordinate, market, and generate funding for arts and culture activities offered in the New River Valley.
- » There are a number of Southwest Virginia arts, culture and heritage initiatives that help to promote and highlight arts and culture in the New River Valley.



'Round the Mountain Artisan Trails Promotes artists and artisans in southwest Virginia.



Crooked Road Focuses on the musical heritage of southwest Virginia.

A study completed in 2008 found the total economic impact of the Crooked Road to be approximately \$23 million per year across southwest Virginia. The Crooked Road includes portions of routes 8 and 58 in Floyd county and the town of Floyd.



THEME GOAL
02 09

- » Visitor spending in the New River Valley totaled just over \$230 million in 2011.
*Virginia Tourism Corporation
- » The economic contribution of arts and culture in the New River Valley is expected to be significant, but is not currently measured.

**\$230
 MILLION**

- » Funding for arts and culture organizations in the New River Valley tends to come from individual and business contributions, annual supporting memberships, admission/ticket/class fees, corporate support, government contributions, and other fundraising efforts. Funds for specific projects may come from grant-making organizations such as the Virginia Commission for the Arts, National Endowment for the Arts, the Virginia Tourism Corporation, and private foundations.
- » Within the New River Valley, several arts organizations are engaged in community arts education activities, such as classes, exhibitions, and shows. Among these organizations are the Fine Arts Center for the New River Valley, Giles Arts Council, Jacksonville Center for the Arts, and the Montgomery Museum and Lewis Miller Regional Art Center.

**JACKSONVILLE
 CENTER FOR THE ARTS**



The Jacksonville Center for the Arts organizes and offers the After School Arts Enrichment program for students in Floyd County. The Giles Arts Council sponsors a Theatre Arts Camp for teens during the summer.

ART EDUCATION in the NRV

As Standards of Learning requirements have forced school districts to shift resources and priorities, **some changes have resulted in shortened and/or less frequent arts instruction sessions for elementary students.**

Hours of Arts Education can be seen as an indicator of the value that a community places on the arts. Among New River Valley localities, arts instruction (i.e., visual arts and music) for the lower elementary grades ranges from about ½ an hour per week to approximately 2 hours per week. For middle and high school students, there are elective choices that provide, as well as compete with, additional arts instruction, thus making comparisons difficult for those levels.



ARTS & CULTURE IN THE NRV



THEME GOAL
02 09

RAISE AWARENESS, ENGAGE PEOPLE, AND CREATE OPPORTUNITIES TO CELEBRATE THE ARTS, CULTURAL EVENTS, & HISTORIC RESOURCES

Citizens strongly support community-based festivals, fairs, farmers' markets, and other events that celebrate the arts, cultural heritage, and community pride. To succeed, these initiatives need affordable and accessible places to gather and hold events. Creating indoor and outdoor spaces for community events can also serve as an everyday draw for residents and visitors, spurring more activity in downtown areas and helping to support revitalization efforts.

BUILD RELATIONSHIPS WITH ORGANIZATIONS THAT FALL OUTSIDE OF THOSE NARROWLY DEFINED AS "ARTS AND CULTURE" INCLUDING ORGANIZATIONS FOSTERING OUTDOOR RECREATION, TOURISM, AND ECONOMIC DEVELOPMENT

Establishing opportunities for partnerships among various economic sectors and creative professionals is a way to promote economic development and the arts. The talents of artists, especially those related to design and communication, can enhance the value of local products and services and increase their dissemination. Deliberate team building among artists, designers and people in related economic clusters can result in mutual advantages to direct participants while serving broader cultural and economic development goals for the region.

CREATE AN ORGANIZATIONAL INFRASTRUCTURE TO ENSURE EFFECTIVE PROGRESS OF PRIORITY ARTS AND CULTURE GOALS

Consider development of a non-profit regional arts council with paid staff that is dedicated to promoting, supporting and expanding cultural activities in the region and integrating the arts and culture into the lives of all residents. This organization would be in a position to encourage, advise and correlate activities dedicated to arts and culture across the region and provide a platform for seeking funding to support local and regional arts and culture initiatives.

MEASURE THE IMPACT OF COMMUNITY PLACE-MAKING AND OTHER REGIONAL EFFORTS SUCH AS ROUND THE MOUNTAIN, THE CROOKED ROAD, AND WILDERNESS 'ROUND IN THE NEW RIVER VALLEY

Successful place-making is known to leverage the creative potential already present in a community, create opportunities for all income levels and backgrounds to thrive, encourage pedestrian activity, and support the local economy by creating places where people and businesses want to be. However, it is hard to measure the impact of investments such as streetscape improvements, public art, performance spaces, parks, and farmers' markets on communities—local economies, public safety, desirability, and enjoyment. Capturing and reporting the impact of arts and design on the livability of communities can help to attract support for current and future investments. It will be important to determine the kinds of things that should be measured and understand why they matter; to identify and or collect data necessary to measure what is important, integrate the topic and data into indicator/quality of life measurement systems, and encourage use of data in research, planning and policy to improve communities in this region.

EXPAND ARTS INSTRUCTION AND UTILIZE EXISTING COMMUNITY ARTS AND CULTURE RESOURCES WITHIN SCHOOL SYSTEMS

Arts instruction is often one of the first things to be cut when school systems run up against budget constraints, yet there is good evidence that high-quality education in the arts has far-reaching effects on students, improving academic achievement and critical thinking skills. Schools and community organizations can collaborate to expand after-school arts programs, as well as community-based arts instruction for people of all ages.



THEME
03

GOAL
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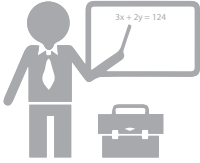
**ENHANCE EDUCATION AND
WORKFORCE READINESS**

ENSURE THAT RESIDENTS IN THE NRV HAVE THE EDUCATION AND SKILLS THEY NEED TO REACH THEIR FULL POTENTIAL AS CITIZENS, WORKERS AND LEADERS

In order for this region to be prosperous, residents need the tools, resources, and education necessary to reach their full potential as citizens, workers, and leaders. As jobs in manufacturing continue to decline and the 21st century economy brings demands for different skills, training programs can connect workers with more secure job opportunities. Improving relationships between businesses and students can also provide students with 'real world' learning opportunities, promote skill development, work ethic and help keep more young people in the region.

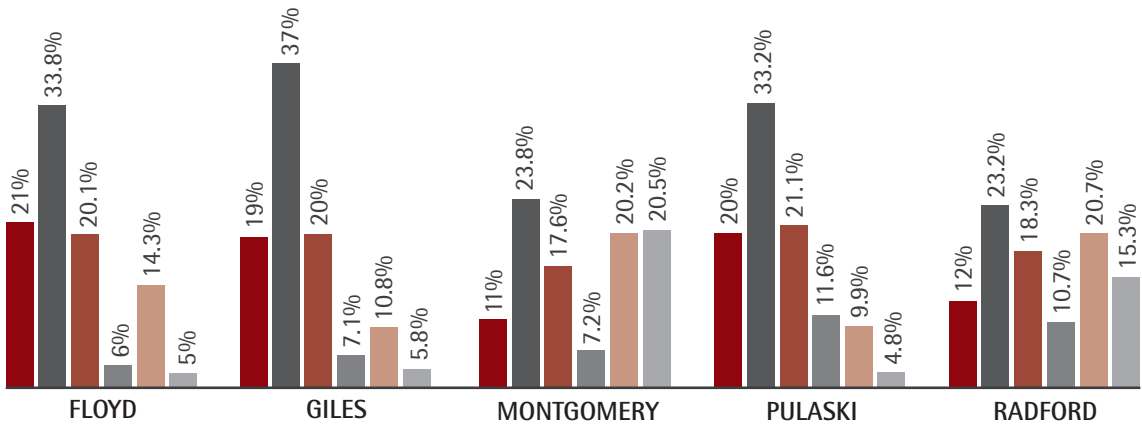
LABOR FORCE CHARACTERISTICS

According to the Virginia Economic Development Partnership (VEDP), the New River Valley labor force consists of 91,531 workers.



EDUCATIONAL ATTAINMENT IN THE NRV

- < HIGH SCHOOL GRADUATE
- ASSOCIATE'S DEGREE
- HIGH SCHOOL GRADUATE
- BACHELOR'S DEGREE
- SOME COLLEGE, NO DEGREE
- GRADUATE OR PROFESSIONAL DEGREE



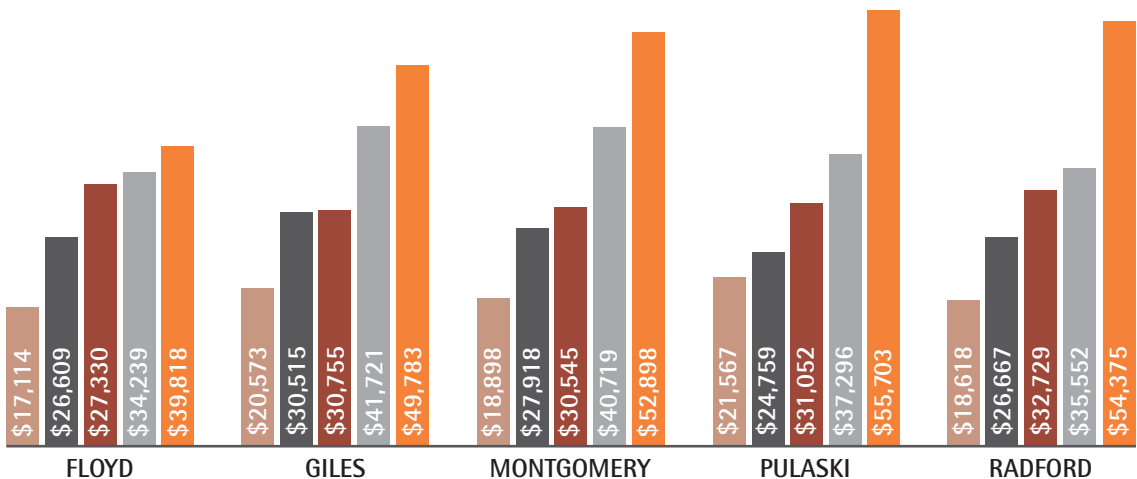
*U.S. Census Bureau, ACS 2007- 2011

Higher levels of educational attainment improve an individual's access to job opportunities, job security, and income.



MEDIAN EARNINGS IN THE PAST 12 MONTHS

- < HIGH SCHOOL GRADUATE
- SOME COLLEGE/ASSOCIATE'S DEGREE
- HIGH SCHOOL GRADUATE
- BACHELOR'S DEGREE
- GRADUATE OR PROFESSIONAL DEGREE



*U.S. Census Bureau, ACS 2007- 2011

THEME GOAL
03 10

EMPLOYMENT TRENDS AND PROJECTIONS BY SECTOR

Following is a chart detailing the future predictions in job growth or loss over the next ten years in some of NRV's largest employment sectors.

INDUSTRY SECTOR	2012 JOBS	2022 JOBS PROJECTED	2022 NRV JOB GROWTH/LOSS
BUSINESS & FINANCIAL	7,237	9,671	+33.60%
HEALTHCARE	4,663	5,990	+28.50%
ENERGY	5,297	5,843	+10.30%
IT TELECOMM AND SOFTWARE	4,168	4,598	+10.30%
BIOMEDICAL – R&D	696	840	+20.60%
AGRIBUSINESS	720	692	-3.90%
ARTS, ENTERTAINMENT, RECREATION	2,561	3,151	+23.00%
ELECTRICAL EQUIPMENT MFG.	2,281	2,108	-7.60%
DEFENSE	2,086	2,278	+9.20%
ADVANCED MATERIALS	3,977	3,351	-15.70%
TRANSPORTATION EQUIPMENT MFG.	2,747	1,762	-35.90%

Note: MFG = Manufacturing
 *Southern Rural Development Center, Cluster Analysis 2012

GEOGRAPHIC DISTRIBUTION OF EMPLOYMENT

Employment in the New River Valley is concentrated in the more urbanized areas of Blacksburg, Christiansburg, Pulaski and Radford. Other large employment centers are generally associated with natural resources, whether for extraction or as a tourist destination.

SECTORS WITH POTENTIAL FOR GROWTH

The five economic sectors that have high concentrations of employment and the greatest growth potential within the region are:

1. Business and Financial Services
2. Health
(includes healthcare services, manufacturing, and research/development)
3. Information Technology and Telecommunications
(includes software companies)
4. Energy
5. Education

*Southern Rural Development Center, Cluster Analysis 2012



Manufacturing has experienced job losses, specifically in textiles, furniture and transportation equipment manufacturing; however, these sectors still provide significant employment for the region with nearly 20,000 employees in several manufacturing sectors. Opportunities exist to regain jobs in these and similar sectors with the re-shoring of manufacturing jobs.

WORKFORCE READINESS

It is important to expand opportunities for workers to learn new skills and enhance existing ones in a changing economic landscape.

Main Issues Impacting Recruitment and Retention in the NRV

- Lack of Technical Skills (39.8%)
- Unable to Pass a Drug Test (31.8%)
- Poor Work Ethic (31.8%)

Top soft skill gaps identified by the region's major employers

- Good attendance record (42%)
- Critical and Analytical Thinking Skills (36.5%)
- Communication Skills (34%)
- Problem Solving Skills (30.6%)

Top technical skill gaps identified by the region's major employers

- Electrical/Electronics (26.7%)
- Engineering (26.7%)
- General Maintenance (25.6%)
- Welding (20.9%)
- Customer Service and Sales (20%)

*NRV Work Force Investment Board Business-Employer Survey 2012

- » The region's top employers currently rely heavily on in-house or on-the-job training.
- » The most common types of workforce training currently available include workforce development facilities and institutions of higher education.

Existing Workforce readiness programs:

- * Radford Workforce Center
- * Goodwill Industries operates One-Stop Satellite offices and Adult/Youth Program operations in Radford, Christiansburg, Floyd and Pearisburg.
- * New River Community College – Dublin, Christiansburg
- * Radford University – Radford
- * Virginia Tech – Blacksburg
- * New River Criminal Justice Training Academy – Draper
- * Blue Ridge School of Massage and Yoga – Blacksburg
- * Radford City Schools – Radford, Practical Nursing
- * Riverview Nursing Home – Pearisburg, Nursing Home Aid Ed. Program
- * Western VA Public Education Consortium – Radford



CAREER PATHWAY DEVELOPMENT

Career pathway development has had some successes in the New River Valley with the creation of the Health Information Technology Education (HITE) program, as well as the Construction, Retrofitting and Energy Efficiency Assessment Training and Employment System (CREATES). Both were collaborative partnerships of educators and regional organizations. These types of programs show promise but often depend upon continued funding streams to support their success.

New River Community College offers dual-enrollment courses for high school students. This collaboration offers some of the first steps along a career pathway, but additional connections and resources are needed to make it complete.

STRATEGIES FOR ENHANCING WORKFORCE READINESS

LINK JOB CREATION AND WORKFORCE PREP. STRATEGIES TO CREATE OPPORTUNITIES FOR LOWER-SKILLED OR LOWER-INCOME WORKERS

The New River Valley has seen losses in some job sectors and gains in others - leaving many workers without the skills and education current employers are looking for. Workforce education and advancement programs enable the region to maintain a competitive workforce and give citizens the skills they need to succeed. These programs could include short-term training to improve specific skills, longer-term career advancement trainings and certifications, or a comprehensive program developed by the region's public schools, colleges, universities and major employers to improve both the technical and 'soft' skills of workers such as communication skills work ethic, and time management.

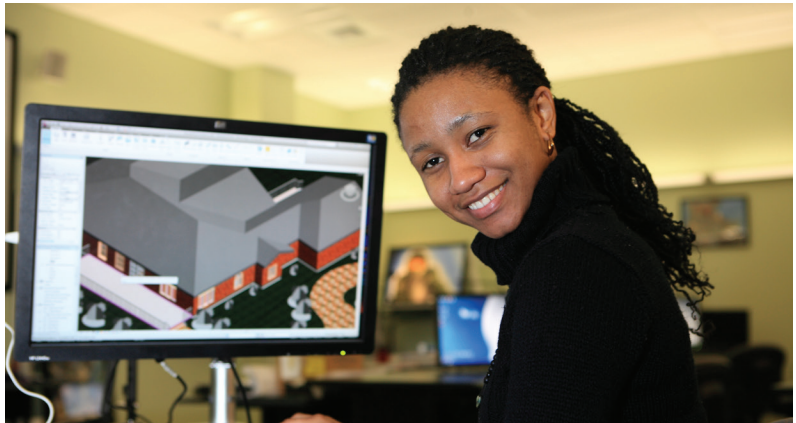
DEVELOP A CAREER PATHWAYS TASK FORCE

A career pathway is a sequence of connected education and training opportunities that assist students in obtaining industry recognized credentials and employment in an occupational area along with the ability to advance with further education or employment. A career pathways task force would include representatives from school districts, community colleges, economic development and local businesses. Its role would be to review the data and recommendations from the recent Skills Gap Analysis of regional employers identifying areas of need and deficit, and to guide and prioritize efforts for revising or developing new programs that will begin to "fill the gaps" for targeted industries. "Advisory Committees" for each priority pathway can help analyze curriculum, identify curriculum gaps, and begin developing a new or revised program of study that would help align secondary Career and Technical Education (CTE) programs, secondary academic programs, adult education and community college certificate, diploma and associates degree programs. Each advisory committee should address all portions of the learning pathway from early childhood and elementary level through secondary education and workforce opportunities.



DEVELOP A PILOT PROGRAM WITH INTEGRATED WORKFORCE CURRICULUM

This would entail selecting a priority career pathway as a pilot for developing a process other pathways can be developed. The advisory committee would then begin to align education with employer needs through sector specific strategies to improve and expand work readiness and help individuals obtain and retain gainful employment. This would include articulating and developing the secondary and postsecondary education course sequence, connecting the education pathway to regional job opportunities, offering the opportunity to interested students, and assessing strategies to validate the alignment.



WORK WITH BUSINESS LEADERS TO INCREASE OPPORTUNITIES FOR PRACTICAL EXPERIENCE

Internship, apprenticeship, and on-the-job training programs offer a unique opportunity to improve the well-being of new, less-skilled or displaced workers. Successful programs often rely on input from or partnerships with employers and industry partners to ensure that training and education is responsive to their needs. Expanding existing and identifying new experiential learning opportunities will enable more workers to experience the requirements of the workplace while offering employers the opportunity to assess potential or new workers for their skills and fit within their company. Activities may include a marketing plan targeted to high school students and their parents about careers that provide sustainable, long-term employment within targeted industries, working with employers to design and implement programs, and facilitating placement of participants in their programs.



WORK TO REGIONALIZE TRAINING AND EDUCATION RESOURCES

Regionalizing training and education resources could help to expand training opportunities to workers in occupations crucial for regional employers, but for which too few students apply annually for an individual school or college to be able to afford. Partnerships across the region would bring programs to a scale that justifies their expense and allows providers to build on their existing expertise as opposed to each one trying to establish new programs. Examples of programs that may pursue this model include CAD drafting and design, specialized welding programs, automotive occupations (painters, mechanics, etc.), industrial electricity, specialized nursing/health care certifications, and a variety of specialized occupational certifications in high-tech and IT fields.

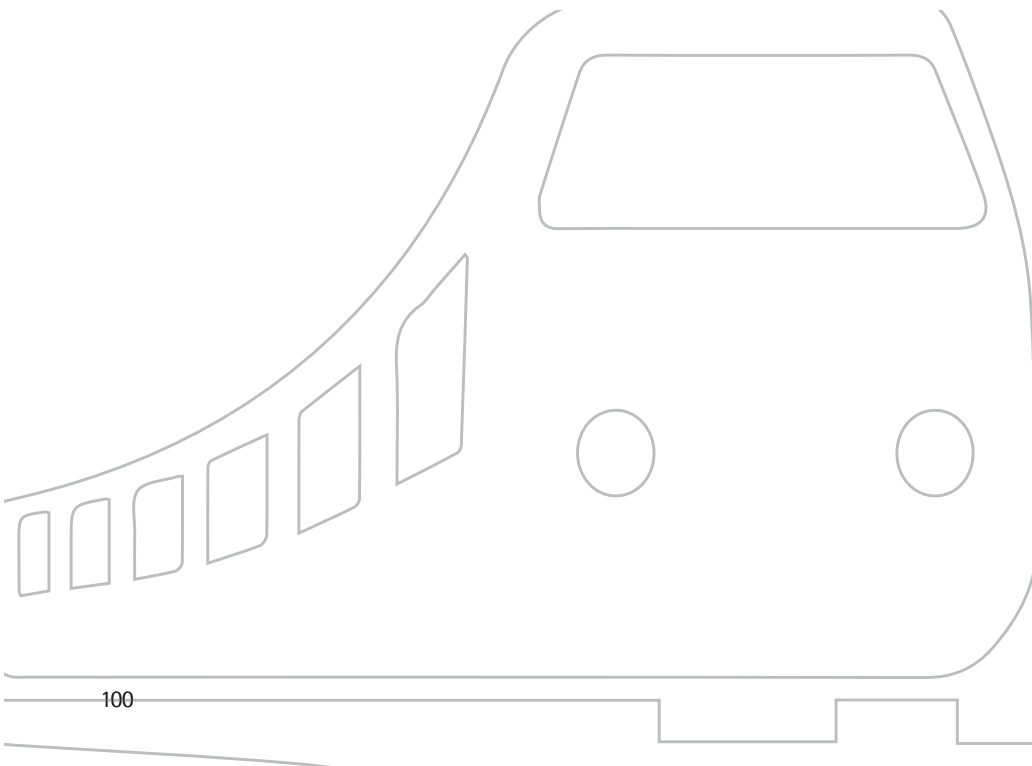
THEME
03

GOAL
11

**SUPPORT INFRASTRUCTURE
NEEDED FOR ECONOMIC
DEVELOPMENT**

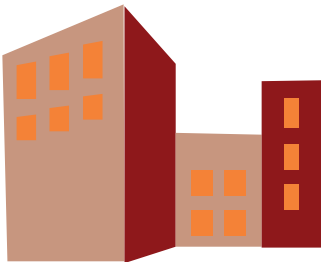
ENSURE THAT EACH COMMUNITY HAS SUFFICIENT INFRASTRUCTURE INCLUDING ROADS, UTILITIES, HIGH-SPEED INTERNET AND BUILDING STOCK TO MEET ITS ECONOMIC DEVELOPMENT GOALS

Access to the latest technology and infrastructure is critical to retaining existing businesses as well as attracting new businesses to the region. Infrastructure, which includes paved roads, railroads, ports, communication networks, and energy supplies, provide services that support economic growth. Maintaining and expanding infrastructure helps to increase business productivity and reduce the costs of doing business so that the region can be more competitive in a global economy. This also helps to increase the number and diversity of local jobs and provides residents greater access to educational opportunities, services, and amenities.



INDUSTRIAL AND COMMERCIAL BUILDING STOCK

- » The Virginia Economic Development Partnership collects and makes public, data on available business and industrial properties and opportunities throughout the commonwealth, including the New River Valley. Businesses can use this information to identify promising opportunities in the region.
- » The NRV Economic Development Alliance serves the region by marketing the region externally and assists prospects in finding suitable locations for business in the NRV by working with local government economic developers.



INDUSTRIAL BUILDINGS (5,000+ Square Feet)

Pulaski: 13
 Montgomery: 4
 Floyd: 2
 Radford: 1

OFFICE BUILDINGS (5,000+ Square Feet)

Floyd: 1
 Montgomery: 9
 Pulaski: 8

- » Excluding the two largest available properties in the NRV at the Radford Arsenal (2,830 acres) and the NRV Commerce Park (973 acres), the median acreage of available industrial land is 72.5 acres. Seven of the twenty-two sites are below 50 acres, five sites are between 50 and 100 acres, and ten sites are 100+ acres.
- » Two “Virtual Industrial Buildings” are listed, in Montgomery county. A virtual building is a business location where all of the preliminary work has been completed in order to allow immediate construction of a building suited to the specific needs of the user within a fixed cost and timeframe.

** All above data: Virginia Economic Development Partnership (VDEP) website.*



Although land is a valuable asset, according to the NRV Economic Development Alliance, 60-70% of relocating companies are looking for existing facilities to move into and retrofit. Even for recent successes for companies that built their own facility like Red Sun and Backcountry.com, the land was graded and ready for construction. Currently there are no buildings of 25,000 square feet or larger that have been built in the last 30 years that are available for relocating companies.





CELL PHONE SERVICE PROVIDERS CURRENTLY AVAILABLE

- nTelos
- Sprint/Centel-Virginia
- Verizon- Virginia
- AT&T
- Citizens Telephone Cooperative
- Verizon South
- Pembroke Telephone Cooperative

**Source: VDEP website: NRV Community Profile.*

- » The region now has broadband access along major regional corridors, around universities, and within larger jurisdictions.
- » Some rural areas with sparse populations and mountainous topography still have limited access and low-speed which limits opportunities for full engagement in the information economy.
- » 95% of households in Floyd have access to broadband service.



ROADS

- » I-81 and US 460 are critical corridors for truck freight movement within the region and throughout the Commonwealth. 40-60% of truck traffic traveling along I-81 neither has an origin or destination in Virginia (9,000 – 13,400 trucks each day).
- » Employers and major employment centers are served through road infrastructure mainly through interstate or state route access. Large employers not located along major roads or in more urbanized areas have selected locations based on proximity to natural resources or other valued amenities.



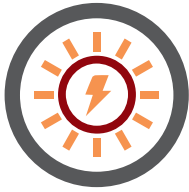
WATER AND SEWER

- » New River Valley towns and the City of Radford are served by public water and sewer. Wells and septic systems serve the needs of residents who are not currently on public water and sewer.
- » Floyd has limited ground water resources which also limits water intensive economic opportunities.



GAS

- » Natural gas is supplied by ATMOS Energy in more populated areas of Radford, Blacksburg, Christiansburg, Dublin, Pulaski, and Fairlawn. No gas service is provided in Floyd and Giles counties except for a dedicated pipeline to the Celanese plant in Narrows. Unlike electricity, industrial, institutional and other large users dominate use with about 65% of natural gas consumption in the region. Natural gas prices have declined since 2008 due to a 20% increase in domestic production, putting those located in natural gas service areas at a price advantage.



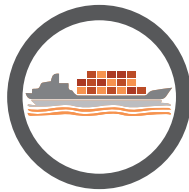
CLEAN ENERGY

- » Development of clean energy options in the region may play a role in attracting new businesses to the region. For example The Sierra Nevada Brewery was considering Christiansburg as a potential site but settled on Asheville, North Carolina, in part because North Carolina's "focus on green technologies played a role in luring the business to invest \$107.5 million into its new brewery there." **Mountain Express, 2013.*



RAIL

- » Norfolk Southern's Heartland and Crescent Corridors intersect just East of Radford. Both corridors are of national significance for freight movement.
- » Freight rail serves Pulaski, Giles, and Montgomery Counties as well as the City of Radford. Rail is a major asset to manufacturing and other industries within the region. Floyd County is not currently serviced by rail. Currently, no passenger rail services exist within the New River Valley.



INTERMODAL TRANSPORT

- » Intermodal freight transport involves the transportation of freight using multiple modes of transportation (rail, ship and truck) without any handling of the freight itself when changing modes. This method reduces cargo handling, improves security, reduces damage and allows freight to be transported faster also reducing costs and total emissions.
- » There is an intermodal transfer facility currently being proposed in Elliston as a part of the Heartland Corridor improvement plan. The completion of the facility would have effects on both the rail and roadway network within the NRV and surrounding regions. Truck freight primarily utilizes I-81, US 460, US 11, US 221, VA 100, VA 8, VA 42 and VA 61. I-81 is one of the primary truck freight corridors on the eastern seaboard.



AIRPORTS

- » There are two general aviation facilities located in the New River Valley: the Virginia Tech-Montgomery Executive Airport in Blacksburg and the New River Valley Airport just north of Dublin in Pulaski County. The NRV Airport is currently a registered foreign trade zone and international port of entry. The nearest major commercial passenger airport is Roanoke Regional Airport approximately ten miles east of the region.

STRATEGIES FOR IMPROVING ECONOMIC INFRASTRUCTURE

DEPLOY LAST-MILE FIBER TO INCREASE INTERNET ACCESS AND SPEED

Last-mile technology is any telecommunications technology that carries signals from the broad telecommunications backbone along the relatively short distance to and from the home or business. In many communities, last-mile technology represents a major remaining challenge to creating universal access to high-speed, high-bandwidth internet services across the region. The main obstacle to date has been the high cost of bringing services the 'last mile' to individual subscribers in remote areas. Laying wire and fiber optic cables is one available option although currently a fairly expensive one. Eventually, broadband wireless networks may provide a less-expensive and equally reliable alternative to reach residents in these areas.

INCREASE MODERN COMMERCIAL AND INDUSTRIAL BUILDING SPACE FOR NEW AND EXPANDING BUSINESSES

Localities can focus on increasing the quantity of available modern commercial and industrial properties, which will help the region to compete in bringing new businesses to the region while providing existing businesses with attractive space for expansion.

RESTORE AND REDEVELOP DOWNTOWN PROPERTIES

Redeveloping downtown properties means looking for opportunities to reimagine and improve properties that are empty, abandoned, or run-down. Citizens strongly support preserving historic resources and restoring town character, but renovating and restoring older, historic buildings and updating them for modern uses can be much more costly and complicated than building new commercial areas on the outskirts of town. Localities can create incentives that reduce these redevelopment costs and spur revitalization of their downtown areas.





EDUCATE LOCAL GOVERNMENTS AND UTILITY PROVIDERS ABOUT DIG ONCE POLICIES

Dig once policies or practices minimize the number and scale of excavations when installing telecommunications infrastructure. The idea is to notify all utility companies that a trench will be open for a given project and if they have a desire to locate their utility in the same area it may be coordinated through a process established by the local government. By establishing a dig once policy in development codes, installation of utilities, particularly conduit for broadband, can drastically reduce the construction cost thereby increasing access to important infrastructure.

IMPROVE THE MAJOR REGIONAL TRANSPORTATION CORRIDORS THAT CONNECT TO EMPLOYMENT CENTERS

Transportation corridors are the backbones of a region which freight and passenger flows converge. They form both market-serving and market-connecting functions which make them a fundamental structure in shaping the economic viability in the region and in linking the region to other economic and job centers. Primary corridors in the region include I-81, US 460, Route 11, Route 100, Route 114, Route 8, Route 177 and Route 221.

THEME
03

GOAL
12

**SUPPORT SMALL BUSINESS
DEVELOPMENT**

EXPAND SUPPORT SERVICES FOR NEW & GROWING BUSINESSES

Small businesses are a vital and growing component of the New River Valley economy. They help make the New River Valley an attractive place to live and help diversify the local economy. Providing support services for new and growing businesses can help ensure their establishment, expansion and retention. Current options for local business assistance within the New River Valley include technical and financial support, site selection and business plan development. As entrepreneurs grow they face new challenges and often need different resources and relationships to support them. Assessing the region's gaps in meeting small business support needs at each stage of development as well as increasing the coordination and marketing of existing services can help to ensure the success of the region's small business community.





- The number of start-up and self-employment based businesses in the region has been growing in the manufacturing sector.
- » The New River Valley has multiple organizations that promote.
 - * For economic development, the New River Valley Economic Development Alliance markets the region's industrial and commercial assets to outside companies.
 - * For tourism and recreation assets, a collaborative website has been formed. The website is www.explorenewrivervalley.com and has been in operation since May 2011. Each county and town also has developed websites and promotional materials with information specific to locality.
- » As of 2013, individual jurisdictions have worked to promote their locality, but the New River Valley does not have a Destination Marketing Organization (DMO) such as a Convention and Visitors Bureau (CVB) with a regional scope.
- » The Strategic Core of Retired Executives (SCORE) program which provides free mentoring, workshops and events to support small businesses as well as templates and tools for business planning and development is minimally active in the New River Valley.

NEW STARTUP FIRMS

2002	83
2003	84
2004	109
2005	111
2006	124
2007	215
2008	180
2009	139
2010	167
2011	151
2012	177

*Virginia Employment Commission, Quarterly Census of Employment & Wages

THEME GOAL
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NRV LOCAL SMALL BUSINESS ASSISTANCE PROGRAMS

**RADFORD UNIVERSITY
 SMALL BUSINESS
 DEVELOPMENT CENTER**

- » Business Planning
- » Loan Packaging Assistance
- » Sources of Business Financing
- » Marketing Assistance
- » Census, Economic and Business Data
- » Financial Analysis
- » Small Business Training Workshops
- » Business Consulting

VT KNOWLEDGEWORKS

- » Business Concept and Competitive Reviews
- » Startup Readiness Workshops
- » Market Opportunity Studies/Marketing Assistance
- » Entity Formation
- » Technical Feasibility Consultation
- » Private Consultation Services
- » Personal Mentoring
- » Conference Facilities/Office Space
- » Grants

**NRV DEVELOPMENT
 CORPORATION**

- » Revolving Loan Fund - \$1,000-\$50,000 loans for small businesses
- » Business Incubator

**ROANOKE-BLACKSBURG
 TECHNOLOGY COUNCIL**

- » Networking and Peer Learning for Technology Companies
- » Talent Promotion

BEANS AND RICE

- » Microsolutions - loans and business counseling

VA COMMUNITY CAPITAL

- » Small Business Credit Solutions
- » Building Development-Expansion Loans
- » CDFI Micro-Lending Program

**MONT. - B.BURG - C.BURG
 DEVELOPMENT CO.
 REVOLVING LOAN FUND**

- » \$5,000-\$50,000 loans for small businesses

**ECONOMIC DEVELOPMENT
 AUTHORITY OF FLOYD CO.**

- » CDFI Micro-Lending Program

460 ANGELS

- » Funding and coaching of early stage hi-tech entrepreneurs

**VIRGINIA COOPERATIVE
 EXTENSION**

- » Overall farm business technical assistance

**VIRGINIA DEPARTMENT OF
 BUSINESS ASSISTANCE**

- » Loan Guaranties
- » Loan Loss Insurance
- » Business One Stop
- » Small Business Workshops

STRATEGIES FOR SUPPORTING SMALL BUSINESS

EXPAND SUPPORT FOR SMALL BUSINESSES, ESPECIALLY IN AGRICULTURE, TOURISM, AND RETAIL SECTORS

Improvements in the coordination, marketing, and diversity of small business services can help small businesses overcome common barriers to success. Small business support services could include one-on-one technical assistance, training opportunities, business start-up fairs, group marketing, or an information clearinghouse. Training programs for small businesses could include regulatory compliance, business planning and management, financial management, marketing plan development or employee management skills. Business incubators house several businesses under one roof and offer reduced rents, shared services, and access to financing.

ENHANCE AVAILABLE RESOURCES AND INFO. FOR SMALL BUSINESSES

There is a need to compile into one place (by county) and inform people about all the small business development resources in the region. It is important to compare this list of resources against other regions with a large number of entrepreneurs to better understand gaps in small business support.

HELP COMPANIES POISED WITH A GROWTH TRAJECTORY TO ACCELERATE GROWTH AND JOB CREATION

Companies often face basic challenges that keep them from realizing their growth potential, such as their current management or marketing model. Often what led these companies to be successful may now be preventing them from reaching a new stage of maturity. This requires identifying these companies, understanding their challenges, and providing skilled resources to coach and consult with them, so that these companies can potentially accelerate growth and break through existing barriers.

RESTORE AND REDEVELOP DOWNTOWN PROPERTIES

Redeveloping downtown properties means looking for opportunities to reimagine and improve properties that are empty, abandoned, or run-down. Citizens strongly support preserving historic resources and restoring town character, but renovating and restoring older, historic buildings and updating them for modern uses can be much more costly and complicated than building new commercial areas on the outskirts of town. Localities can create incentives that reduce these redevelopment costs and spur revitalization of their downtown areas.

DEPLOY LAST-MILE FIBER TO INCREASE INTERNET ACCESS & SPEED

Last-mile technology is any telecommunications technology that carries signals from the broad telecommunications backbone along the relatively short distance to and from the home or business. In many communities, last-mile technology represents a major remaining challenge to creating universal access to high-speed, high-bandwidth internet services across the region. The main obstacle to date has been the high cost of bringing services the 'last mile' to individual subscribers in remote areas. Laying wire and fiber optic cables is one available option although currently a fairly expensive one. Eventually broadband wireless networks may provide a less-expensive and equally reliable alternative to reach residents in these areas.

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**STRENGTHEN AGRICULTURAL
VIABILITY**

STRENGTHEN THE ECONOMIC VIABILITY OF AGRICULTURE

Farms are shrinking, farmers are getting older, and younger generations are showing less interest in continuing their families' farms. In Montgomery and Floyd, pressure to sell farm property is high as the population and resulting need for additional housing continues to increase. Shrinking farmlands alter the rural character and scenic beauty that defines the New River Valley region. With fewer farms and fewer farming families, the skills, traditions, and culture built around the rural economy are less likely to contribute to a rural community's sense of place and history.

Increasing interest and demand for more locally grown foods presents an opportunity for farmers to increase the economic viability of farming. However, it is unknown whether there is interest from current farmers to expand or diversify their operations. Expanding access to training, processing facilities, slaughterhouses, cold storage facilities and distribution hubs could help small and medium size producers offer their products to both local and regional markets-increasing farm profitability, community presence, and regional agricultural viability.



BASELINE STATS ON AGRICULTURE IN THE NRV:

- » The top crops for the NRV are: forage land (for livestock), hay, corn, wheat, rye, fruits and vegetables, cut Christmas trees, sod, nursery stock, and short rotation wood crop.
- » In 2007 the average farm operator was 58 years of age, and 58% of farmers relied on an off-farm job as their primary source of income.

\$80 MILLION

crop & livestock revenue in the NRV between 2002 - 2007.



1 out of every 5 NRV jobs is related to agriculture.



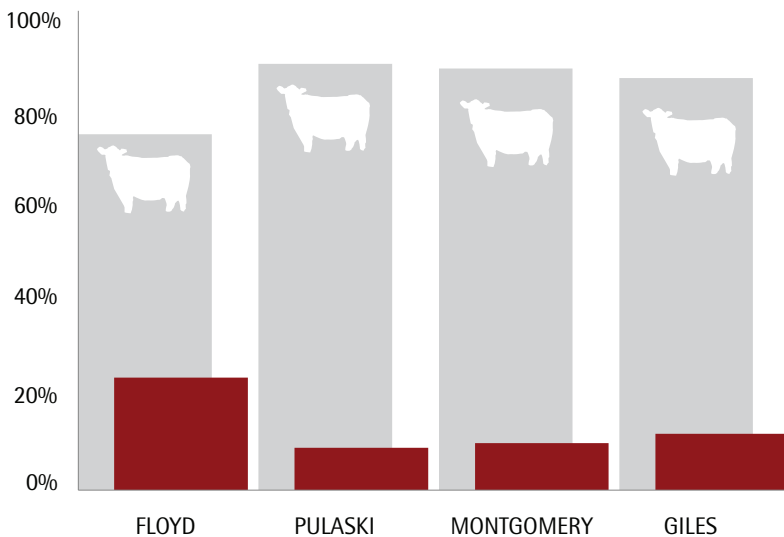
IN 2007

THERE WERE 359,227 ACRES IN FARMLAND AND 2,251 FARMS IN THE NRV

*All above data * USDA Census of Agriculture 2007*

PERCENTAGE OF TOTAL MARKET SALES BY LIVESTOCK AND CROP PRODUCTION

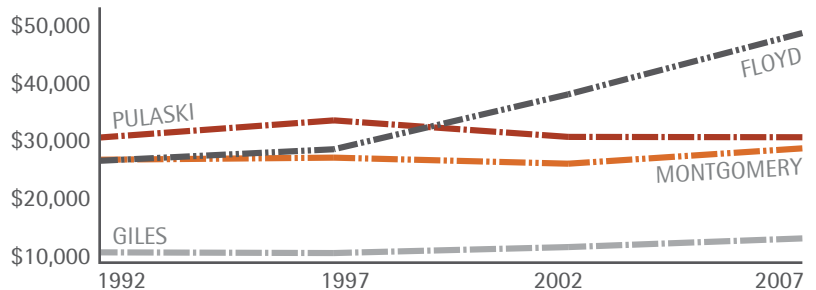
■ LIVESTOCK ■ CROPS



**2007 USDA Agricultural Census*

- » The average market value and sales per farm in the NRV are lower than the average for the state of Virginia. The state of Virginia averages about 70% of its agricultural sales based in livestock and 30% based in crops; the corresponding NRV averages are 77% of NRV's agricultural sales in livestock and 23% in crops.
- » The NRV is home to the 7th largest cattle population in Virginia. Livestock makes up the majority of market sales in every county.
- » Currently, the only USDA certified meat processing facility is located in Giles County.

CHANGE IN AVERAGE MARKET VALUE OF AGRICULTURAL PRODUCTS

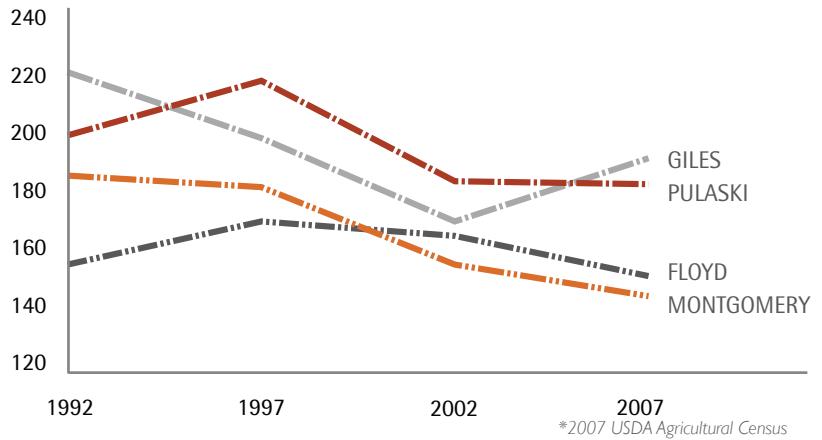


Floyd County averages much higher earnings per farm than the rest of the NRV due to their higher percentage of crop production.

THEME GOAL
03 13

- » Between 2002 and 2007, approximately 25,000 acres of active farm land was converted to non-agricultural uses. The largest losses occurred in Montgomery and Floyd Counties. Land conversion correlates with increasing population growth in the two counties.
- » More prime farmland in the NRV has been lost to development than any other land cover type (forests, etc.).

CHANGE IN AVERAGE FARM SIZE (ACRES)





GROWTH OPPORTUNITIES FOR NRV AGRICULTURE SECTOR:

» There is a developing local foods movement in the region that provides market opportunities for the manufacture and sale of value-added local foods. Area institutions, including Virginia Tech and smaller private colleges, are actively seeking ways to support local food entrepreneurship and farming, and several have an interest in sourcing value-added food products from a facility processing locally grown products.

VALUE-ADDED: if it is originally grown by the farmer and increased in value by labor and creativity. Fruit turned into jam, tomatoes into sauce, milk into cheese, or wood into furniture.

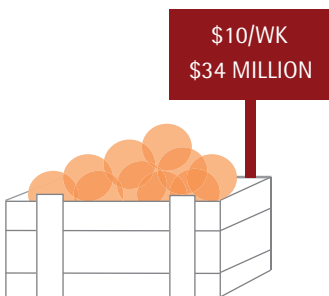
ANNUAL BLACKSBURG FARMER'S MARKET VENDOR REVENUES

Between 2006-2011, The Blacksburg Farmers Market saw a 160% increase in vendor revenues.



2006-2007	8%
2007-2008	71%
2008-2009	2%
2009-2010	16%
2010-2011	20%
2011-2012	8%

**Blacksburg Farmer's Market Data*



If every household in the NRV spent \$10/week on locally produced food, the region would see \$34 million in revenue (US Census Bureau). There may be increased opportunities for direct-to-consumer sales at farmers' markets, community supported agriculture venues, and through other methods.

STRATEGIES FOR STRENGTHENING AGRICULTURE VIABILITY

FORM AGRICULTURAL AND FORESTAL DISTRICTS TO ENCOURAGE PRESERVATION OF FARMLAND

Agriculture and Forestal Districts are similar to conservation easements but are temporary by design. These rural conservation zones are reserved for agriculture, timber production, and the maintenance of open space. They are initiated by a landowner or group of landowners as a mutual undertaking with the local government. These property owners agree not to convert their farm, forestland and open space lands to more intense commercial, industrial or residential uses for a term of 4 to 10 years. In exchange, local governments agree not to make infrastructure decisions that will increase development pressure and usually offer a more favorable property tax rate, which cannot be changed while the district agreement is in place. Furthermore, landowners in these districts have additional protections against eminent domain actions. Agricultural and Forestal Districts provide more robust protection to farming and forests than agricultural zoning, which does little to mitigate development pressure and can be changed with greater ease by local governments.



PROVIDE THE INFRASTRUCTURE TO PROCESS AND SELL LOCAL FOOD

Farmers typically sell their raw agricultural products at a price far below what consumers eventually pay in the grocery store. A way to improve the economic viability of farming is to enable farmers to “add value” to raw agricultural products – packing and processing to make foods consumer-ready such as bottling milk for individual sale or turning tomatoes into tomato sauce. Adding value to agricultural products often requires infrastructure investments, such as a food aggregation and distribution center or a dairy, vegetable or USDA-certified meat processing facility. In addition to benefitting individual farmers and creating new kinds of agricultural jobs, the money from value-added agricultural purchases is more likely to circulate within the local economy.





ESTABLISH A FARM EQUIPMENT SHARING COOPERATIVE FOR SMALL AND MID-SIZED FARMS

The capital cost of farm equipment is a major issue for small and mid-sized farms. While most find a way to acquire new and used tractors and basic hay equipment, certain equipment that might allow them to improve their operations is prohibitively expensive. Examples might include no-till seeders for planting winter or summer annuals or legumes, corn planting and chopping equipment for producing corn silage as feed in lieu of purchased grain-based feed, bale wrappers for baleage/silage of high quality grasses and legumes and loaders and bulldozers for improving roads and creating ponds, etc. While some of this equipment can be rented from third parties, there is limited availability and farmers could benefit from pooling resources to increase access. Major challenges include administration, maintenance and scheduling equitably since many may want to use the equipment during the same time of year.

EXPAND EDUCATION AND TRAINING OPPORTUNITIES FOR LOCAL FARMERS

At the same time that support and demand for local food is increasing, the younger generation seems to have less interest in continuing with farming traditions. Local farming can be supported by including agricultural education into local and regional workforce development as well as small business assistance efforts. This might include providing new and established farmers with training or helping young farmers find where land is available, help them access capital for land and equipment purchases, and help with marketing their products more directly to consumers.

DEVELOP A COMPREHENSIVE COMMUNITY FOOD ASSESSMENT

A community food assessment evaluates current land use, food production, processing, marketing, distribution, consumption and waste. The goal of a community food assessment is to improve the viability of the region's food system by enhancing agriculture production and the ability to create value-added products. Assessments can also help producers increase revenues and lower costs by examining the inflow and outflow of food to and from the region to better understand potential markets on which local farmers and related businesses could capitalize. An assessment would likely include creating an inventory of local producers, an ordinance and policy review, a land use evaluation of suitable parcels and characteristics for food production, and a review of the potential demand for local food and public support. Understanding the trends and relationships between elements within the food system ultimately assists community members, producers, and policy makers to pinpoint areas for improvement and collaboration. This will help local producers meet the growing demand for local food and will help support agriculture as an important component of the regional economy.

THEME
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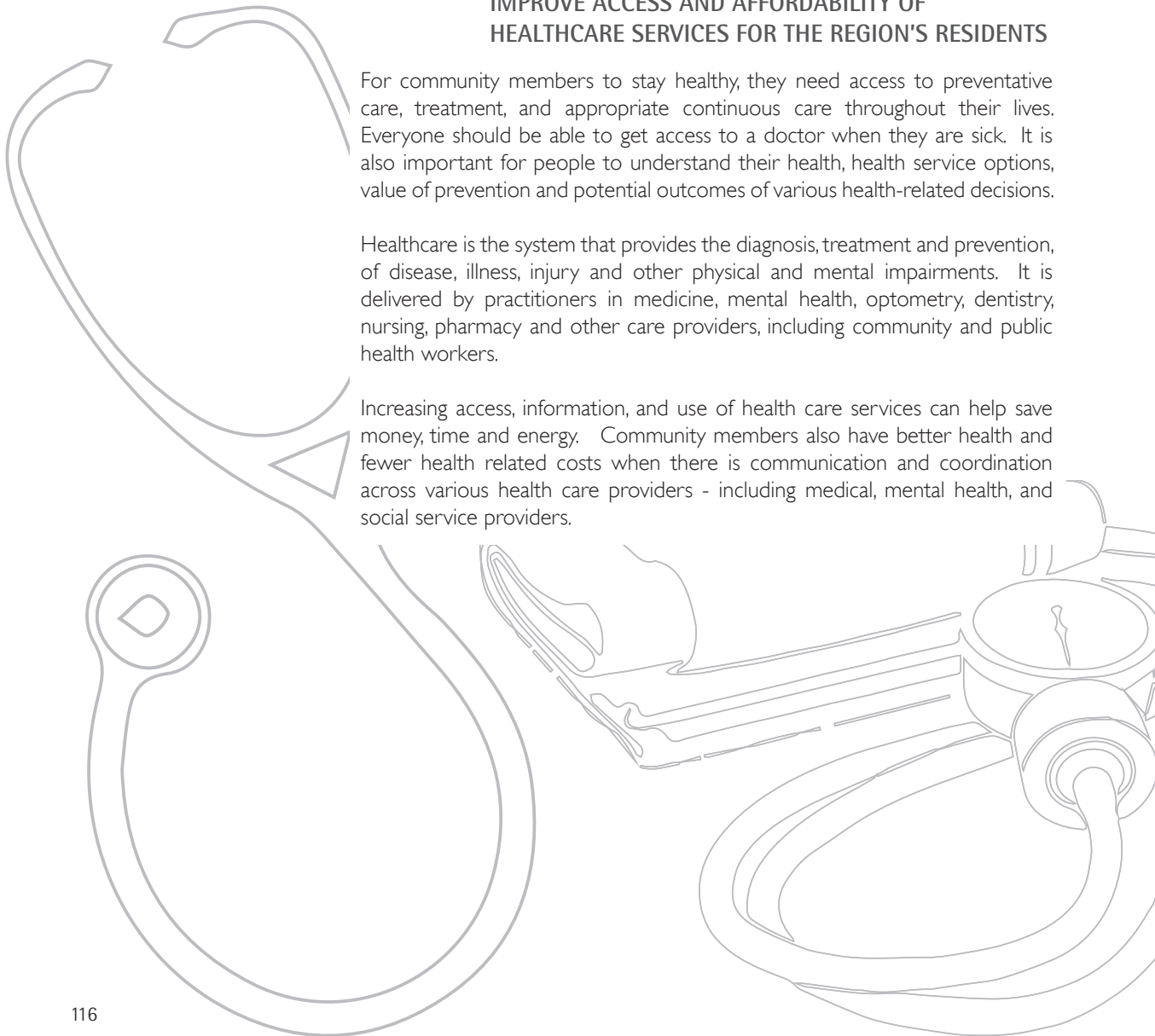
**ENSURE ACCESS TO
HEALTHCARE**

**IMPROVE ACCESS AND AFFORDABILITY OF
HEALTHCARE SERVICES FOR THE REGION'S RESIDENTS**

For community members to stay healthy, they need access to preventative care, treatment, and appropriate continuous care throughout their lives. Everyone should be able to get access to a doctor when they are sick. It is also important for people to understand their health, health service options, value of prevention and potential outcomes of various health-related decisions.

Healthcare is the system that provides the diagnosis, treatment and prevention, of disease, illness, injury and other physical and mental impairments. It is delivered by practitioners in medicine, mental health, optometry, dentistry, nursing, pharmacy and other care providers, including community and public health workers.

Increasing access, information, and use of health care services can help save money, time and energy. Community members also have better health and fewer health related costs when there is communication and coordination across various health care providers - including medical, mental health, and social service providers.



Unemployment, poverty, lack of transportation, the inability to get an appointment with a physician, and the cost of care all reduce healthcare access and proper use of health care services.

The median income of the NRV is approximately **\$20,000 less** than that of Virginia as a whole
20% Of Virginia Residents Live In Poverty
6.5% Do Not Have A Vehicle



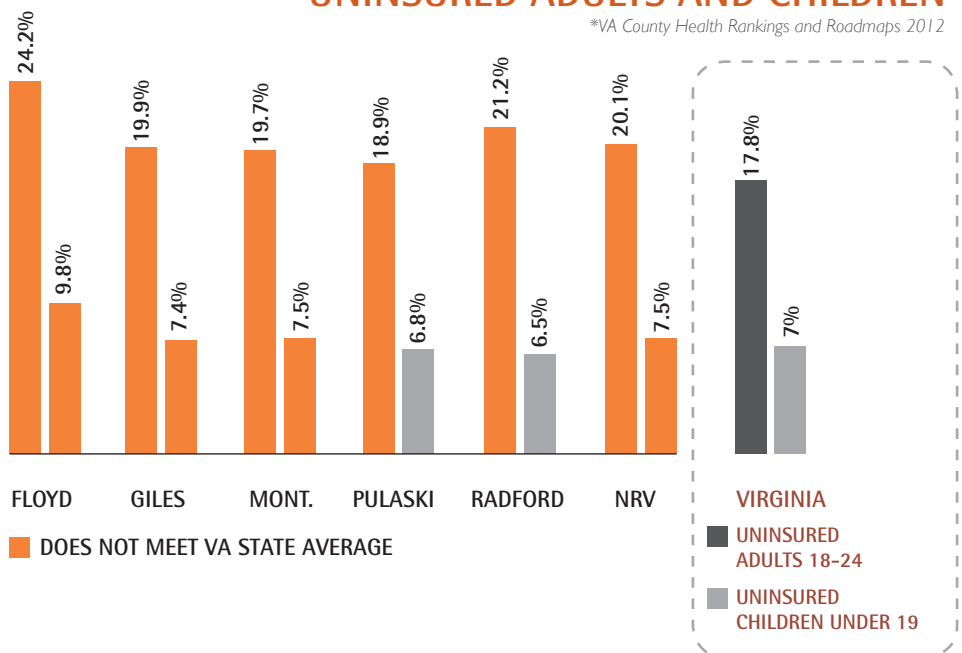
IMPORTANT DISTANCES

	FLOYD	GILES	MONT	PULASKI	RADFORD
HOMES WITHIN 1/4 MILE OF A TRANSIT STOP (WALKING DIST.)	0%	0%	28%	1%	57%
HOMES WITHIN 2 MILES OF A TRANSIT STOP (BIKE/CAR)	0%	0%	70%	43%	98%
HOMES WITHIN 10 MILES OF A HOSPITAL	1%	69%	90%	86%	100%
% OF HOUSEHOLDS WITHOUT ACCESS TO A VEHICLE	5%	6%	6%	7%	5.7%

- » Too many NRV residents don't have adequate opportunities to take good care of their health. New River Valley residents, relative to Virginia averages, have low access to healthcare insurance, high rates of uninsured, high rates of emergency care use, low numbers of healthcare specialists, as well as lack of care coordination and continuity.
- » Most uninsured people cannot afford to go to a physician on a regular basis. Even if they do seek medical attention, most cannot afford the cost of prescriptions and either do not get prescribed medication or take a smaller dosage than is prescribed. Many uninsured seek attention for routine and acute medical conditions in the most costly of all settings – hospital emergency rooms.

UNINSURED ADULTS AND CHILDREN

*VA County Health Rankings and Roadmaps 2012



THEME GOAL
04 14



4
HOSPITALS



3
FREE CLINICS

The New River Valley is served by four major hospitals, located in **Giles, Pulaski and Montgomery Counties and the Town of Christiansburg**, that provide beds to over 500 patients. These medical facilities include diagnostic, cardiology, obstetrics, orthopedics and emergency services. There are nine public and private clinics affiliated with local hospitals available.

There are three Free Clinics located in **Pulaski, Giles and Montgomery**; and a Federally Qualified Health Center located in Floyd.

Approximately 292 physicians and 100 dentists practice in the area. Several hundred more physicians and dentists practice in the adjoining Roanoke Valley region. *In 2012, the NRV was listed as a Medically Underserved Area, Dental Health Professional Shortage Area and Mental Health Professional Shortage Area. Both Floyd and Giles Counties are listed as Primary Care Health Professional Shortage Areas.*

- » According to the County Health Rankings, all counties, except for the City of Radford have a significantly high ratio of population to primary care physicians as well as dentists, as compared to Virginia. These high ratios of population to an individual primary care physician or dentist make accessibility and availability of healthcare services difficult for residents.
- » Given the NRV's rural nature, it is difficult for the region to attract healthcare specialists.

		VA	FLOYD	GILES	MONT	PULASKI	RADFORD
UNINSURED	% of population under 65 without health insurance	15%	20%	17%	17%	16%	19%
PRIMARY CARE PHYSICIANS	ratio of population to primary care physicians	1356:1	5110:1	1441:1	1575:1	1740:1	1028:1
DENTISTS	ratio of population to dentists	1811:1	7707:1	3485:1	2730:1	3973:1	19410:1
PREVENTABLE HOSPITAL STAYS	hospitalization rate for ambulatory-care sensitive conditions per 1000 Medicare enrollees	58	56	75	60	104	50

*VA County Health Rankings and Roadmaps 2012

DOES NOT MEET VA STATE AVERAGE

Hospitalization for diagnoses treatable in outpatient services suggests that the quality of care provided in the outpatient setting was less than ideal. The measure may also represent a tendency to overuse hospitals as a main source of care.

STRATEGIES FOR ENSURING ACCESS TO HEALTHCARE

ENSURE AVAILABLE AND EFFECTIVE UTILIZATION OF HEALTH SERVICES

For community members to stay healthy, they need access to preventative care, treatment, and appropriate continuous care throughout their lives. Improving access and use of services could include: increasing the number of health centers and Federally Qualified Health Centers in the region so that people would not have to travel great distances; increasing the hours of operation to make appointments available for those with busy schedules; and improving health insurance options so that patients can afford necessary health services. Additionally, it is important for people to understand their health, health service options, value of prevention and potential outcomes of various health-related decisions. Increasing access, information, and use of health care services can help save money, time, and energy.

INCREASE AND IMPROVE COORDINATION OF HEALTH SERVICES

Community members have better health and reduced health costs when there is communication and coordination across various health care providers, including medical, mental health care, and social services providers. It is important to have health and social service providers from different agencies and specialties coordinating their efforts, understanding best practices around health issues, and effectively communicating them to their patients. Providers also need to better understand what community health services and resources are available and make sure their patients are aware of these options. An increased inter-agency and provider network collaboration will help patients coordinate their health services so they can prevent diseases and take care of their health needs at the right time, for the lowest cost possible. Coordinating effective and efficient care across a variety of providers will include 1) supporting systems navigators to support care coordination and culturally competent assistance - which includes developing regional best practices around prescription education and knowledge to ensure consumers/patients are taking the correct medications at the correct dose and correct time, 2) promoting preventative care through financial incentives for patients to adopt preventative care behaviors such as smoking cessation and working towards healthy BMI targets, 3) reviewing and supporting appropriate administrative policies, and 4) increasing funding to expand access to mental health services.



THEME **04** GOAL **15** **CREATE HEALTHY ENVIRONMENTS**

CREATE MORE OPTIONS FOR RESIDENTS TO SAFELY AND CONVENIENTLY WALK, BIKE, RECREATE AND ACCESS HEALTHY FOOD

Increasing the availability and affordability of healthy food and opportunities for exercise enables communities to take action to reduce adverse health outcomes associated with a poor diet and lack of physical activity. Adding multimodal options - such as sidewalks, shared roads, bike lanes, and multi-purpose trails - to existing road systems makes it easier to cross the street, walk to shops and bike to work. Gaining access to affordable, healthy food options can be a particular challenge for lower income residents and those who have limited transportation options. Improving access via public transit to grocery stores and farmers' markets, along with expanding healthy food choices in schools and convenience stores, can make it easier for people to embrace good nutrition.





- » The Bike Kitchen serves lower income residents by offering a place to purchase their own recycled bicycle and receive follow up maintenance support under a fee structure they can afford.
- » The Towns of Blacksburg and Christiansburg, the City of Radford as well as Montgomery and Pulaski Counties have current plans for bikeway and walkway development.
- » Bicycle and pedestrian planning has been more prevalent in the Towns of Blacksburg, Christiansburg and the City of Radford due to the demand for inexpensive travel by students attending Virginia Tech and Radford University. Rural areas of the region are making strides to integrate safe shared roadway networks in combination with natural surface and paved facilities that promote local recreation and tourism.
- » There is a growing interest in the region to interconnect the bicycle and pedestrian system to the public transportation network in order to promote a multimodal transportation system.
- » Virginia highway construction funds can be used to build bicycle and pedestrian accommodations either concurrently with highway construction projects or as independent transportation projects.
- » Virginia Department of Transportation (VDOT) provides funding for pedestrian and bicycle facilities as part of the Transportation Enhancement Program. Other funds for bicycle and pedestrian improvements are also available, such as: FTA 5307 funds, Safe Routes to School funds and the National Recreational Trails Fund.



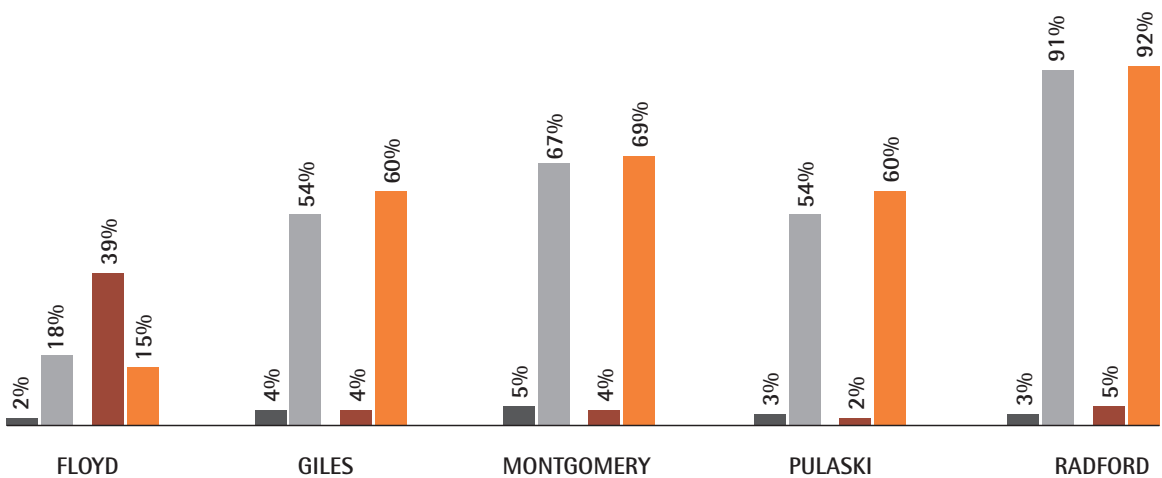
Transportation maintenance funds continue to be depleted. However, costs are significantly lower when the construction of a roadway, bike lane or trail can occur simultaneously within the same right-of-way. Improving communication between local and state agencies is the first step towards reducing project redundancies and costs.



THEME **04** GOAL **15**

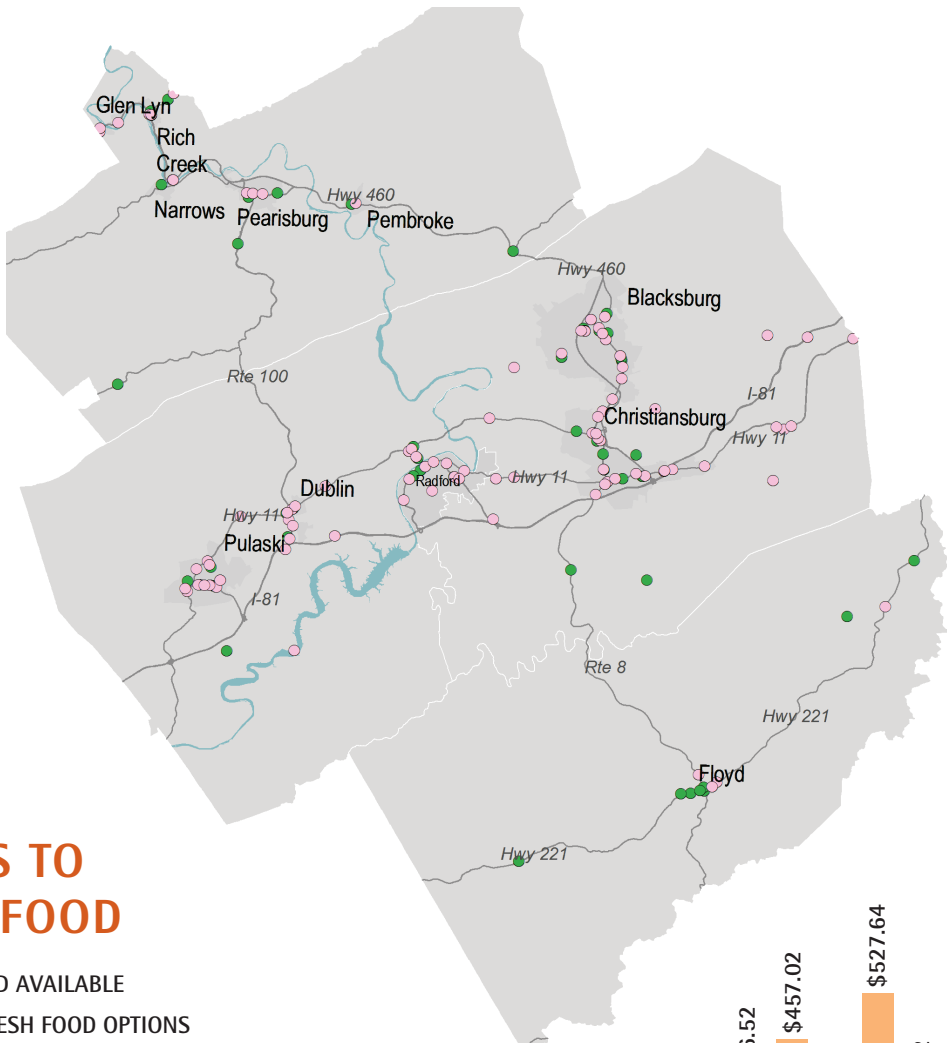
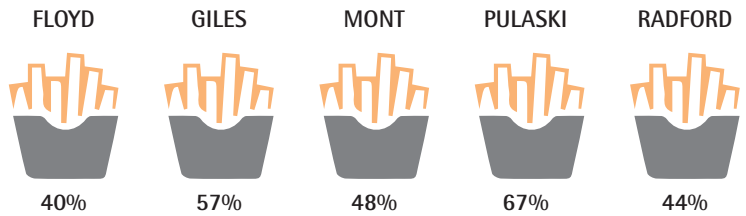
Percent of Population near a Sidewalk, Trail, or Gym: The portion of the population within various distances to sidewalks indicates a neighborhood's walkability. Close proximity to stores and services have been strongly associated with people walking and bicycling as a means of transportation.

Fresh Food Access: Access to food is calculated by distance of consumer residence to nearest supermarket or grocery store. The physical distance from fresh foods determines eating behaviors and preferences. The greater the physical distance from full service supermarkets, the more likely a resident is to purchase food from convenience stores or corner shops that stock mainly cheap, processed foods or foods high in fats and sugars.



- HOMES WITHIN 1/4 MILES OF FRESH FOOD (WALKING DISTANCE)
- HOMES WITHIN 2 MILES OF FRESH FOOD (BIKING/SHORT CAR TRIP)
- HOMES WITHIN 1/4 MILES OF RECREATION (GYM, SIDEWALK, HIKING TRAIL)
- HOMES WITHIN 2 MILES OF RECREATION (GYM, SIDEWALK, HIKING TRAIL)

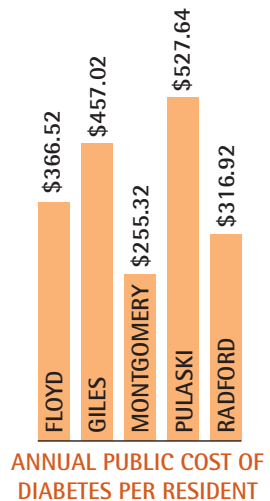
% OF ALL RESTAURANTS THAT ARE FAST-FOOD ESTABLISHMENTS
**Census County Business Patterns 2010*



ACCESS TO FRESH FOOD

On average, people diagnosed with diabetes have medical expenditures that are approximately 2.3 times higher than expenditure would be in the absence of diabetes. Approximately 1 in 10 public health care expenditures are attributed to diabetes. Indirect costs include increased absenteeism from work and reduced productivity and quality of life.

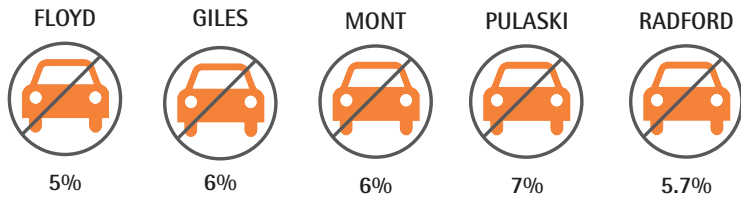
**County Health Calculator; Based on: Education and income statistics from US Census; county death rates and diabetes prevalence estimates from the US Department of Health and Human Services 2006-2008; estimates of medical spending on diabetes from the American Diabetes Association; and a county variation factor derived from the Dartmouth Atlas of Health Care Medicare reimbursement.*



THEME GOAL
04 15

% OF HOUSEHOLDS WITHOUT ACCESS TO A VEHICLE

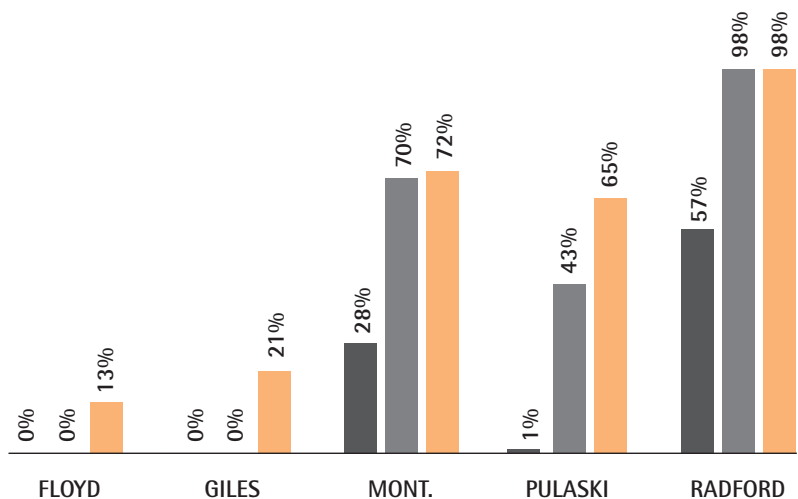
**US Census Bureau, ACS 2006-2010*



Lack of transportation options can make it difficult for residents who don't have access to a vehicle.



The proximity of a resident to a major employment area helps measure the likelihood for employees to walk, bike and/or use public transit to get to work. Having public transit stops, sidewalks and bike lanes close to employment areas encourages the residents of a neighborhood to use alternative transportation, increasing physical activity and good health.



- HOMES WITHIN 1/4 MILES OF A TRANSIT STOP (WALKING DISTANCE)
- HOMES WITHIN 2 MILES OF A TRANSIT STOP (BIKING/SHORT CAR TRIP)
- HOMES WITHIN 2 MILES OF AN EMPLOYMENT CENTER

STRATEGIES TO CREATE HEALTHY ENVIRONMENTS

EXPAND ACCESS TO FRESH FRUIT, VEGETABLES AND WHOLE GRAIN FOODS IN MAJOR BUSINESSES, SCHOOLS AND CONVENIENCE STORES, ESPECIALLY IN AREAS IDENTIFIED AS LACKING ACCESS

There are wide arrays of programs and policies that can be employed to expand access to healthy food. Land use policies can be created to encourage land use mix, density, connectivity and other measures to improve overall walkability and connections between destinations such as home, work and food shopping. Transportation policies can encourage safe and convenient multi-modal transportation connections between low-mobility neighborhoods and healthy food sources. Economic development policies can encourage tax incentives that promote the location of healthy food retail in underserved neighborhoods or near existing public transportation routes. Incentives can also be created for public institutions to sell or use locally produced foods (e.g. farm to school programs or competitive pricing in schools) and to encourage partnerships between food outlets and neighborhood-based nonprofits to encourage stores to offer healthy foods. Healthy, affordable food access can also be expanded, and waste decreased, through support of improved refrigeration or warehouse capacity for perishable foods (i.e. fruits and vegetables). Housing goals and policies can encourage development of community gardens, supermarkets and farmers' markets near new and existing affordable housing and can ensure provision of community gardens in low-income neighborhoods.

CREATE MORE BICYCLING AND WALKING OPTIONS THAT CONNECT RESIDENTIAL AREAS TO COMMUNITY CENTERS

Many communities have sidewalks downtown but few continuous paths between residential areas and key community destinations. Fostering walkable and bike-friendly communities means creating safe and convenient ways for residents to walk or bike from where they live to the places they want to go around town. This could mean extending sidewalks, bike lanes, and trails into larger neighborhoods or connecting sections to create a more continuous system for pedestrians and cyclists to use.

OPEN UP OR EXPAND HOURS OF AVAILABILITY OF SCHOOL-BASED RECREATION FACILITIES AND EQUIPMENT TO THE COMMUNITY

Many schools have recreation facilities that are underutilized when school is not in session. Joint use agreements could be developed to allow public access to existing facilities by defining terms and conditions for sharing the costs and risks associated with expanding a property's use. School districts may create joint use agreements to allow community access to school property after hours. This would significantly expand affordable access to recreation and exercise facilities to community members who might not otherwise have ready opportunities to improve their overall health and fitness.

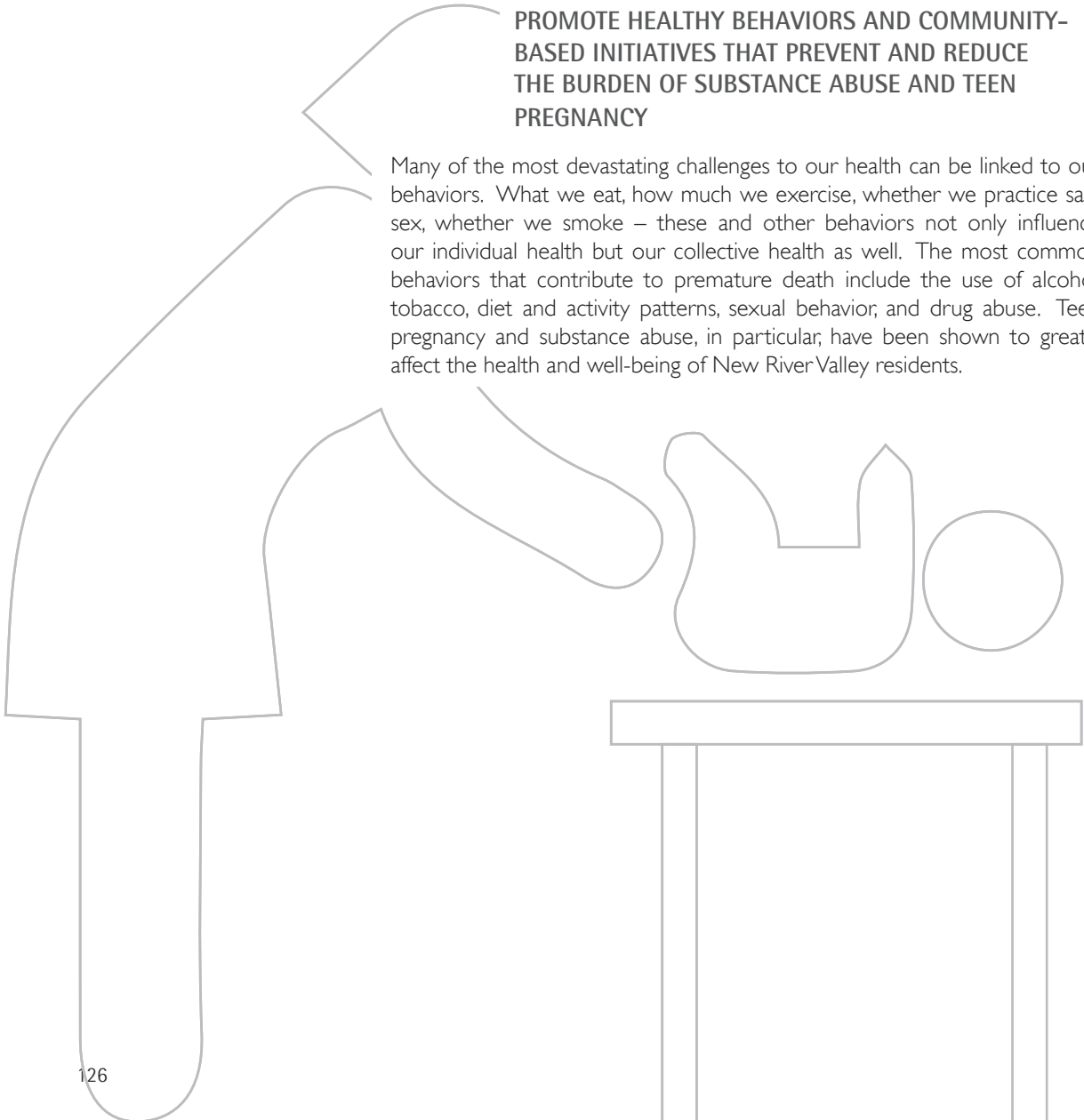
INTEGRATE EXISTING COMMUNITY CHARACTER INTO THE DESIGN OF COMMUNITY CORE IMPROVEMENTS

The community character of a county, town or neighborhood can be seen as a story or narrative of a place. Planners and community members can come together to describe and articulate the historic, cultural, and economic context of their community with the purpose of reinforcing and enhancing that identity. This process can then inform the implementation of policies, regulations and incentives that support and enrich the most valued aspects of community identity in the way it evolves over time.

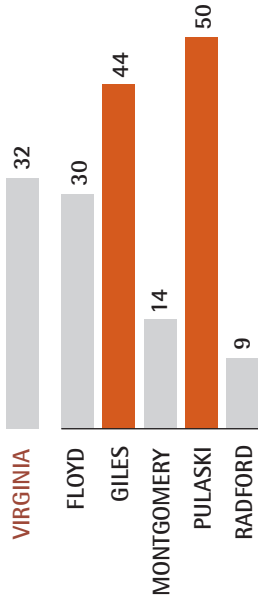
THEME **04** GOAL **16** **PROMOTE HEALTHY BEHAVIORS**

PROMOTE HEALTHY BEHAVIORS AND COMMUNITY-BASED INITIATIVES THAT PREVENT AND REDUCE THE BURDEN OF SUBSTANCE ABUSE AND TEEN PREGNANCY

Many of the most devastating challenges to our health can be linked to our behaviors. What we eat, how much we exercise, whether we practice safe sex, whether we smoke – these and other behaviors not only influence our individual health but our collective health as well. The most common behaviors that contribute to premature death include the use of alcohol, tobacco, diet and activity patterns, sexual behavior, and drug abuse. Teen pregnancy and substance abuse, in particular, have been shown to greatly affect the health and well-being of New River Valley residents.



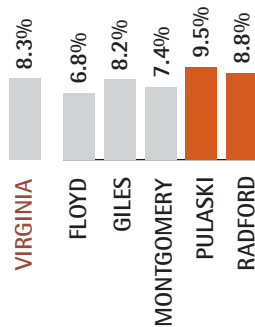
DOES NOT MEET VA STATE AVERAGE



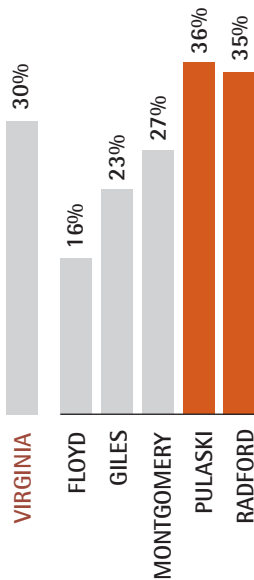
TEEN BIRTH RATE PER 1,000 FEMALE POPULATION AGES 15-19

Adverse outcomes associated with teen pregnancy:

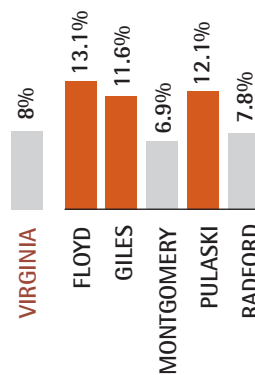
sexually transmitted infection, repeat pregnancies, poor prenatal care, gestational hypertension, anemia, and low birth weight, all of which increase risks of child developmental delay, illness and mortality.



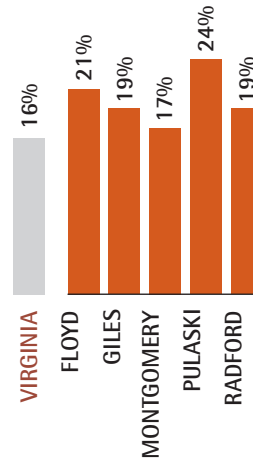
LOW BIRTH RATE, % OF LIVE BIRTHS WITH WEIGHT <2,500 GRAMS



% OF CHILDREN THAT LIVE IN A HOUSEHOLD HEADED BY A SINGLE PARENT



% AGE 25+ WITH LESS THAN A HIGH SCHOOL EDUCATION



% OF CHILDREN UNDER AGE 18 IN POVERTY

SUBSTANCE ABUSE

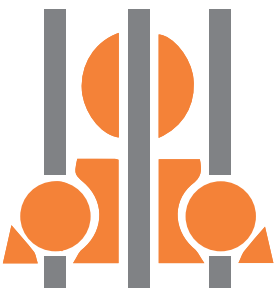
Substance abuse is the use of illicit drugs or the abuse of prescription or over-the-counter drugs or alcohol for purposes other than as properly indicated for treatment of a medically diagnosed condition. **Substance use and abuse not only impacts individual health, but have dramatic impacts on crime, incarceration, repeat incarceration, the workforce and the economy.** Systemic and multi-generational substance abuse is increasingly eroding the health and wellbeing of individuals, families and communities in the New River Valley.



New River Valley residents have high rates for substance use and abuse, prescription drug use and death, unemployment, incarceration and recidivism, foster care and substance abuse which results in high healthcare service costs.

- » A Virginia state policy study found that substance abuse costs Virginia and local governments an estimated \$613 million annually, with 96% of the identified costs deriving from the criminal justice system from incarceration, rise in foster care placements and substance abuse services. These figures are conservative, as the study did not measure the additional real and opportunity costs to local communities and the state from lost personal and business revenue and reduced well-being of the workforce.
- » In the New River Valley, there is a high prevalence of substance abuse among sentenced adult offenders. The most frequently abused substances are alcohol, methamphetamines, prescription medications, cocaine and marijuana.

In the NRV, mortality rates from prescription drug abuse are 3X higher than the state average and rates in Giles and Pulaski Counties are 4X higher and 6X higher respectively.



- » 33% of children coming into foster care in the NRV were due to parental substance abuse issues. This is almost twice the state average.
- » Over half (52.2%) of substance-involved inmates have one or more previous incarcerations compared with 31.2 percent of inmates who are not substance involved. Officials point to a lack of education, job skills and job availability as a major factor to incarceration and recidivism.
- » NRV Regional Jail has estimated that more than 26% of their inmate population suffers from substance use disorders.



92% of the region's major employers are currently hiring, but **67% had difficulties filing vacant positions due to failed pre-employment drug and alcohol testing.**

*Virginia Tech preliminary study, Collins et al., 2011

STRATEGIES TO PROMOTE HEALTHY BEHAVIORS

COORDINATE RESOURCES TO REDUCE RATES OF TEEN PREGNANCY

Teen pregnancy rates are significantly higher in certain parts of the New River Valley than the averages in Virginia and the nation. Teen pregnancy can seriously limit life opportunities for both mother and child and is known to produce significant financial impacts for families and local governments due to increased dependence on public assistance and higher rates of future incarceration for children born of teen mothers. Community groups, churches, parents, schools, and healthcare providers can work together to reduce the factors that are known to increase the likelihood of teen pregnancy.

EXPAND SUBSTANCE ABUSE TREATMENT OPTIONS

Substance abuse hurts individuals, their families and the community as a whole by preventing individuals from reaching their full potential. Strategies to reduce substance abuse will require multiple approaches: expanding community, employer and school-based recovery programs and support; working with health providers and pharmacists to ensure that patients take medications appropriately; increasing consequences for health practitioners and patients who abuse substances and practitioners who enable abuse; and improving pain management strategies for patients with chronic pain. Reducing substance abuse within the community will help save people's lives, positively impact the economy, create and retain jobs, and save public and private resources.



THEME
04

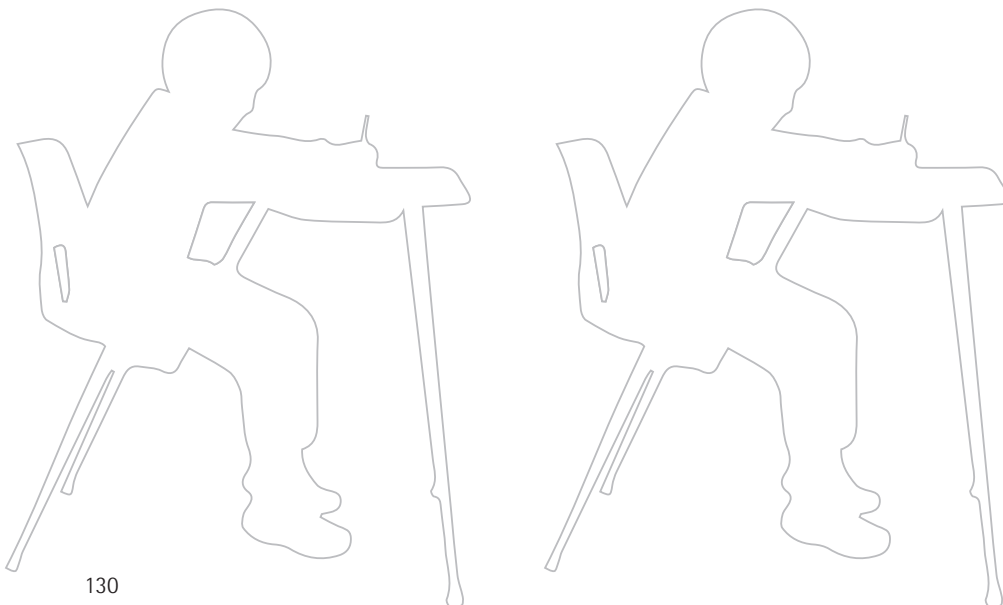
GOAL
17

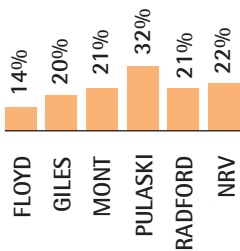
SUPPORT CHILDREN REACHING THEIR FULL POTENTIAL

SUPPORT CHILDREN'S OPTIMAL DEVELOPMENT AND SCHOOL READINESS

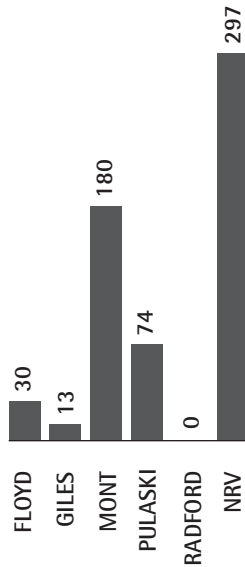
When children and youth receive the support they need to grow and thrive, they are more likely to contribute to society and the economic well-being of families, businesses and communities. The earlier this support is provided, the greater the impact on the life chances of the child and the benefit to the individual and the broader community. Programs that start children on the path to successful adulthood - such as early education and parent support/home visiting - help to increase school test scores, graduation rates, college attendance, job readiness and earnings. They also reduce substance abuse, crime and teen pregnancy.

Research has shown that young children benefit from access to good nutrition and medical care, quality childcare, early diagnosis of developmental delays and participation in school readiness programs. When families have access to these opportunities either through private resources or through their community, children are more likely to complete their education and make positive life choices as they move into adulthood.

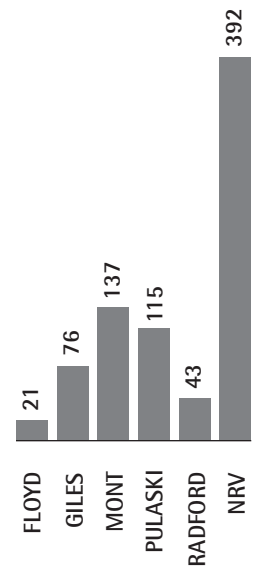




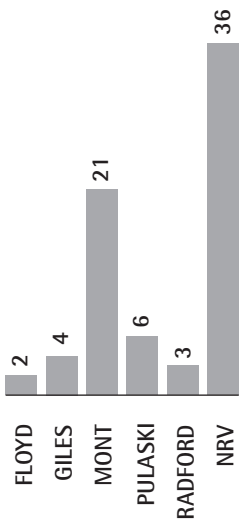
CHILDREN UNDER 5 IN POVERTY (2010)



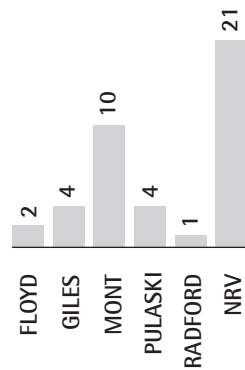
CHILDREN SERVED BY THE VIRGINIA PRESCHOOL INITIATIVE (2012)



CHILDREN ENROLLED IN HEAD START PROGRAMS (2011-2012)



LICENSED CENTER BASED CHILDCARE PROVIDERS



CHILD CARE CENTERS WITH/WORKING TOWARDS STAR QUALITY RATING



There is a greater demand for quality childcare than is currently available in the region.

- » In 2010 22% of children in the NRV under the age of 5 were living in poverty and less than half of these children were receiving the benefits of Head Start or Virginia Preschool Initiative.
- » There are 75 licensed and religious-exempt day care facilities in the NRV, out of these 21 are licensed homes with a 12 child maximum capacity; another 18 are religious-exempt facilities. Of the remaining 54, 21 are participating in the Virginia Star Quality Initiative, a program aimed at improving the quality of daycare centers through a rating process. Star quality ratings take into account: Education, Qualification and Training of staff, Interaction with Children, Program Structure Environment and Installation.

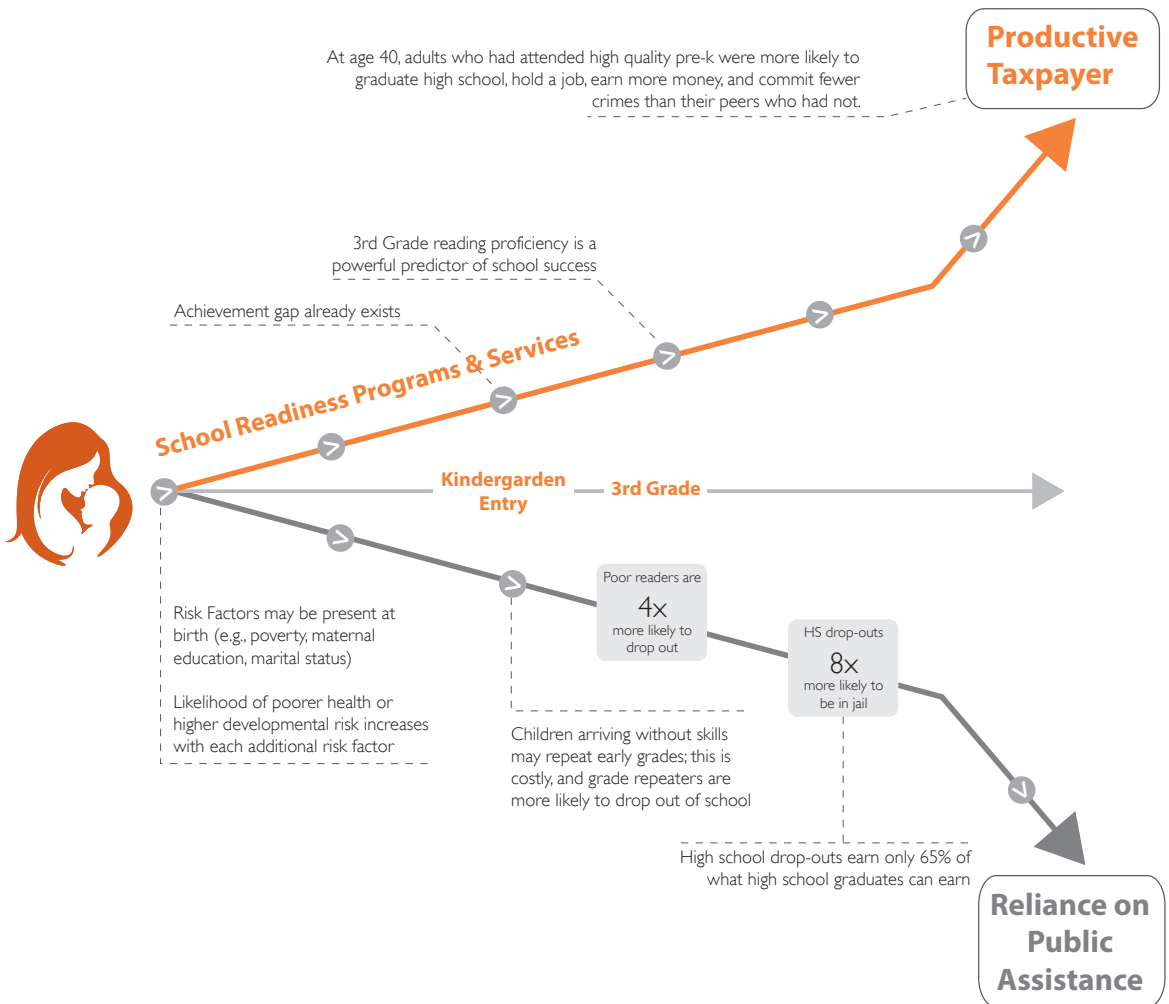
THEME GOAL
04 17

The NRV has lower rates of kindergarten readiness and a higher percentage of children needing special education services compared to the state average.

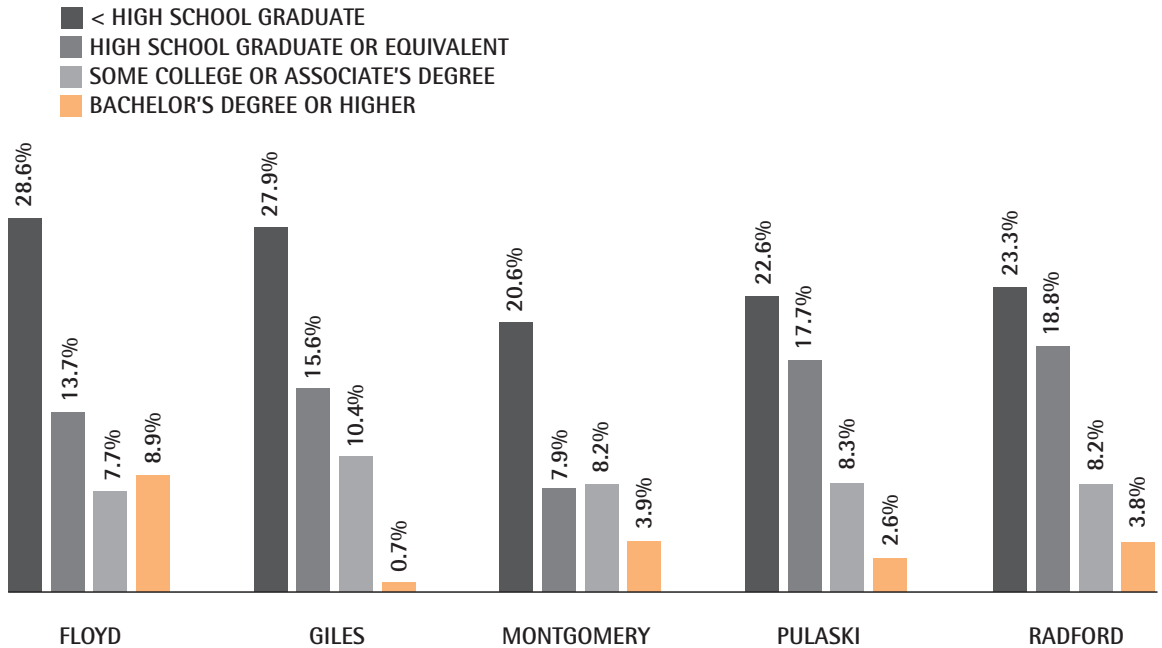


IN 2011-2012, 29%

of children in Virginia, between the ages of 10 months and 5 years, underwent standardized screening for developmental delays. Children screened for developmental delays before entering kindergarten produce higher rates of academic and social success. Early treatment is also shown to have positive economic benefits as a result of reduced demand for special education, fewer teen pregnancies and lower crime.



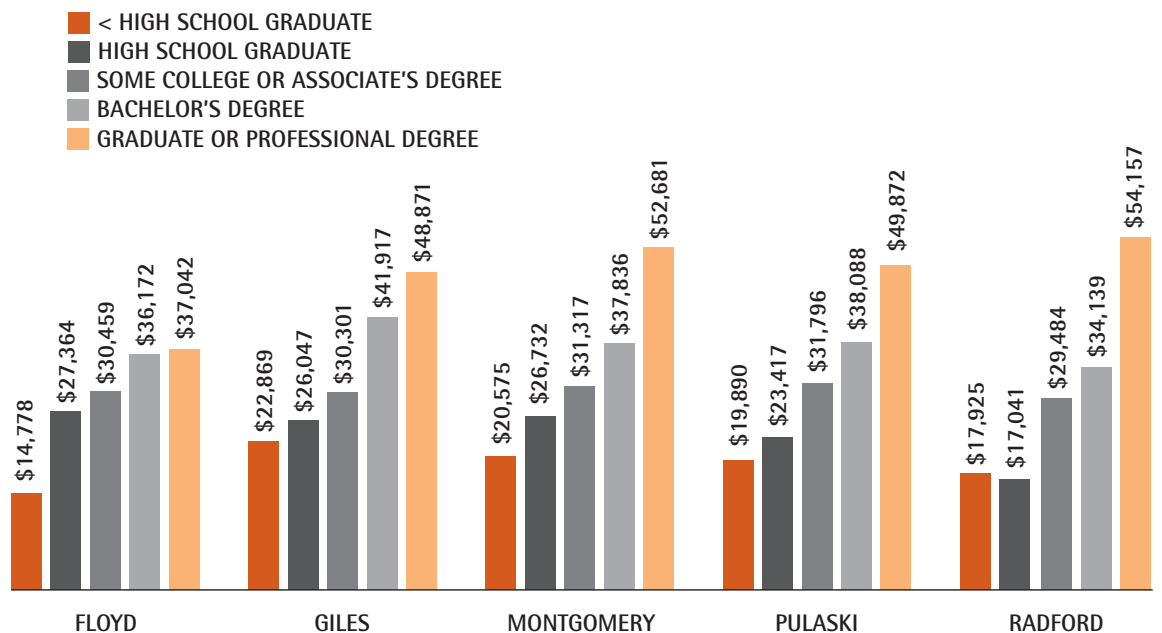
% OF RESIDENTS LIVING IN POVERTY BY EDUCATION LEVEL



* 2005-2009 Census ACS

As the 21st century economy brings demands for different skills, residents will need the tools, resources, and education necessary to reach their full potential as citizens, workers and leaders.

MEDIAN EARNINGS BY LEVEL OF EDUCATION IN 2009



STRATEGIES TO SUPPORT CHILDREN REACHING THEIR FULL POTENTIAL

PROVIDE AFTER-SCHOOL PROGRAMS TO SUPPORT AT-RISK YOUTH

Older children and teenagers do better physically, emotionally, and academically when they are supported and engaged in healthy, enriching activities outside of school hours. Team sports, after-school clubs and activities, and community-based programs offer kids ways to stay physically active and provide a positive structure to their days that might otherwise be occupied with sedentary or even risky behaviors. Programs that provide opportunities for youth to participate in activities that link academic and occupational learning are also valuable. Youth programs could offer supplemental activities such as leadership development, job shadowing, employer tours, and work experience. Tutoring and mentoring programs can also help to keep youth engaged in school.

INCREASE THE EXPOSURE OF REGIONAL K-12 STUDENTS TO THE TYPES OF CAREERS AVAILABLE IN THE REGION

Students need to prepare for the careers of the future. Young people face many of life's most important decisions in those transition years between high school and the working world. Unfortunately too many students are unaware of their education and employment options. There are a number of ways to increase exposure of regional K-12 students to the types of careers available in the region including: 1) career exploration through site visits to business and industry, meetings with individuals representing various occupations, occupational assessments, videos, and computer programs; 2) visits to area community colleges and universities 3) summer employment, job shadowing and internship opportunities linked to academic and occupational learning. Comprehensive guidance, career counseling, and adult mentoring can also help improve student understanding of job requirements and what courses/educational pathways will need to pursue in their career field/s of interest.



INCREASE THE NUMBER AND PERCENT OF CHILDREN SCREENED FOR DEVELOPMENTAL DELAYS

It is easy for parents to miss the signs of a developmental problem with their own children, and many delays are not identified until the child enters kindergarten. Kindergarten readiness is a key predictor of how well a child will do, both academically and behaviorally, throughout her/his school career. People who have regular interactions with infants and young children, including family doctors and preschool teachers, can help identify physical, cognitive or emotional problems at an earlier age. This can be as simple as promoting the use of developmental checklists for all professionals who regularly interact with babies and young children or increasing the number of people in the region who are trained to effectively treat a range of developmental delays.



EXPAND AND IMPROVE QUALITY PRENATAL CARE AND EARLY CHILDHOOD PROGRAMS INCLUDING PRE-SCHOOL EDUCATION AND DAYCARE OPTIONS

Kindergarten readiness is a key predictor of how well a child will do, both academically and behaviorally, throughout his/her school career. It is also strongly correlated to graduation rates and future educational attainment. In addition to lifelong benefits for children, parents with good daycare options are more productive and reliable employees, bringing far-reaching benefits to local employers and the regional economy.

THEME **04** GOAL **18** **IMPROVE AND PROTECT WATER RESOURCES**

IMPROVE AND PROTECT WATER QUALITY AND SUPPLY

Waters of the New River Valley are an important resource for drinking, forestry, agriculture and industrial uses. They also provide amenities such as water quality, tourism, fishing, boating and other types of recreation and open space. Poor water quality leads to higher water treatment costs, health problems and diminishes opportunities for recreational swimming and fishing.

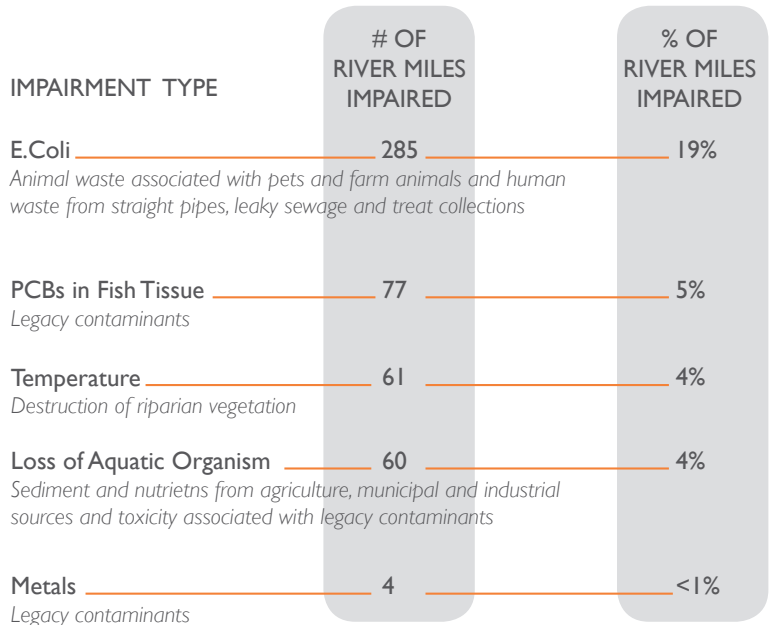




- » The New River is one of the most ecologically intact big rivers in Virginia.
- » The New River serves as the main water source for the New River Valley and is a popular recreational attraction for local citizens and tourists from outside of the region.
- » The NRV has many 'headwater' areas - high ridges where water gathers to form streams. These headwaters are also important resources for water supplies and for recreational opportunities like trout fishing. Protection of headwaters not only protects trout fisheries but also has a direct impact on the water quality of downstream rivers and lakes.



WATER QUALITY IMPAIRMENT IN THE NEW RIVER VALLEY



WATER QUALITY HIGHLIGHTS

NUMBER OF IMPAIRED WATERWAYS

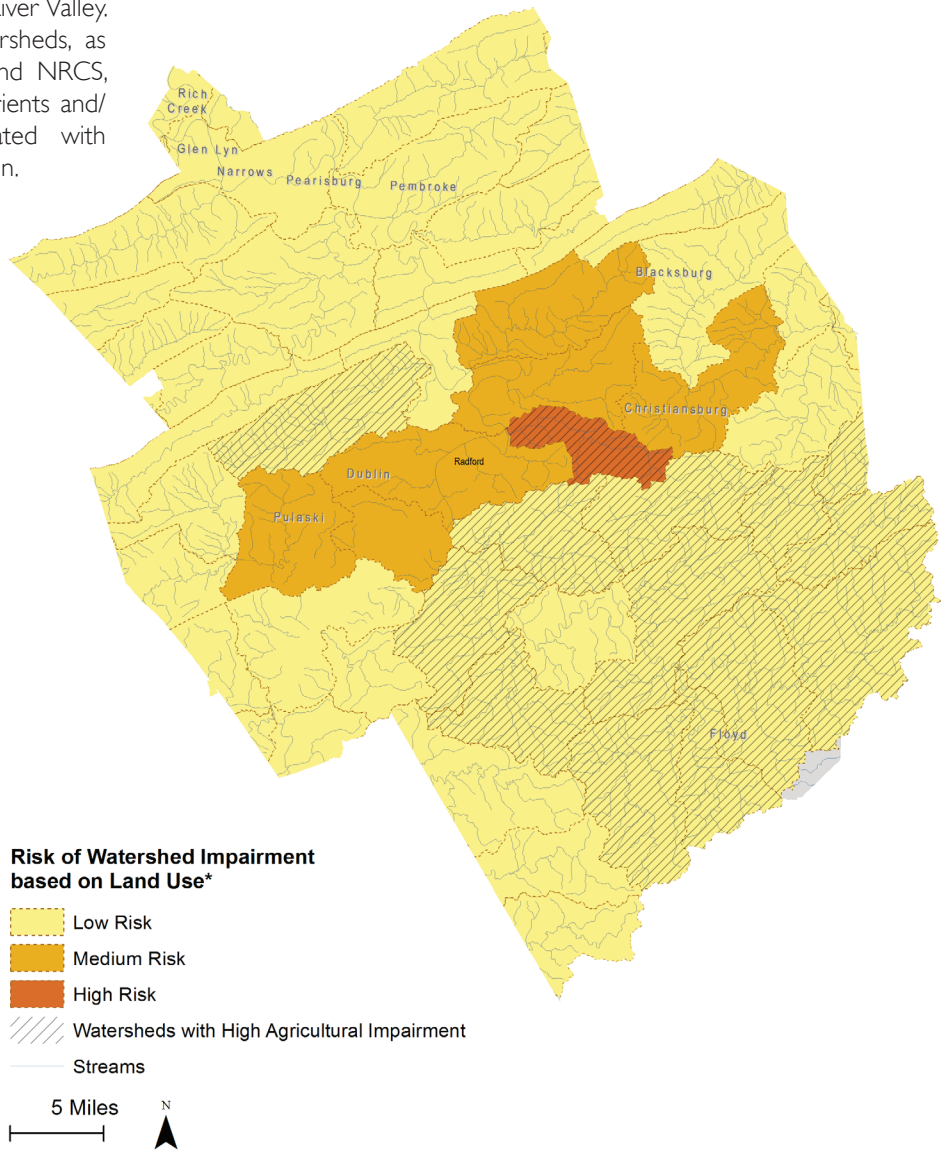
PULASKI COUNTY	5
MONTGOMERY CO	13
FLOYD COUNTY	12
GILES COUNTY	2
RADFORD	1

*2012 VA Department of Environmental Quality



IMPAIRED RIVERS AND WATERSHEDS IN THE NEW RIVER VALLEY

Agriculture and development are sources of water quality stress in the New River Valley. 26 out of 57 watersheds, as defined by USGS and NRCS, are impaired by nutrients and/or bacteria associated with agricultural production.



Source: NRVPCD, DEQ, US Census

*Note: Risk was determined by the % Impervious surface cover in each watershed which includes features such as roads, sidewalks, driveways, parking lots, and rooftops. Low Risk = < 10%, Medium Risk = 10-25%, High Risk >25%.

STORMWATER

- » By the time 10% of a watershed is covered in impervious surface (roads, houses, parking lots, etc.), the stream is likely to become impaired and at 25% it is severely impaired. *Schueler, 1995
- » Low density development requires more parking lots, roads, and driveways, which make it harder and more expensive to protect water quality.
- » New stormwater management regulations have reduced total water volume allowed to enter a waterway in order to help waterways recover between storm events.

WATER SUPPLY

Each of the four counties and the City of Radford have their own Public Service Authority (PSA) which is responsible for the delivery of water to customers within their service area. To the extent possible, water sharing agreements and consolidation of systems can reduce operational expenses and can improve efficiencies.

PULASKI COUNTY

The Pulaski County PSA utilizes Claytor Lake for their source water and sells directly to customers in the county while selling in bulk to the Town of Dublin for distribution to town customers. The Town of Pulaski utilizes Peak Creek for their source water and sells directly to customers in town.

MONTGOMERY COUNTY

Montgomery County recently joined the Blacksburg-Christiansburg-VPI Water Authority after several years of deliberation among the owners. The authority will help the County meet current and future demand for its growing population and economic opportunities.

RADFORD

The City of Radford utilizes the New River for their source water. A recently completed waterline project allows the City to deliver water to the Pulaski County PSA in the eastern portion of the county. This significant collaboration allowed the county to avoid building a new treatment plant while enabling the City to sell excess capacity.

GILES COUNTY

The Giles County PSA operates two wells full time, with three wells serving as back-up. The PSA provides water to all five towns in the County through independent agreements. The PSA has researched alternative water sources for several years.

FLOYD COUNTY

Floyd-Floyd County PSA operates five wells to serve the population in and around the Town of Floyd (a relatively small portion of the County's population). Water is a limited resource in the county. Given the unique geology, there are very few aquifers (underground reservoirs) for source water. Since Floyd County is a headwater area, all water originates through rainfall and as a result, drought is a major concern with potential impacts on water for a growing population and economic development purposes.



STRATEGIES TO IMPROVE AND PROTECT WATER RESOURCES

INCREASE COORDINATION OF SERVICES, PROGRAMS AND OUTREACH EFFORTS THAT PROVIDE INFORMATION AND SUPPORT TO PROTECT AND RESTORE WATER RESOURCES AND INCREASE PUBLIC UNDERSTANDING OF ACTIVITIES THAT IMPACT WATER QUALITY

Water contamination can come from multiple sources including industrial processes, development practices, livestock waste, agricultural chemical and stormwater runoff, and improperly designed or maintained septic systems. Currently there are multiple programs and cost-sharing initiatives available to help farmers, home owners, and businesses to reduce water pollution, but these programs are complicated for the average citizen or business person to navigate on their own. Better coordination among agencies and organizations that provide these options could help to expand the number of residents and enterprises taking active steps to protect water quality.

DEVELOP COMPREHENSIVE WATERSHED MANAGEMENT AND REGIONAL STREAM RESTORATION PLANS

The goal of watershed and stream restoration plans is to summarize all important information on the watershed (water quality, history, geography, geology, etc.), to prioritize water quality problems in order of impact, to present options and recommendations for stream restoration and to provide a framework for future activities. It is often easier to receive funding for a restoration project that has been included in an approved plan.

EXPAND OUTREACH EFFORTS WITH FARMERS AND LANDOWNERS TO INCREASE ADOPTION OF AGRICULTURAL AND FORESTRY BEST MANAGEMENT PRACTICES (BMPS)

Agriculture and Forestry Best Management Practices include management or structural practices designed to improve production and reduce pollution and/or erosion resulting from agriculture or forestry operations. Examples of Best Management practices include streamside plantings, habitat restoration, livestock fencing, alternative watering sources, ground cover, and nutrient management planning. BMPs are voluntary in nature but there are a number of funding programs that provide regulatory, planning, technical, and cost share assistance for landowners interested in reducing the cost barriers to implementing BMPs. The Virginia Department of Conservation and Recreation (VDCR) administers state agricultural pollution control programs through local Soil and Water Conservation Districts (SWCD). The VDCR conducts educational programs on the potential benefits BMPs offer in terms of improved water quality and increased crop production.

INCORPORATE STORMWATER BEST MANAGEMENT PRACTICES (BMPS) INTO LAND USE POLICIES AND INCORPORATE WATERSHED AND STORMWATER MANAGEMENT INTO RESIDENTIAL AND COMMERCIAL DEVELOPMENT REQUIREMENTS

People do not often think of rainwater as a source of water pollution, but water that runs over paved surfaces picks up lawn and garden chemicals, as well as oil and road salts, carrying them swiftly into aquifers and waterways. Expanding natural buffers between road and water ways, reducing the amount of paved area for new developments, and upgrading the municipal stormwater drainage system are all ways to reduce the impacts from stormwater. These practices help slow down the flow of waters, giving more time for the water to percolate into the soil and reducing erosion along river banks. Requiring no- or low-net change in total stormwater runoff compared to pre-development conditions, decreasing allowable total paved surfaces as a ratio of the commercial site, and increasing green space and tree planting requirements for commercial developments can also help reduce costs to municipalities when infrastructure can no longer keep pace with development.

WHERE THERE ARE COMMUNITY HEALTH CONCERNS, EXPAND WATER QUALITY MONITORING OF POINT-SOURCE POLLUTERS

Some industrial processes in the region are suspected to be negatively impacting human health through drinking water contamination. However, the lack of monitoring for a broader range of contaminants and the lack of information-sharing with the public keeps local decision-makers and citizens from fully understanding what can and should be done. Expanded monitoring could help pinpoint sources of water contamination and provide local governments and citizens with better information to reduce future contamination and to clean up areas of concentrated pollutants.



IMPLEMENTATION AND PATH FORWARD

The purpose of this initiative has been to better understand the views and desires of residents and to serve as a catalyst for positive change in the region. The goal of this report is to serve as a living document that will help to inform action towards creating the New River Valley citizens want to see in the future.



IMPLEMENTATION AND PATH FORWARD

The purpose of The Livability Initiative has been to better understand the views and desires of residents and to serve as a catalyst for positive change in the region. The goal of this report is to serve as a living document that will help to inform action towards creating the New River Valley citizens want to see in the future.

It has become clear that pursuit of the vision for the future that has emerged is not likely to be the responsibility of any single organization or sector. **There exists great potential for collaboration across the region** to better meet the needs of citizens, leveraging all sectors of society including local and regional governments, private businesses as well as non-profits and voluntary citizen initiatives. Constraints on resources mean that there is little room for redundancy of efforts or working at cross-purposes, so communication and coordination across sectors and specific entities will be an important part of achieving successful outcomes. This vision does not represent a centralized, top-down approach, but rather hinges upon partnership-based initiatives that are tailored to the needs of citizens and localities.

The livability initiative began the work of bringing citizens from all walks of life together to share ideas and expertise and to build communication, relationships and networks across the region. **The completion of this project should not mark the end of these efforts, but the beginning of a long-term goal to build networks of support that can bring to bear financial, human and material resources towards achievement of broadly shared goals and priorities.**

Leadership and coordination of these efforts will initially be provided under a partnership between the Community Foundation of the New River Valley and the NRV Planning District Commission.





Since 1994, the **Community Foundation of the New River Valley** has been committed to encouraging collaboration and providing philanthropic dollars to meet the region's current and future challenges. As it continues to pursue that mission, the Foundation will support implementation of the goals and strategies identified in this report by:

- » Adding to its existing staff to better facilitate collaboration and cooperation around the report themes.
- » Using the data and citizen preferences provided here to guide Foundation grant making, providing critical private dollars to move good ideas forward.
- » Launching a major fundraising initiative, GiveBigNRV, with the intent of supporting projects and organizations that advance innovative local and regional solutions to community needs.



New River Valley
Planning District Commission

Since 1969, the **New River Valley Planning District Commission** has worked with its members to provide opportunities for regional collaboration, deliver technical assistance, and assist the region in meeting current challenges with an eye toward the future. The Commission will support this partnership with the Community Foundation by collecting relevant data over time that will help measure progress on indicators identified in the planning process. Also, the Commission will assist communities with project development when requested and work with the Community Foundation to increase coordination and collaboration across the region.



MODELS OF PARTNERSHIP FOR THE FUTURE

Already, there are a number of examples in the region that embody the kinds of partnerships needed to support future goals, bringing together a range of groups and citizens around issues of common concern. Some of these efforts are highly local in their focus and impact, while others address more regional perspectives and scope. These early case examples offer a model for future initiatives and will yield lessons that help residents better understand what works and what does not.

1

“COMMON GROUND” IN FLOYD COUNTY – Local Initiative

Updating Floyd County’s comprehensive plan served as the impetus for creating a community-wide conversation about its future. Concerns were raised about whether the county was prepared to accommodate current and future population growth in a county whose identity has traditionally been rooted in its open spaces and rural character. These concerns led to the first series of “Common Ground” meetings in the county beginning in 2010. Pulling broadly from all ages, cultures and geographic locations throughout the county, strikingly common interests emerged that ran strongly in the veins of very diverse county residents.

In response to the demonstration of public interest in the issues raised at Common Ground meetings, two task forces were formed to focus particularly on the challenges associated with water, farming, forestry and land use in the county. The Land Policy Task Force and the Agriculture and Forestry Viability Task Force were created out of these conversations, and they began to meet regularly to explore ways to support viable land-based industries and public land policies that promote their existence and success. Additionally, it has become increasingly apparent to the Task Forces that citizens should empower local interests to guide the future of Floyd County. A series of articles was developed to share the work of the task forces on pivotal questions facing the future of Floyd County, including water quality and quantity issues, water security, population growth and development, farm and forest land preservation, land use policy and protection against harmful uses and encouragement of viable agricultural and forest businesses. These efforts will serve to inform future decision-making and policy making in Floyd County.



2

AFTER SCHOOL ARTS ENRICHMENT

A non-profit organization leading local change

In Floyd County, a success story has emerged which underscores the importance of the arts to residents as well as the community's commitment to provide arts education for its students. School budget cuts in recent years significantly impacted art instruction in Floyd County elementary schools. After the most recent round of budget cuts, one art teacher now serves all Floyd County elementary school children, which amounts to one-hour per month of in-school art activities for 2,100 public elementary (K-7) school students (Floyd County has no middle school).



In response, citizens and the arts community in Floyd County drew a line in the sand to ensure that “no child in Floyd County shall be without access to creative expression.” The Jacksonville Center for the Arts, in partnership with Floyd Elementary School, developed and implemented a one-school pilot youth creativity program, known as After School Arts Enrichment (ASAE), offering instructor-led art activities twice weekly during after-school hours. Staff from the Jacksonville Center led fundraising efforts to provide professional art instruction and helped coordinate the satisfaction of school system requirements for use of school facilities.

The ASAE program is completing its third year during the 2012-13 school year. New this year is an expansion beyond the Floyd Elementary School pilot project to make the program open to students in grades 1-7 from all Floyd County elementary schools. Also new is a partnership with FloydJAMS which provides an opportunity to introduce children in grades 4-8 to music and instruments common to the Appalachian region. These programs offer: creative educational experiences led by talented professional instructors; healthy after school snacks provided by Plenty!, a “good food for all” service organization; and one evening per 8-week session showcasing the children and their talents to the community. The ASAE program has enjoyed enthusiastic success and demand among the County's citizens, youth, and teachers. The Jacksonville Center for the Arts has worked diligently to raise funds from supporters in the community as well as from several grant sources to make this program and its growth possible.

3

SUCCESSFULLY AGING AT HOME IN THE NEW RIVER VALLEY

A multi-sectoral partnership

Successfully Aging at Home in the New River Valley is a collaborative project between the NRV HOME Consortium, the NRV Agency on Aging, Habitat for Humanity of the NRV, Virginia Tech's Habitat Student Chapter, and the NRV Planning District Commission. The purpose of the partnership is

to develop and implement a strategic plan to help people age at home and in their community. The project will focus on the dual needs that impact people's ability to successfully age in place: home accessibility and supportive services. Too often people are plunged into poverty because diminished mobility or preventable injury forces them from their home and into institutionalized care. With appropriate home modifications planned in advance and some level of assistance, an older person may be able to remain independent for much longer - living in their own home and connected to family, friends and their community support network for much less cost and much higher quality of life.



The project has two components: (1) limited funding currently exists to help people for aging-in-place needs. In order to help make the limited funds go further; a program will be created whereby community volunteers through Habitat for Humanity and students through the Habitat Virginia Tech Student Chapter (VTSC) and Virginia Tech's Myers-Lawson School of Construction will augment the work of locally hired contractors; and (2) the creation of a community based, membership-driven organization that would help coordinate access to affordable and reliable services including transportation, health and wellness programs, home repairs, and social and educational activities. Implementation of this project is supported through a three-year VISTA volunteer placement.

4

HABITAT FOR HUMANITY - Critical Repair Network **Strengthening partnerships between funders, organizations and communities**

In 2012, the Community Foundation of the New River Valley began incorporating the data collected through the NRV Livability Initiative into its review of grant applications, seeking to fund projects that make an impact on some of our region's most pressing needs. Despite awarding over \$200,000 a year in grants, the Foundation realized quickly that it had to do more to address some specific challenges related to our aging population and deteriorating housing stock.



To begin to make an impact in those areas, the Foundation awarded the 2013 Norman and Nancy Eiss Community Impact Grant to Habitat for Humanity of the New River Valley's Critical Home Repair Program. Already, three in five calls to Habitat for Humanity are requests for home repairs, and those numbers will likely increase in the coming years. Using Habitat's extensive group of volunteers, its relationships with churches and civic organizations, and its network of building professionals, the Critical Home Repair Program will work with low and fixed-income homeowners to perform quality home repairs, allowing them to stay in their homes and maintain their property's value. The Community Impact Grant will provide \$10,000 plus in-kind services to support the program over the next three years and has already helped Habitat to secure additional private donations.

5

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY (DEQ) A regional partnership working to inform state policy

Although the Livability Initiative has identified a number of strategies that can be readily tackled at the local and regional level, the planning process also revealed some areas where changes to state-level policies and regulations might be needed for us to make meaningful progress toward our regional priority goals. The DEQ has offered assistance in identifying state-level contacts and key decision-makers to raise some of these critical issues with for resolution. One such effort is the DEQ facilitated Small Solar Working Group (SSWG), a statewide set of stakeholders comprised of electric utilities, environmental advocates, solar power professionals, local governments, and university researchers. Based in part on the issues identified by the Livability Initiative, the SSWG group was formed to identify areas of common ground for stakeholders from across the state and facilitate a discussion around identifying key policy recommendations the SSWG stakeholders can present to their state regulators and lawmakers for consideration. If these policy and legislative recommendations are advanced by the stakeholders they could better position Virginia as an equal competitor in the country's emerging solar energy markets, as is the case for the neighboring states of North Carolina and Maryland. Based on feedback gathered during the Livability Initiative's planning phase, it is clear that citizens of the NRV overwhelmingly support improving our environmental stewardship related to energy production and use. The Livability Initiative's participation on the SSWG is a way to make sure our voices are heard in the arenas where our state's energy policies are made.

These goals, areas for action, and approaches to partnership represent the planting of seeds. **These seeds will need to be nurtured by individual citizens, businesses, community leaders, and governments to take root.** Think about how you, your family, your friends and colleagues can get involved to contribute to this vision, what new partnerships might help achieve this vision, and how our communities can measure real progress overtime.



MEASURING PROGRESS

This report includes many indicators to better understand current conditions and trends in the New River Valley. These indicators are also valuable when making important decisions and as a way to measure progress overtime. A regional partnership focused on maintaining existing and developing new datasets is needed to measure progress over the long-term. Listed below are a number of indicators that can be used as a starting point- to help determine whether the actions taken are helping to increase the overall livability of the region.

THEME 01

ENHANCING LIVING AND WORKING ENVIRONMENTS

- » Population trends/growth rate by age group
- » Population density
- » Population living in poverty
- » % of homeowners/renters paying more than 30% of income for housing or more than 45% for housing and transportation
- » Average home value and sales price
- » # of homes at different income levels compared to the # of people at those levels
- » Number of new homes near employment centers
- » Energy use per household
- » # of household energy retrofits
- » Relative energy mix in the region
- » Kw installed/Kw produced by renewable sources per year
- » % of energy that comes from renewable sources
- » % increase in local energy production through renewable sources
- » % of the region's energy demand met by energy produced within the NRV
- » Vehicle Miles Traveled (VMT) per capita
- » Average distance to work
- » Household transportation/commuting costs
- » % of population served by public transit
- » Public transit ridership rates
- » Carpooling rates
- » % of the population able to walk or bike to work, school, shopping
- » # of new housing or business developments within ½ a mile of public transit

THEME 02

PRESERVING RURAL HERITAGE AND COMMUNITY CHARACTER

- » # of acres of farmland lost to housing development
- » % of land area this is impervious (roads, buildings, parking lots)
- » Amount of land entering public and private conservation
- » % of land conserved by habitat type
- » % of land in different uses (open space, forest, farming, housing, etc.)
- » # or % of species at risk
- » Sales of locally produced food
- » Agriculture value added as percent of gross sales
- » Projects receiving state or federal support for historic preservation
- » Local government expenditures on capital improvements to buildings and public spaces
- » # staff capacity of nonprofit, public, and commercial arts-related organizations
- » Public expenditures in support of the arts in all sectors
- » Private expenditures in support of the arts (nonprofit, public, and commercial)
- » Estimated tourism expenditures
- » Level of integration of arts and culture into other policy areas and corresponding allocation of resources
- » K-12 arts instruction in hours per week
- » Proportion of school budgets for arts education
- » Availability of arts after-school programs

THEME
03

MAKING THE BUSINESS ENVIRONMENT PRODUCTIVE AND RESILIENT

- » Employment by sector
- » Average wage by sector
- » Per capita income
- » Unemployment rate
- » New business starts
- » # and value of small business loans
- » Net job growth/growth among new businesses
- » Adult literacy rate
- » High-school graduates pursuing advanced training
- » Graduation rates (high-school, associates, bachelor, and graduate degree)
- » Technical school graduates employed in field



THEME
04

BUILDING HEALTHY COMMUNITIES

- » Number of preventable hospitalizations
- » % of adults without social/emotional support
- » % of persons under 65 without health insurance
- » % of persons eligible for Medicaid, who are enrolled
- » # of dental services provided to school-aged children on Medicaid
- » % of school-aged children getting dental services
- » Travel distance to primary care, hospitals and specialists
- » Travel distance to recreational amenities and healthy food options
- » % of adults reporting no leisure time physical activity
- » Smoking, alcohol and substance use and abuse rates
- » # of deaths involving prescription drugs
- » # of founded cases of child abuse and neglect
- » % of births without early prenatal care
- » Breastfeeding rates
- » Teen pregnancy rates
- » Childhood and adult obesity rates
- » # of annual Particle Matter (PM) Days
- » # of annual Ozone Days
- » # of miles of impaired streams by impairment type
- » Percent of forest cover by sub watershed
- » # of new septic tank permits
- » Acres of restored riparian area





THIS REPORT WAS BUILT BY...

NRV Planning District Commission

LOCALITIES

Floyd County
Giles County
Montgomery County
Pulaski County
Town of Blacksburg
Town of Christiansburg
Town of Floyd
Town of Pulaski
City of Radford

NON-PROFIT/COMMUNITY-BASED ORGANIZATIONS

Alliance for Energy Conservation Professionals
Appalachian Trails Conservancy
Beans and Rice
Blacksburg Partnership, Inc.
Children's Trust
Christiansburg Institute
Community Foundation
Community Housing Partners of the New River Valley
Giles Arts Council
Jacksonville Center for the Arts
Mental Health Association of the New River Valley
Montgomery Museum
Mountain Valley Charitable Foundation
New River Center for Energy Research & Training
New River Community Action
New River Land Trust
New River Valley Fine Arts Center
New River Valley Satellite Center for Independent Living
NRV Habitat for Humanity
Pulaski Community Partners Coalition

Pulaski Community Partners Coalition
Pulaski County United Way
Sierra Club
Sustain Floyd
The Cabell Brand Center
The Lyric Theatre
Virginia Community Capital
Virginia Interfaith Center for Public Policy
Virginia Outdoors Foundation
YMCA

PRIVATE/OTHER

Allegheny Brokerage Company
American Electric Power Company
Anderson and Associates
Blue Ridge Home Improvement, Inc.
Carilion New River Valley Medical Center
Chambers of Commerce
Citizens Telephone Cooperative
Energy Check/Shelter Alternatives
Green Valley Builders
J&D Builders
New River Bank
Pembroke Management
Pentel Telephone Cooperative
Pulaski Hospital
Solid Rock Enterprises
Taylor Hollow Construction
Wall Residences

REGIONAL ORGANIZATIONS

NRV Metropolitan Planning Organization
NRV Area Agency on Aging
Montgomery, Pulaski & Radford County Public Schools
NRV Economic Development Alliance
NRV HOME Consortium
NRV /Mount Rogers Workforce Investment Board
NRV Builders Association
NRV Realtors Association
NRV Water Authority
NRV Wireless Authority
Pulaski County Wireless Authority
Small Business Development Center

STATE AGENCIES

VA Dept. for Aging & Rehabilitative Services
VA Dept. of Conservation and Recreation
VA Dept. of Environmental Quality
VA Dept. of Forestry
VA Dept. of Game and Inland Fisheries
VA Dept. of Health
VA Dept. of Transportation
VA Tourism Corporation
Virginia Cooperative Extension

UNIVERSITIES / COLLEGES

Virginia Tech:
Center for Gerontology
Center for Information Technology
Center for the Arts at Virginia Tech
College of Natural Resources
Conservation Management Institute
Dept. of Theatre and Cinema
E-corridors program
Institute for Policy and Governance
Museum of Geosciences
Myers Lawson School of Construction
Planning Department
Public Health program
Virginia Center for Housing Research
Virginia Tech, Inc.
Virginia Tech Intellectual Properties
Virginia Tech Transportation Institute
VT Knowledge Works

Radford University:
College of Visual and Performing Arts
School of Nursing
Sustainability Coordinator

New River Community College:
Division of Business and Technologies

LIVABILITY INITIATIVE STAFF

Kim Thurlow, Program Coordinator
Carol Davis, Community Outreach Coordinator

...And close to 3,000 citizen voices.

With special thanks to the HUD/DOT/EPA Sustainable Communities Partnership – Regional Planning Grant Program for providing funding for this initiative.



APPENDIX

A complete matrix of the Strategies and corresponding goals.

1. Support home modifications to assist aging in place. GOALS 1 2 4
2. Expand and coordinate support services to assist aging in place. GOALS 1 2 3 14 15
3. Encourage builders and developers to include lifespan friendly features in new construction and renovation projects. GOAL 1
4. Develop new housing and neighborhood options designed for aging in place. GOALS 1 2 3 4 6 15
5. Support the development of affordable assisted living and long term care options close to community services and amenities. GOALS 1 2 3 14
6. Provide incentives to homebuilders and developers for developing affordable housing. GOALS 1 2
7. Create or amend zoning requirements to support the aging population. GOALS 1 3 6 15
8. Develop shared housing opportunities for existing homes. GOALS 1 2 3 15
9. Support housing affordability for the aging population. GOALS 1 2
10. Provide quality and affordable day care programs for older adults. GOALS 1 14 15 16
11. Increase older adult programs, such as educational, social or physical activities in group settings that encourage personal interactions, regular attendance and community involvement. GOALS 1 9 16
12. Identify high priority sites located close to existing town and job centers and promote the development of affordable housing in these locations. GOALS 2 3 6
13. Localities with shortages of affordable housing should consider the adoption of an Affordable Dwelling Unit ordinance. GOAL 2
14. Build permanent housing for multiple income and service-need populations, including graduated housing options for people in recovery as well as those with varying mental health needs. GOALS 1 2 15
15. Establish a Housing Trust Fund to support the financing of affordable housing. GOAL 2
16. Provide incentives for repair and renovation of existing housing as well as retrofits that promotes energy efficiency. GOALS 1 2 4
17. Promote the maintenance and renovation of existing manufactured housing subdivisions (mobile home parks). GOALS 1 2 4 15
18. Promote the development of a model manufactured home community. GOALS 1 2 4 17
19. Provide a "one-stop" resource for the purchase, finance, and installation of new, affordable, energy efficient, attractive manufactured and modular homes. GOALS 1 2 4
20. Adopt and use the Virginia Maintenance Code to protect the value and longevity of our housing by promoting maintenance and improvements to older housing. GOALS 1 2 4 15 18
21. Adopt and use the Virginia Rehab Code as an alternative to the Construction code for renovation of residential properties. GOALS 1 2 4 15 18
22. Improve the major regional transport corridors that connect communities to employment centers. GOALS 3 11 12 13
23. Apply Virginia's access management standards along regionally significant corridors. GOALS 1 3 6 7 8 11
24. Enhance existing transit stops and park-and-ride lots. GOALS 1 2 3 11 14 17
25. Construct ADA accessible pathways and lighting in community centers. GOALS 1 3 9 11 14 15 16
26. Complete a public transit needs assessment to identify potential services and to evaluate the efficiency of existing services. GOALS 1 2 3 17
27. Invest in educational and marketing materials for existing alternative transportation services. GOALS 1 3 6 7 17
28. Enhance existing transit routes and expand service where possible. GOALS 1 2 3 6 7 10 11 12 14 15 17 18
29. Identify public/private partnerships to create alternative transportation options for commuters. GOALS 2 3 7 11 15 17
30. Enhance and expand rural transportation options. GOALS 1 2 3 10 11 12 14 15 17
31. Create non-emergency medical transit services. GOALS 1 2 3 14 16 17

32. Create alternative transportation options for community events. GOALS **1 3 9**
33. **Target transportation investments towards projects that integrate more than 1 mode of transportation, including creation of multimodal access to employment centers.**
GOALS **1 2 3 6 7 10 11 12 14 15 16 17**
34. Prioritize alternative transportation projects that link key destinations and multiple communities.
GOALS **1 2 3 6 7 11 12 17**
35. **Create more bicycling and walking options that connect residential areas to community centers.**
GOALS **2 3 6 7 9 11 15 16 17**
36. Create walking and bicycling options within a 20 minute radius of employment centers and transit stops and create opportunities for children and families to walk and bike to school, the library and public parks.
GOALS **2 3 6 7 8 9 11 12 15 16 17**
37. Develop the technical and business expertise to expand energy efficiency in buildings.
GOALS **1 2 4 5 10 12 15 18**
38. Use colleges/universities to expand education, training and research around clean energy.
GOALS **2 4 5 10 12 13 15 18**
39. Provide information and resources to consumers to manage peak-load energy demand.
GOALS **2 4 5 18**
40. Develop & implement education and outreach programs in schools and civic organizations on reducing energy waste through conservation behavior. GOALS **1 2 4 5 7 17 18**
41. **Work with the NRV Realtors Association to include green features and certifications in the MLS system.** GOALS **1 2 4 5 6 7 15 18**
42. Promote appraisal accuracy of green or energy efficient buildings through appraiser and realtor education.
GOALS **1 2 4 5 6 7 15 18**
43. Work with lenders to offer buyers energy efficient or energy improvement mortgages through a green addendum in the loan process. GOALS **1 2 4 5 7 15 18**
44. **Develop an energy information clearinghouse.** GOALS **1 2 4 5 7 12 15 18**
45. Continue to offer and enhance energy services training and certifications to existing local contractors or others interested in becoming an energy professional. GOALS **1 2 4 5 7 10 12 17 18**
46. Implement a community loan program for home energy monitors and other tools or devices that residents can use to track their energy use. GOALS **1 2 4 5 7 15 18**
47. Inventory and highlight successful energy efficiency development in the region.
GOALS **2 4 5 7 11 12 15 18**
48. Support energy education programs (e.g. adult education or NEED, an energy education program focused on K-12). GOALS **1 2 3 4 5 7 15 17 18**
49. Inventory existing rural and farm based energy production. GOALS **5 7 12 13 18**
50. **Work with landowners and agriculture businesses to identify and develop potential renewable energy projects.** GOALS **2 5 7 8 9 11 12 13 18**
51. **Target rural residential retrofit programs to older less efficient homes and/or those dependent on expensive fuel types and those of lower-income and elderly homeowners.**
GOALS **1 2 4 5 15 16 17 18**
52. Expand retrofit programs to multifamily, rental housing, and the commercial sector.
GOALS **1 2 4 5 7 11 15 18**
53. **Encourage neighborhood farm, campus, commercial and community-scaled distributed energy production.** GOALS **2 5 6 7 11 12 13 18**
54. Identify new opportunities for other renewable energy projects, such as methane capture, geothermal, and wind. GOALS **2 5 7 11 12 13 18**
55. Expand weatherization assistance program for low-income homeowners by promoting increased federal and state funding. GOALS **1 2 4 5 7 15 18**

56. **Develop attractive financing mechanisms for moderate income homeowners to pursue energy retrofits.** GOALS **1 2 4 5 7 8 15 18**
57. Attract capital to develop and implement clean energy technologies. GOALS **2 4 5 11 12 13 18**
58. Encourage utility providers to develop and implement a utility demand-side management program. GOALS **2 4 5 7 18**
59. **Explore and advocate for a PACE type financing program for commercial and residential buildings.** GOALS **1 2 4 5 7 11 12 15 18**
60. **Work with municipal utilities to develop Power Purchase Agreement projects on public buildings.** GOALS **5 7 11 18**
61. Explore a pilot 'Solarize' type program to generate interest for bulk pricing of solar energy installations at the neighborhood/community scale. GOALS **2 5 7 12 18**
62. Support the growing electric vehicle market by developing a network of charging stations. GOALS **3 5 7 11 18**
63. Encourage municipal and commercial adoption of electric vehicles. GOALS 3 5 7 18 **3 5 7 18**
64. **NRV localities and local groups continue to advance the region's interest in energy efficiency and renewable energy development.** GOALS **2 5 7 11 12 13 18**
65. Establish local and regional energy advisory committees and groups to support plan implementation. GOALS **2 3 4 5 6 7 11 12 13 15 18**
66. Ensure enforcement of upgraded state building codes. GOALS **1 2 4 5 7 15 18**
67. **Offer incentives for construction or development practices that achieve enhanced energy efficiency standards (Earth Craft, Energy Star, LEED).** GOALS **1 2 4 5 7 8 12 15 18**
68. Reflect local solar and renewable energy development goals in NRV local government plans and ordinances. GOALS **2 5 7 11 12 15 18**
69. Include energy efficiency and renewable energy development in updates of local comprehensive plans. GOALS **2 4 5 7 11 12 15 18**
70. Local governments should adopt model solar and wind ordinances developed by DEQ to demonstrate commitment to removing barriers and facilitating renewable energy development. GOALS **5 7 11 12 13 18**
71. Local governments should adopt state-authorized property tax exemptions on the value of renewable energy installations to demonstrate commitment to facilitating renewable energy development. GOALS **2 5 7 12 13 18**
72. Local governments incentivize green energy efficient building development projects with expedited reduced-rate permitting. GOALS **1 2 4 5 7 15 18**
73. Develop and coordinate contingency plans for energy supply disruptions. GOALS 1 4 5 11 18 **1 4 5 11 18**
74. Take advantage of state policies and innovative financing mechanisms as they become available. GOALS **2 5 7 11 12 13 18**
75. **Develop local government legislative package in conjunction with Virginia Municipal League and Virginia Association of Counties that promotes community clean energy policies.** GOALS **4 5 7 11 12 13 15 18**
76. Identify locations where housing + transportation + energy cost exceed 50% of take-home income. GOALS **2 17**
77. Promote development that creates closer proximity of housing units to jobs and services by educating elected officials and the public about the benefits of this approach. GOALS 2 3 6 18 **2 3 6 18**
78. Develop transportation and land use options that reduce auto dependence. GOALS **1 2 3 6 7 13 14 15 16 17 18**
79. Adopt plans, incentives, and policies that encourage mixed-use, pedestrian friendly and compact development near town centers. GOALS **1 2 3 4 6 7 8 9 11 12 13 14 15 16 17 18**

80. Ensure that Capital Improvement Plans offer options that protect rural character.
GOALS **3 6 7 11 13 18**
81. Periodically review the cumulative impact of new residential development patterns on rural character.
GOALS **6 7 13 18**
82. Target land conservation programs to the locations with the highest priority for preserving rural character. GOALS **6 7 13 18**
83. Develop a resource inventory of priority viewsheds and incorporate viewshed considerations into local and regional planning. GOALS **6 7 6 7**
84. Encourage land use policies that minimize negative environmental impacts from development.
GOALS **6 7 18**
85. Encourage land donation or acquisition for conservation easements. GOALS **7 18**
86. Protect and restore wetland areas within high-priority watersheds. GOALS **7 18**
87. Develop an air quality monitoring plan and conduct an assessment to identify risks. GOAL **7**
88. Minimize the impacts of transportation projects near rural landscapes and scenic vistas.
GOALS **6 7 8 13 15 18**
89. Raise awareness, engage people, and create opportunities to celebrate the arts, cultural events, and historic resources. GOALS **8 9**
90. Encourage more community and public art. GOAL **9**
91. Create spaces and opportunities for community events. GOALS **8 9**
92. Build relationships with organizations that fall outside of what is more narrowly defined as “arts and culture”, including organizations fostering outdoor recreation, tourism, and economic development. GOALS **8 9 12**
93. Create a regional arts council and ensure arts council representation on tourism and economic development boards. GOALS **8 9 12**
94. Establish a regional destination marketing organization and develop a regional marketing plan.
GOALS **8 9 12**
95. Create an organizational infrastructure to ensure effective progress of priority arts and culture goals.
GOALS **8 9 12**
96. Measure the impact of community place-making and other regional efforts such as Round the Mountain, Crooked Road, and Wilderness Road in the New River Valley. GOALS **8 9**
97. Expand arts instruction and utilize existing community arts and culture resources within school systems. GOALS **9 17**
98. Examine Standards of Learning (SOLs) to determine where they can be strengthened, broadened, or made more regionally relevant with regard to arts and culture and make recommended changes.
GOALS **9 17**
99. Reduce barriers that hinder full participation and experience of artistic, cultural, and historic events and venues, including persons with disabilities or limited financial means. GOALS **1 9 17**
100. Inventory cultural assets, historic sites and related assets in the NRV and identify priority sites for preservation. GOALS **8 9**
101. Establish a historic zoning overlay district ordinance, historic review board, and design guidelines.
GOAL **8**
102. Integrate existing community character into the design of community core improvements.
GOALS **6 7 8 9 11**
103. Restore and redevelop downtown properties. GOALS **4 6 7 8 9 11 12 18 4 6 7 8 9 11 12 18**
104. Increase modern commercial and industrial building space for new and expanding businesses.
GOALS **4 6 10 11 12**
105. Expand support for small businesses, especially in agriculture, tourism, and retail sectors.
GOALS **9 10 11 12 13**

106. Invest in critical infrastructure to support business development. GOALS **10 11 12 13**
107. Develop regional water sharing approaches to support economic development opportunities in areas that do not have access to sufficient water supply. GOALS **4 6 7 11 12 16 18**
108. **Deploy last mile fiber to increase internet access and speed.** GOALS **9 10 11 12 13 14 17**
109. Support tower infrastructure for wireless internet connectivity. GOALS **9 10 11 12 13 14 17**
110. **Educate local governments and utility providers about dig once policies.** GOALS **7 11 12 18**
111. **Help companies poised with a growth trajectory to accelerate growth and job creation.**
GOALS **10 11 12**
112. **Link job creation and workforce preparation strategies to create opportunities for lower-skilled or lower-income workers.** GOALS **2 3 10 11 12 13 16 17**
113. **Develop a career pathways task force.** GOALS **10 11 12 14 16 17**
114. **Develop a pilot program with integrated workforce curriculum.** GOALS **10 11 12 17**
115. Expand workforce education and training programs in targeted growth sectors.
GOALS **2 10 11 12 13 17**
116. Develop a technology magnet school. GOALS **10 11 12 17**
117. **Work with business leaders to increase opportunities for practical experience.**
GOALS **10 11 12 13 17**
118. **Work to ‘regionalize’ training and education resources.** GOALS **10 11 12 13 16 17**
119. **Enhance available resources and information for small businesses.** GOALS **9 10 11 12 13**
120. **Provide the infrastructure to process and sell local food.** GOALS **12 13**
121. Establish a retail outlet for products processed at area meat, dairy, or vegetable facilities.
GOALS **12 13**
122. **Establish a farm equipment sharing cooperative for small and mid-sized farms.** GOALS **12 13**
123. Hire a beef industry and agriculture economics consultant to better understand ways to help increase revenues and lower costs. GOALS **12 13**
124. **Expand education and training opportunities for local farmers.** GOALS **10 12**
125. **Develop a comprehensive food assessment.** GOALS **6 12 13**
126. Implement a BuyLocal food and forest product campaign encouraging people to buy locally grown vegetables, meat, wood and wood products, as well as plants. GOALS **9 12 13 16**
127. **Form agriculture and forestal districts to encourage preservation of farmland.** GOALS **6 13 18**
128. Allow agricultural use of open space land created by innovative residential subdivisions.
GOALS **6 12 13**
129. Work with existing agritourism partners to grow the industry and bring more visitors into the region.
GOALS **6 8 9 12 13**
130. Promote biomass energy production by local schools and other commercial facilities. GOALS **5 13**
131. **Increase the hours of operation of medical offices and clinics.** GOALS **11 14 16 17**
132. Improve health insurance options so that patients can afford necessary health services.
GOALS **10 11 14 16 17**
133. **Develop mechanisms that help health and social service providers from different agencies and specialties coordinate their efforts.** GOALS **3 10 14 16 17**
134. **Increase understanding and information sharing across different agencies and specialties about best practices around health issues, and how this information can be effectively communicated to patients.**
GOALS **14 15 16 17**
135. Help healthcare service providers (e.g hospitals, providers, primary care) better understand the Affordable Care Act and its upcoming impacts and changes. GOALS **10 12 14 15 16 17**
136. **Encourage collaboration between hospitals on chronic disease management and readmission rates.**
GOALS **1 10 14 15 16 17**

137. Reassess the definition of disability, as many people classified as “disabled” may not be, and mitigate the number of people that do not necessarily qualify but are receiving disability benefits. GOALS **1 14**
138. **Increase healthcare and community services practitioners understanding on what health services and resources are available and make sure their patients are aware of these options.**
GOALS **3 4 10 14 16 17**
139. Conduct a Needs Assessment of Health Services Availability and Gaps.
GOALS **3 4 11 14 15 16 17**
140. Implement K-12 school based medical and dental programs. GOALS **3 10 14 15 16 17**
141. Implement the use of ‘patient navigators’ (trained laypeople, nurses, social workers, etc) to coordinate doctors’ appointments, facilitate telephone contact with health providers, arrange rides, help with insurance forms, help patients prepare their questions for the doctor and understand treatment options. GOALS **1 14 16 17**
142. Expand the number and availability of healthcare workers (e.g. physicians, nurse practitioners, community health workers) and improve access to healthcare services (e.g. telehealth, electronic health records and health information exchange) and specialists (ENT surgeons, urologists, psychiatrists, licensed social work, addiction counselors), particularly in high risk populations and underserved areas.
GOALS **1 14 16 17**
143. Where broadband access is available in rural areas, support expansion and initiation of telemedicine to deliver consultative, diagnostic and healthcare treatment for individuals with chronic conditions.
GOALS **1 14 16 17**
144. **Open-up or expand hours of availability of school-based recreation facilities and equipment to communities.** GOALS **1 8 15 16 17**
145. Increase youth programs to include physical activity, nutrition, and empowerment programs.
GOALS **9 10 14 15 16 17**
146. Create a special recreation association to enable vulnerable or disabled populations to engage in community activities. GOALS **1 9 16**
147. Create trail systems that connect community centers to outdoor destinations.
GOALS **8 9 11 5 16 17**
148. **Expand access to fresh fruit, vegetables and whole grain breads in major businesses, schools and convenience stores, especially in lacking access.** GOALS **1 13 15 16 17**
149. Expand school and community vegetable gardens. GOALS **1 9 13 15 16 17**
150. Implement competitive pricing in the community and schools, to assign higher costs to non-nutritious foods and lower costs to nutritious foods. GOALS **13 15 16 17**
151. Promote and support farmers markets to accept food stamps. GOALS **9 12 13 15 16 17**
152. Invest in housing rehabilitation loan and grant programs that provide funding primarily to low- or median-income families to make their homes more energy efficient, improve indoor air quality, remove health or safety hazards and upgrade failing septic systems. GOALS **1 2 4 12 15 17 18**
153. **Establish and provide training, educational information, network, and information on local support/ recovery programs for faith based communities (and other applicable groups) to better support members of their congregations with chronic conditions (e.g. substance abuse, diabetes, mental health, chronic heart disease).** GOALS **1 14 16 17**
154. **Advocate for alternative sentencing and recovery options for repeat substance abuse offenders.**
GOALS **10 14 16 17**
155. Collaborate with primary care providers who manage chronic pain, ADHD, anxiety and work with them to establish policies and practices that prevent mis-use of medications, diversion and increase provider and patient satisfaction. GOALS **1 10 14 16 17**
156. Incorporate violence prevention, preconceptual care and birth control topics into substance abuse treatment plans and incorporate family violence assessment as a part of regular wellness checkups with primary providers. GOALS **1 10 14 16 17**

- 157. **Improve coordination of human service efforts across multiple social service areas, drug treatment, child welfare, day care centers (adult/child) and workforce services.** GOALS **1 10 14 16 17**
- 158. **Coordinate resources to reduce rates of teen pregnancy.** GOALS **10 14 15 16 17**
- 159. Empower community members with culturally relevant health information and opportunities.
GOALS **1 14 15 16 17**
- 160. Implement the use of 'system navigators' to support patient care coordination, promote financial incentives for patients to adopt preventative care behaviors, support policies and expand access to mental health services. GOALS **10 14 16 17**
- 161. **Expand and improve quality prenatal and early childhood programs including pre-school education and daycare options.** GOALS **10 15 16 17**
- 162. **Increase the number and percent of children screened for developmental delays.** GOALS **10 6 17**
- 163. **Provide after school programs to support at-risk-youth.** GOALS **10 16 17**
- 164. Establish mentoring and other programs to improve school readiness, graduation rates, increase college aspirational behavior and enrollment among low-income and minority students (such as Career Academies, Smart Beginnings, Talent Search and Upward Bound models). GOALS **10 16 17**
- 165. **Increase the exposure regional K-12 students receive to the types of careers available locally and regionally.** GOALS **3 10 11 12 13 17**
- 166. Increase counseling resources for K-12 and community colleges students, as well as working-age adults, to include career counseling as well as academic counseling. GOALS **10 11 12 13 15 16 17**
- 167. **Develop comprehensive watershed management and regional stream restoration plans.**
GOALS **7 18**
- 168. **Where there are community health concerns, expand water quality monitoring of point-source polluters.** GOAL **18**
- 169. Create a regional spatial and electronic database of private septic, well and spring systems.
GOALS **6 7 15 18**
- 170. **Increase coordination of services, programs, and outreach efforts that provide information and resources to protect and restore water resources and increase public understanding of activities that impact water quality.** GOALS **7 18**
- 171. Expand homeowner water testing and education and advise homeowners of cost-effective and/or cost-sharing options for well and septic maintenance. GOAL **18**
- 172. **Expand outreach efforts with farmers and landowners to increase adoption of agricultural and forest BMPs.** GOALS **7 18**
- 173. Support regional best practices for residential and commercial storm water management.
GOALS **6 7 15 18**
- 174. **Incorporate stormwater BMPs into land use policies and incorporate watershed and stormwater management into commercial development requirements.** GOALS **6 18**
- 175. Work with local businesses to identify and mitigate on-site threats to water quality from on-site storage tanks, improper disposal of chemicals, and poor on-site management of storm water and sediment.
GOALS **7 12 15 17 18**
- 176. Offer incentive-based erosion and sediment control (E&S) practices for developers. GOAL **18**
- 177. Invest in upgrading or replacing aging municipal wastewater systems. GOALS **7 15 18**

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